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AVIATION AND EMPIRE: THE BRITISH  
AFRICAN EXPERIENCE, 1919-1939

by

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## ABSTRACT

The period 1919-1939 was the pioneer age of air transport, the newest and most promising of man's efforts to improve and accelerate his means of transport and communications. The agent of that purpose was the aeroplane, no longer the mere 'contraption' of the decade before world war I nor simply the fighting machine which had proved itself so ably during the war. In Great Britain, the aeroplane brought a new dimension to the vision of empire, its task to link the British world with a chain of imperial air communications. After 1924 and the formation of Great Britain's 'chosen instrument', Imperial Airways, British air efforts were directed to the establishment of air routes and services to India, the Far East, and to South Africa, the latter goal to bring much of British Africa within the compass of imperial air transport development. The task in British Africa was especially difficult. Government parsimony, public apathy, and the challenge of the African environment all troubled the progress of air transport for more than a decade. Nonetheless, by 1932, the Cape Town route was established. Challenged throughout Africa by Belgium, France, Germany, Italy and South Africa in a 'scramble' not unlike the pattern in the late nineteenth century, Great Britain still triumphed. By 1939, British Africa was being served by a growing network of air services provided by Imperial Airways, Rhodesian and Nyasaland Airways, Wilson Airways in East Africa, and South African

Airways in the Union. With the West African situation an exception, success rather than failure colored the British air transport thrust into Africa. British Africa now had the foundations upon which to build and the means to meet the challenges and demands of air transport development in the future.

airplane	aircraft
air	air
airfield	airfield
airport	airport
air	air
airline	airline
air	air
A.M.	A.M.
A.O.C.	A.O.C.
A.F.C.	A.F.C.

## ABBREVIATIONS AND DEFINITIONS

All offices and records are British unless otherwise noted.

Aerodrome .....	Designated runway-equipped landing and take-off area with ground facilities for aircraft storage and other services.
Aeroplane .....	Engine-powered fixed wing craft capable of sustained flight.
AIR .....	Series designator for Air Ministry records in the Public Record Office, London.
Aircraft .....	All machines capable of sustained flight.
Airfield .....	Designated landing and take-off area with minimum ground facilities.
Airport .....	Aerodrome with Customs facilities.
Air Route .....	Designated navigation track for air traffic between one station and another.
Airship .....	Lighter-than-air machine capable of sustained flight.
Airways .....	General term for designated air routes and occasional air space use.
A.M. ....	Air Ministry.
A.O.C. ....	Air Officer Commanding.
AVIA .....	Series designator for Air Ministry (Department of Civil Aviation) records in the Public Record Office, London.

B.A. ....	British Airways Limited.
BOAC .....	British Overseas Airways Corporation. Used to refer to air line and archives.
CAB .....	Series designator for Cabinet records in the Public Record Office, London.
Cd./Cmd. ....	Command Papers.
C.I.D. ....	Committee on Imperial Defence.
CO .....	Colonial Office and series designator for records in the Public Record Office, London.
C.P. ....	Cabinet Paper.
D.C.A. ....	Director of Civil Aviation.
DF .....	Navigational Direction-Finding equipment.
D.G.C.A. ....	Director-General of Civil Aviation.
D.L.H. ....	Deutches Luft Hansa.
DO .....	Dominions Office and series designator for records in the Public Record Office, London.
E.A.M.S. ....	Empire Air Mail Scheme.
encl. ....	enclosure.
FO .....	Foreign Office and series designator for records in the Public Record Office, London.
G.N.A. ....	Ghana National Archives.
GPO .....	General Post Office.
Hansard .....	Parliamentary Debates, House of Commons.

I.A. ....	Imperial Airways Limited and designator for company files in BOAC archives.
I.A.C. ....	Designator for papers of the I.C.I.A.C.
ICAN .....	International Commission on Air Navigation (League of Nations).
I.C.I.A.C. ....	Inter-Departmental Committee on International Air Communications.
Imperials .....	Popular term for Imperial Airways Limited.
Junkers .....	Junkers Luftverkehr.
K.L.M. ....	Koninklijke Luchtvaart Maatschappij voor Nederland an Kolonien.
Landing ground .....	Any area prepared to accommodate aircraft.
MET .....	Aviation jargon for weather conditions, reports and forecasts.
PRO .....	Public Record Office, London.
RAF .....	Royal Air Force.
RANA .....	Rhodesian and Nyasaland Airways.
R.N.A.S. ....	Royal Naval Air Service.
S.A.A. ....	South African Airways.
S.A.A.F. ....	South African Air Force.
SABENA .....	Société Anonyme Belge d'Exploitation de la Navigation Aérienne.
Wilsons .....	Popular term for Wilson Airways Limited.
W/T .....	Wireless telecommunications.

MAPS

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## PREFACE

Out of the swelling noon,  
Bursting the eye with tears of heat,  
From the parched sea  
Looms Africa.

John Pudney, 1944. <sup>1</sup>

This thesis examines the birth and growth of commercial air transport in what was called not too many years ago, British Africa. As the title, "Aviation and Empire: the British African Experience, 1919-1939", suggests, it is an attempt to weave into the historic fabric of empire the golden thread of a new technology, air transport. In part, it is the story of the work of the aeroplane, one of the twentieth century's most dramatic expressions of technical prowess and progress. Almost from the beginning, the aeroplane's protagonists could claim with awe, "it is going to open up the world as no other means of transport has yet done..." <sup>2</sup> a vision of the future with which this thesis deals, primarily in the setting of British Africa, whose

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1. John Pudney, "First Sighting of Africa", Flight above Cloud (New York, 1944), p. 41.
  2. George Holt-Thomas, "Commercial Aeronautics", The Aeronautical Journal (forerunner to the Journal of the Royal Aeronautical Society), XXI (October-December, 1917), 370.

vastness and still primitive means of transport and communications made it a ready target for the ambitious aims of civil aviation.

The study begins in Great Britain, and returns there time and time again, because it is mainly from there that the ideas and policies, men and machines came to plan and build an 'empire of the air' in British Africa. The period is 1919-1939, as one historian has noted, "an epoch during which men toiled in the shadow of one war just finished and another soon to come".<sup>3</sup> An appreciation of this framework is no less crucial to an understanding of British aviation history than it is for imperial and African history. For commercial air transport, the first world war provided an important impetus to aircraft development. It accelerated the transformation of the aeroplane from a mere 'contraption' of but a few years before to a swift and high-powered machine. By 1918, aeroplanes were potentially capable of enjoying as much success in the peaceful pursuits of air transport and communications as they had enjoyed in their new-found fighting role over the battlefields of Western Europe. Regrettably, as this thesis points out, the first world war cast forward a long shadow as well. Civil aviation in the British experience had ever to jostle for attention with the claims and priorities of military aviation, both in

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3. Paul Knaplund, The British Empire, 1815-1939 (London, 1942), p. 593.

the aftermath of one war and as the future forecast another one to come.

Still, these were the pioneer years for civil aviation, and, as such, this study looks at the men who challenged Africa and the future with determination and vision. Many were pilots, and while the wider view held the aeroplane to be the new 'agent of empire', it was the men and women in the cockpit who provide the necessary human dimension to the drama of these years. To be sure, this thesis is not simply about pilots flying in Africa, nor can it be said that fliers dominated the scene. As will be borne out in the following pages, the growth and progress of air transport in British Africa followed a difficult and tortuous path. The process was ever complicated by varied political and economic considerations, and always challenged by the special circumstances of the African climate, topography and great distances to be overcome. It was a 'war' from the start, and it was waged by many in Great Britain and Africa: statesmen as well as politicians, the Governors and 'men on the spot', engineers and publicists, adventurers and military officers. And, not to be forgotten, were the tens of thousands of Africans, who, in their too often ignored roles as the cutters of grass and bush, or removers of stones and ant-hills, toiled at the hundred and one other tasks that prepared and maintained the airfields without which the whole effort would have been impossible.

Yet it remains the pilots who capture the imagination, and indeed, who have provided much of the historical record upon which this study is based. To read the reminiscences and adventures of Alan Cobham, G. D. Fleming, Jack McAdam, Beryl Markham, and others, is to capture the flavour and excitement of the times.<sup>4</sup> These were the men and women in the front-line of the struggle. These were the pilots who flew in Africa with faith their guide, and who expressed their daring in abundance. Their assigned task and personal ambition was to bring the aeroplane to Africa, to 'open' the continent, still seen as 'dark' by many, and only dimly perceived by others. Coincidentally, they pressed forward the imperial aim of building a chain of air communications linking the scattered outposts of Great Britain's African empire one with another and with the far-away 'homeland' of the British Isles. In the process, these pilots made history an adventure.

One interpretation advanced by this thesis should become clear immediately. British air transport in the inter-war years gave a new and important dimension to the shape and direction of imperial policy and colonial rule. The aeroplane became the new weapon in the arsenal of empire, and a promising tool with which British policy-makers hoped to fashion a British world more united in purpose and more

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4. See bibliography for selected published accounts.

intimate in association. The goal of more certain and swifter communications was integrated with the wider aims of British imperial policy in Africa, as well as elsewhere. To a considerable extent, then, air policy became imperial policy, with obvious implications for the British African colonial world. That the story is not one of total success, and that the new means never quite matched the old aims, is quite beside the point. Air transport was introduced into Africa in the period under study, and it has remained to stay long after the bugles and drums of empire have been muted and muffled, and the imperial legions have marched into history. Imperial aims have since been displaced by African aims, and the needs of empire swept aside by the needs of Africa. Nonetheless, the imperial aim and vision were clear, and because air transport developed into a key expression of Great Britain's hopes to hold and maintain an empire, this study makes an important contribution to our historical understanding of the British African empire in the inter-war period.

Studies of British colonial rule and imperial policies in Africa are legion. What is shocking is the singular lack of any serious and scholarly reference to the phenomenon of air transport development in this African context. Air transport and the air lines have been examined critically and otherwise from almost every perspective, and hypotheses abound. David Corbett has produced a splendid book about

the policies and politics governing air lines.<sup>5</sup> William Ogburn has attempted to assess the "social effects" of aviation, developing a thesis around the American model.<sup>6</sup> Neither these examples nor the countless similar references focus on empire or Africa. Perhaps the nearest approach to this thesis appears in Robin Higham's Britain's Imperial Air Routes, 1918-1939, wherein two chapters are devoted to British Africa.<sup>7</sup> Higham, however, is concerned with 'business' history, and is clearly less interested in the aims of empire in the colonial world. Not surprisingly, a model to follow has been available for almost a quarter of a century in Harold Innis' Empire and Communications. "In the organization of large areas communications occupies a vital place...", Innis noted,<sup>8</sup> and while he does not touch upon Africa nor air transport, the application of this idea to British air communications aims in British Africa is readily apparent. These are but a few samples of the historical literature. As the appended bibliography would suggest, and in curious contradiction to the thrust of the

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5. David Corbett, Politics and the Airlines (Toronto, 1965).
  6. William F. Ogburn, The Social Effects of Aviation (Boston, 1946).
  7. Robin S. Higham, Britain's Imperial Air Routes, 1918-1939 (London, 1961).
  8. Harold Innis, Empire and Communications (Oxford, 1950).

above remarks, there remains nonetheless a rich and fertile lode of published materials to mine for facts and ideas. Their collective failing is a matter of perspective and emphasis. Many ignore or neglect the African aviation experience, while others with sharper focus remain chronicle or reminiscence all the same, their authors unwilling or unable to probe beneath the gloss of romance and adventure. Studies of African aviation have been published, for example, Harry Klein's Winged Courier, focusing on South Africa, and David Jones' The Time Shrinkers, a readable account of the efforts to establish the Cairo-Cape Town air route.<sup>9</sup> Neither these nor others are critical and scholarly analyses, but they have broken important new ground and are departure points for subsequent study and research. The fact is, then, that what consequential work has been done in the history of air transport throughout the length and breadth of British Africa, has reflected the efforts of the 'amateur' not the professional historian. The neglect of the latter might be explained in a number of ways. Certainly there are many important themes to pursue in the context of British African colonial history --- economic development, education, indirect rule and political change, nationalism, and others,

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9. Harry Klein, Winged Courier (Cape Town, 1955). Klein was a South African journalist. David Jones, The Time Shrinkers (London, 1971). Jones is with the British Broadcasting Corporation. There are numerous 'histories' in the periodical literature.

--- and these have attracted the bulk of attention. There is also the near fearful reluctance of historians to handle themes still in their historical infancy, and still too close in time to the present. Aviation history, so new and fresh, calls upon skills and approaches not yet blessed with the signs of tradition and familiarity. Its subject matter is technology, economics, politics and adventure, all blended in a pattern sometimes difficult to perceive. Its cast of characters are clearly men of invention and vision, perhaps no more nor less than their land-minded counterparts, but like the swift machines which they send aloft and fly, they are men of action, more often quick in thought than thoughtful, more tuned to planning and programming than pondering the meaning of the world in which they live. Thus, the men and the aeroplanes of aviation history are elusive targets of historical inquiry. None of this suggests that the historian should surrender his values or give up the idea of air history. What it does mean is that he must get caught up in a mood of adventure. Air transport history, whether in Africa or elsewhere, can be pedestrian, but it should never be so.

In the expanding compass of historical interest in Africa and the colonial experience, the need is there to include air transport as an integral feature of British policy in Africa between the wars. Since 1970, the records of the British Air Ministry and other interested offices to 1939 have been open to public access in the Public Record

Office (PRO), London. <sup>10</sup> The historian can no longer plead ignorance on British air matters before the war. In summary, this dissertation, whatever may be its other merits, is intended to fill the obvious gap in our knowledge and understanding of Great Britain's Africa between the wars. It is a story of beginnings, the endings are yet to come. And, in the sense that this is a study of a pioneer industry, so too is this a pioneer study, a work which, in itself, is to be but a beginning to a continued and serious inquiry into the advance of the air age in Africa.

It is germane, perhaps, to interject some personal comment at this point. I think that the origins of this dissertation are of interest to the reader if only to explain the special enthusiasm which I have tried to bring to the task of its preparation and writing. A Ph.D. thesis must grow out of the interests, the experiences or the desperation of the budding scholar, but whatever its beginnings, it is the great challenge, perhaps the highlight and climax of the years of study which have preceded its presentation. I have been fortunate, for this thesis is the end-product of some memorable personal experiences, in aviation, in Africa, and in academic life as a student, teacher and historian. I was a military and commercial pilot for 15 years, and part of that time was spent in West

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10. For a PRO series listing, see the appended bibliography.

Africa with Nigeria Airways (WAAC) Ltd., shortly after Nigerian independence. I know that my flying experiences in Africa have given me a sense of identity with the pioneer pilots who appear on the pages which follow. For the flier, Africa has its special appeal and challenge which defy explanation but are understood by every pilot of every age who has ever flown there. Perhaps the answer lies in its sheer splendour as seen from on high, a panorama denied those who labour and travel below. For every pilot it is a quiet thrill to fly over Africa and enjoy the seemingly endless and changing landscape of rugged beauty. From above, Africa is quiet and clean. It looks old, but it is a gorgeous old like a treasure to be cherished. This only hints at what a pilot feels and senses, but I am sure that these impressions were shared by the fliers of a generation before. So, to my love of flying was wedded a special love for Africa, born of the opportunity to work and live there, now more than a decade ago. My more recent career as an academic finds Africa still the prominent interest. Thus, the decision to commence research and prepare this thesis, "Aviation and Empire: the British African Experience, 1919-1939", was made almost without question. The subject matter was new, the sources plentiful and by and large untouched, and the thesis reflects to a remarkable degree my experiences and interests in Africa, aviation and history.

This is the first detailed exploration of the formative years of aviation in British Africa, and the task of attempting to collect and synthesize a massive amount of material collected on three continents has been a difficult but rewarding experience. Clearly, the whole effort would have been impossible without the help, counsel and patience of many individuals, institutions and organizations in Canada, Great Britain and Africa. I accept, of course, full responsibility for the views that I have expressed and the interpretations I have placed upon the events and personalities which have highlighted the story. The errors and omissions are mine, but I am indebted to all those who gave of their time and made available to me the source materials upon which this thesis has relied. To them I would like to make grateful acknowledgement.

For much needed financial support, I thank the Woodrow Wilson National Fellowship Foundation for its sponsorship in 1968-69, the Canada Council, whose support enabled me to spend 14 months in England and make a field trip around Africa in the fall of 1970, Dalhousie University for graduate support, and the University of Winnipeg for research help in the latter stages of this dissertation.

Especial thanks must go to the directors and staff of the many libraries and archives which were opened to me: the British Museum, Dalhousie University Library, ICAO Library, Institute of Commonwealth Studies, National

Archives of Ghana, National Archives of Nigeria, National Archives of Rhodesia, Public Record Office, Royal Commonwealth Society Library, School of Oriental and African Studies, Strange Library of Africana, and the University of Winnipeg Library. Particular help was given by Mr. John Bourne and his staff at the Board of Trade Civil Aviation Library in London, Mr. T. E. Scott-Chard and Miss French at the BOAC Reference Library, the staff of the BOAC Archives, Miss A. N. Marks at the Ministry of Defence (Air) Library, and Mr. A.W.L. Nayler and his staff at the Royal Aeronautical Society Library. My thanks also to Dr. A. M. Lewin Robinson of the South African Library, and Miss A. H. Smith of the City of Johannesburg Public Library for bibliographic assistance in correspondence.

Mr. P. L. Pezarro, Publicity Superintendant of Air Rhodesia, and Mr. P. J. van Rensburg, Public Relations Manager of South African Airways, were generous of time and effort during my 1970 tour of Africa, as were the pilots and operations staff of Sudan Airways.

Many others have been of assistance at various stages of the thesis research: Captain Ginger Brewer of the International Federation of Airline Pilots Associations, who gave me valuable introductions to airline people in Africa; Mr. Leonard Bridgman, a past editor of the Aeroplane, Professor C. E. Carrington, and Sir Alan Cobham, three fine gentlemen whose recollections added a great deal

to my understanding of the early years; Dr. Peter Davies of the University of Liverpool who gave me access to material on Elder Dempster and his own manuscript dealing with Elders Colonial Airways; Dr. Robin Higham of Kansas State University whose work on the airlines has been influential and whose correspondence always helpful; Mr. D.M.V. Jones of the BBC who allowed me to read the manuscript of his since published book on the Cairo to Cape Town route; Mr. Jack McAdam of Air Rhodesia who gave me access to his manuscript material on Rhodesian aviation history; M. Patrick Siché of the Institut du Transport Aérien who obtained for me copies of important IFTA papers; Professor George Shepperson of Edinburgh University who was most helpful in suggesting lines of inquiry; and Mr. Chris Wren, editor of Esso Air World, who generously gave me a rare copy of the Intava World.

My thesis supervisor, Professor John Flint of Dalhousie University, has been a bulwark of support in every way; critical, complimentary, and, above all else, patient with my efforts. My typist, Mrs. Betty Ann Loughnan, has worked long and hard to present my efforts in thesis form and I am grateful for her good humour and excellent work on my behalf.

To my former teachers and now colleagues, Professors Victor Batzel and Walter Stein of the University of Winnipeg, I owe a great debt for counsel, guidance and stimulation in

the years gone by.

I want to give particular thanks to friends whose constant encouragement has been welcomed and necessary these past few years: Professor and Mrs. Peter Brown of the University of Winnipeg, Captain and Mrs. Gus de Jardin of Air Canada, Winnipeg, Lt. Cmdr. and Mrs. Alfred Holmes of Dartmouth, Captain and Mrs Peter Frame of Sudan Airways, Khartoum, Mr. and Mrs. Sid Macbeth, Mrs. Hazel Parkinson, and Mr. and Mrs. Arthur Rich, all of Winnipeg.

Finally, a thank you to my family is very much in order. To Peter, still too young to understand, I apologize for the moods and moments which made you feel forgotten. To my wife and partner, Jean, I owe more than words can express or money repay. She has shared so much in the joy and anguish of this thesis. She has been my co-pilot over every mile of the difficult and lengthy route which has led to this moment. Without her encouragement, her faith, and, most of all, her love, this thesis would never have been written.

Robert Lewis McCormack

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## CHAPTER I

### GREAT BRITAIN AND AFRICA:

### THE LEGACY OF WAR, 1918-1921

We cannot be both imperial and mean.

H. G. Wells, 1917.<sup>1</sup>

On November 11, 1918, the Great War came to a merciful end. Peace, with its illusions of stability and progress, had come to the relief of all, the joy of many, and the surprise of some.<sup>2</sup> The battle had been fought as a war to end all wars, and for at least a moment in history, the

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1. Wells was high on the possibilities of Imperial air transport development. While Chairman of the Special Committee on Labour of the Civil Aerial Transport Committee (see Committee Report published as Cd. 9218 [1918]) appointed by Lloyd George in 1917, Wells wrote:

The British Islands are small islands and our people numerically a little people; their only claim to world importance depends on their courage and enterprise, and a people who will not stand up to the necessity of an Air Service planned on a world scale and taking over thousands of aeroplanes and thousands of men from the very onset of peace has no business to pretend to anything more than a second-rate position in the world. We cannot be both imperial and mean.

Quoted in The Times, March 7, 1919, p. 12. See also Eric Birkhead, "The Beginnings of British Civil Air Transport, 1919-1924", unpublished M.A. thesis, University of Leicester, 1959.

2. The 'surprised' included the War Office and the Air Ministry, although not the Prime Minister according to his War Memoirs of David Lloyd George, vol. VI (London, 1936). General Sir Henry Wilson and Field Marshall Haig viewed 1919 as the decisive year; ibid., pp. 3107-20 and 3300-04. Winston Churchill, Minister

triumph of Great Britain, her Empire and her Allies seemed to signal the dawn of a new age of everlasting peace. The armistice spelled out on paper what had been written in battle; Germany had been beaten, her armies and ambitions torn apart in the maelstrom of war. After four years of indescribable carnage on the scarred landscape of Europe, victors and vanquished laid down their arms; the war-weary battalions emptied the trenches and started home to pick up the threads with which to weave anew a fabric some were calling 'normalcy'. A world had suddenly become a quieter place. The great guns were now silent and only nature's thunder remained to deafen men and frighten children. Even the skies above quietened as the aeroplanes, new and deadly additions to man's arsenal of terror, fluttered down to settle on a thousand airfields. Most would never fly again in peace or war. <sup>3</sup>

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2. (continued) of Munitions, was also planning for 1919; see his memorandum to cabinet dated September 5, 1919, in The World Crisis, 1916-1918, part II (London, 1927), pp. 519-20. Air Ministry plans for 1919 are suggested in Andrew Boyle, Trenchard (London, 1962), pp. 271-316. See also Lord Hankey, The Supreme Command, 1914-1918, vol. II (London, 1961), pp. 849-50, Winston Churchill, The World Crisis. The Aftermath (London, 1929), pp. 28-9, and W. J. Reader, Architect of Air Power (London, 1968), pp. 80-1.
3. While no attempt has been made here to tally the numbers of aeroplanes used by all air forces in action during the war, the British figures alone are impressive, if confusing. M.J.B. Davy, Interpretive History of Flight (London, 1937), p. 152, notes 22, 647 aircraft of all types on charge to the R.A.F. as of November 30, 1918; C. Martin Sharp, D. H. An Outline of de Havilland History (London, 1960), p. 61, states that the R.A.F. had 20,890 aircraft on strength on October 31, 1918;

Once more men could look upward and not fear the rain of death and destruction so impressively identified with aircraft in their first years of extensive use. <sup>4</sup>

3. (continued) Hilary St. George Saunders, Per Ardua (London, 1945), p. 279, argues that in all the British air forces used 50,000 aircraft during the war of which 36,000 were destroyed. Whatever the exact figure, thousands of British aircraft were on hand at the end of the war, parked on some 700 British airfields of which 337 were in the United Kingdom. See AVIA 2/1743, Air Ministry Minute, April 14, 1919. Of this large fleet, only 3,300 were considered 'first-line' aircraft. See Hansard, CXVI, March 14, 1923, col. 1610. The Royal Air Force kept some aircraft, 100 were given to South Africa, and some were made available for civil aviation, but the great majority were scrapped.
  
4. Although in the first few years of pioneer aviation (1903-1912) there was considerable optimism for non-military uses of the aeroplane, by 1913, Jane's All the Worlds Aircraft (London, 1913, p. 7) could note that "except as a war machine the aeroplane is of little interest or use to anyone". The Great War merely confirmed a general opinion that the aeroplane's future was as a weapon. Its important contribution to Allied victory reinforced this view and Churchill, in 1917, was sufficiently impressed to comment, "there are only two ways now of winning the war, and they both begin with A. One is aeroplanes and the other is America". (Quoted in Reader, Architect of Air Power, p. 59). A good account of air power capabilities as seen during the war is given in Churchill's The World Crisis, 1916-1918, pp. 568-77. The most authoritative source on the roles played by the Royal Naval Air Service, the Royal Flying Corps and the Royal Air Force in giving aircraft their near exclusive military identification is W. Raleigh (vol. I) and H. A. Jones (vols. II-VI), The War in the Air (Oxford, 1922-1937). See also R. H. Fredette, The First Battle of Britain, 1917-1918 (London, 1966). Several chronicle accounts deal with the early years of British aviation. See R. Dallas Brett, History of British Aviation, 1908-1914 (London, 1933), and two works by Harald Penrose, British Aviation: the Pioneer Years, 1903-1914 (London, 1967) and British Aviation: the Great War and the Armistice, 1915-1919 (London, 1969).

Peace had come but the world still awaited the full reckoning of the costs in human and material terms. The crosses which hallowed the heroes' final rest in the cemeteries of Europe and Empire had yet to be given a last counting, and stood in their too neat rows like a ghostly army on parade, mute testimony to the folly of war and the mortality of man. The lives lost, the bodies maimed and the minds bewildered in the hell of war were facts of the moment to become memories for a generation. There is not now nor was there then a simple formula with which to measure how both living and dead reminders affected the later workings of a nation or an empire, although aviation, military and foreign policy debates throughout the period between the two world wars certainly sought strength in arguments from Great War premises. So painful and so large was the memory of war in the Empire that it was prepared to pay almost any price to preserve the peace. <sup>5</sup>

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5. In terms of military readiness, the price included near defeat in the early years of World War Two. Not until 1934 did the British Government truly awaken to the reality that another war was possible, indeed, probable. For the most part, Great Britain sought refuge in hopes for collective security in the League of Nations and international disarmament, at the same time allowing her armed forces to deteriorate in size if not quality. Air power, in particular its civilian bombing capabilities, was a clear memory from the Great War during which German airship and aeroplane raids on England had killed 1,117 civilians and wounded 2,886 more. It moved some to advocate the total abolishment of all aviation. "The world was a very good place before aeroplanes came and we got on well enough

The material costs of the war were staggering as well both in terms of money spent and property destruction. Almost impossible to calculate was the price paid for a four year interruption in the believed march of civilization and progress. Throughout this period the energies of most of the industrial world had been expended in arming and supplying the great war-machines of Europe with scant regard for the production and distribution of goods and services designed to improve the kind and quality of life for man. Few would argue that tanks, guns and ships of war contribute in any lasting way to the mainstream of human progress. There are only scattered credits to match the debits in the ledgers of war. Perhaps the aeroplane stood alone to balance an otherwise desperate accounting. While man's most exciting invention was everywhere regarded as a weapon of war, some at least saw it as an agent of peace. There is little doubt that the Great War accelerated the development of the aeroplane to a degree that years of

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5. (continued) without them," wrote A. C. Temperley (The Whispering Gallery of Europe, London, 1938, p. 271). The place of civil aviation in this question is discussed in David Carlton, "The Problem of Civil Aviation in British Air Disarmament Policy, 1919-1934," Journal of the Royal United Services Institution, III (November, 1966), pp. 307-22. For various views on the legacy of war see Francis W. Hirst, The Consequences of the War to Great Britain (Oxford, 1934), C. L. Mowat, Britain between the Wars, 1918-1940 (London, 1955), Saunders, Per Ardua, pp. 281-326, and Arthur Marwick, "The Impact of the First World War on British Society," Journal of Contemporary History, III (January, 1968), pp. 51-63.

peace would not have done.<sup>6</sup> Thus aviation in war kept the wheels of progress turning if only slowly.

However, not even the aeroplane could significantly alter the fact that the price of peace was astronomically high. Social progress, economic development and political change, all these had been subordinated to the cause of war and the quest for victory. If peace brought relief, then, it also brought the world face to face with the reality that the war had been beyond its means and its account could not be paid in full. For Great Britain and her Empire, as for much of the world, the war left a legacy which no peace could erase as events of the next two decades would bear out. In economic terms alone the Great War cast long shadows across an Empire upon which the sun never set. The British Exchequer, master of the destinies of Great Britain and Colonies alike, knew better than most the shattered state of the imperial economy, the

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6. In almost every way -- design, performance, reliability and potential -- the aircraft and engines of 1918 were superior to their pre-war counterparts, most of which could be described as 'contraptions' rather than aeroplanes. Thus, the war accelerated aviation progress and gave a powerful impetus to aircraft development. A very few air historians argue that the war interrupted 'true' progress. Brett (History of British Aviation, p. x) suggests that "the War deflected the progress of aviation from the broad road to success, along which it was sweeping with gathering velocity in 1914, into a lane which led nowhere". This interpretation hardly squares with the facts, nor does it take into account the fact that it was during the war the potential uses of aircraft for civil purposes were recognized and the first steps taken to study the question by the Civil Aerial Transport Committee.

debts to be paid, the repairs to be made, and the need for restraint after the almost exuberant expenditure in war. For almost all of the inter-war period, the real and imagined needs for financial stringency in British Government spending dictated the economic life of the Empire, with special consequences for Civil Aviation and the African Dependencies. The one a child of war, the other a victim, would seem at first glance to be unlikely bedfellows in imperial considerations, but they shared the economic legacy of war in a strikingly similar way. Both ranked rather well down in the scale of British priorities and neither were given the attention and assistance needed to a degree compatible with their ambitions.<sup>7</sup> British Africa and Civil Aviation were not alone, of course, in sharing a peace which had brought more parsimony than prosperity, but this gave small comfort to those who argued for the importance of civil aviation and African development. The price of bringing about and maintaining a peace did appear to be a never-ending burden laid heavily on the shoulders of Empire. Peace was welcomed in 1918 and was still welcome in 1939, but there is little

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7. Debates in the House of Commons on colonial questions and civil aviation questions were notorious for their poor attendance and interest. Even in these circumstances a great deal more was said than done. Development in the Colonies was circumscribed by the notion that 'the Colonies must pay for themselves'; civil aviation progress struggled against the belief that it 'must fly by itself'.

doubt that in the intervening years, the legacy of the Great War was a consistent influence upon the direction and pace pursued by British and Imperial Policy.

Still, in the first few years after the war, victory made peace more palatable if not sweeter. Great Britain had special reason to rejoice as the Empire celebrated the end of war and the coming of peace. The Central Powers had challenged progress, civilization and mankind and had threatened the Empire as they had Europe. This challenge had been met with purpose and strength, and Allied victory owed much to the part played by the British Empire.<sup>8</sup> What gladdened the hearts of Imperial statesmen was that war and triumph had brought the Empire together as never before.

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8. The number of works dealing with and documenting the important role played by the British Empire in the war are legion. See, for example, C. R. Cruttwell, A History of the Great War, 1914-1918 (Oxford, 1934), in which he notes that the Empire enlisted 9,496,170 men in the cause of which 3,284,743 came from the Dominions and the Colonies. In Allied forces, only France provided more. Official Government figures may be found in Great Britain, War Office, Statistics of the Military Effort of the British Empire during the Great War, 1914-1920 (London, 1922). The African contribution is detailed in Sir Charles Lucas, ed., The Empire at War, vol. IV, Africa (London, 1925). See also John Buchan, The History of the South African Forces in France (London, 1920[?]), and W. D. Downes, With the Nigerians in German East Africa (London, 1919). Some 143,634 white British Africans served in the Imperial forces of whom 7,786 were killed. 32,000 black British Africans served in the King's African Rifles, 24,867 in the West Africa Frontier Force, and another 6,100 were recruited in Rhodesia. In addition, there were about 600,000 in non-combatant roles, with total black casualties about 48,000 dead. For summary see L. H. Gann and Peter Duignan, eds., Colonialism in Africa, 1870-1960, vol. 2, The History and Politics of Colonialism 1914-1960 (Cambridge, 1970), pp. 7-10.

The Dominions and Colonies had rallied to the cause and their sons had swelled the ranks of the Imperial legions fighting for King, country and Empire. Whatever doubts had ruffled the calm of imperial unity in the years before 1914, these had been dispelled; war had confirmed not shattered the imperial identity. It was a sanguine view which later years would not support, but it gave heart and hope to the Empire-minded.<sup>9</sup> For them, war had not only underlined the importance of the Empire, it had assured its permanence. The closing of ranks in times of crisis suggested that the imperial family enjoyed more intimate and lasting ties than any mere political form could assume. In the aftermath of war, peace promised a fresh beginning to an old empire in a new age, and Great Britain could claim with some justification that the Empire had never been stronger nor more united in purpose.<sup>10</sup>

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9. The formation and success of the Imperial War Cabinet and the first stirrings of the 'Commonwealth' idea certainly helped to encourage these views. The still unsettled Irish question, the legacy of the Boer War, and the need for change in India were not forgotten, but few saw the extent to which they would trouble the Empire in the years ahead. The triumph of the Empire in war also added to the belief that Great Britain was the pillar of western civilization with a mission to fulfill. Lord Birkenhead wrote of "our expanding destiny as leaders of mankind" (quoted in A. F. Havighurst, Twentieth Century Britain, 2nd. ed., New York, 1962), while Lord Lugard gave the Imperial mission its African interpretation in The Dual Mandate in Tropical Africa (London, 1922).
10. One dimension of this claim lay in the fact that in 1919 the extent of the British Empire had reached its zenith. With the additions of 'mandates' in the Middle East, the Pacific, and Africa (the ex-German colonies of Togo, the

This was not to ignore the problems to be faced in giving shape to dreams of what peace would bring. Peace should and could mean prosperity, progress, and the bestowal of countless blessings upon the Empire. The task now at hand was to ensure that the Empire could make as effective a contribution to peace as it had to war. Imperial strength and unity, so much in evidence in the war, must be carried on and maintained in peace in such a way that Imperial trade, commerce and prestige would be restored to its rightful place in the hierarchy of world power. Strength and unity were indeed two sides of the same coin; the one could not exist without the other, and the implications of the relationship were plain to see. A strong Empire called for a military readiness to meet any challenge in any part of the King's domain, while unity presupposed the continued development of more continuous, rapid, and effective communication between the Imperial metropolis, the Dominions and the Colonies. For a few men of bold vision the means to these ends were there in the thousands of men and machines which had made Great Britain the greatest air power in the world. 11

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10. (continued) Cameroons, South-West Africa and Tanganyika, the Empire covered fully one-quarter of the world's land surface. About one-quarter of the world's population inhabited this vast empire.
  11. While Great Britain held second rank behind France in terms of numbers of front-line aircraft (3,600 v. 3,300), the Royal Air Force had developed into the best organized and most efficient air force in operation during the war. See Davy, Interpretive History of Flight, p. 159. Led by Trenchard and supported by Weir at the Air Ministry, the R.A.F. were widening the horizons of air power

Skills born in war could now be used for peace. The aircraft manufacturing industry and the Royal Air Force had proved their worth and potential. It remained to organize and develop civil air transport, as yet an untried dimension in Imperial transport and communications.<sup>12</sup> This triumverate, representing the whole of British aviation enterprise, promised a continuing air supremacy, a defended Empire, and most exciting of all, stronger links in the chains which bound Great Britain, Canada, South Africa, India, Australia and New Zealand, and the dependent Empire to an Imperial whole. These were the dreams born in war. With the coming of the peace, it was time for aviation, noted Great Britain's first Controller-General of Civil Aviation, "to profit by the well-nigh incredible impetus which the stress of war has given to its development".<sup>13</sup>

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11. (continued) capabilities in 1918 with a growing interest in strategic bombing and the establishment of units which were to become Bomber Command. This concept was in advance of the air thinking of the French, for example, and given more emphasis than had been given by the Germans. See Boyle, Trenchard, pp. 271-316.
12. This does not ignore early air mail experiments in India and Great Britain in 1911, but these were premature demonstrations of limited success and even less influence on civil air transport development. See M. R. Dhekney, Air Transport in India (Bombay, 1953), p. 54, and Robin Higham, Britain's Imperial Air Routes (Hamden, Connecticut, 1960), p. 20.
13. AIR 1/725. Enclosure. Synopsis of speech, "Commercial Aviation in the Light of War Experience", by Sir Frederick Sykes to the London Chamber of Commerce, January 7, 1919, p. 1.

The official opening of civil aviation in Great Britain came on May 1, 1919, and while no great excitement marked the day the British press gave the occasion full play.<sup>14</sup> The British public still had to be persuaded that the aeroplane could function in a role other than that of a weapon of war. Many remembered the stunts and joy-rides of pre-war pioneer pilots and gave little thought to the idea that aviation could become a serious means of transport and communication.<sup>15</sup> Civilian enthusiasm was confined to a handful of men, aircraft designers and manufacturers, pilots and politicians, all of whom had looked forward to the moment when civil aviation would be recognized as the important development it was.<sup>16</sup>

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14. AVIA 2/1743, Official Opening of Civil Aviation, May 1, 1919. Press Reports and Notices. See also The Times, May 1, 1919, pp. 6-7, 12, featuring a full account of the new air regulations and specifications, and a detailed map of the United Kingdom indicating approved airfields and air routes.
15. And, as one historian has noted, "the aeroplane, from which most was expected after the war, probably affected the ordinary man least of all the wonders of the new age". Mowat, Britain Between the Wars, p. 238.
16. George Holt-Thomas (1869-1929) was one of these few who had been looking forward to the end of war and the opportunity to promote and organize civil air transport. In October, 1916, he founded and registered his company, Aircraft Transport and Travel, Ltd., (A.T.&T.), with a view to establishing an air line to "enter into contract for the carriage of mails, passengers, goods and cattle". See John Pudney, The Seven Skies (London, 1959), p. 16; also Higham, Britain's Imperial Air Routes, p. 20. He also founded the Society of British Aircraft Constructors (S.B.A.C.).

Moreover, even this enthusiasm was tempered with the knowledge that May 1 was only, to use Kipling's words, "the opening verse of the opening page of a chapter of endless possibilities".<sup>17</sup> Civil aviation could now fly under the aegis of the newly-formed Department of Civil Aviation, and the Government was assuming responsibility for providing a framework of regulations, standards and facilities.<sup>18</sup> While this was a step in the right direction, and a necessary first step at that, the assumption that this was sufficient to establish civil/commercial aviation was wide of the mark. The Government was providing financial support for aeronautical research, aircraft development, and the provision of all required ground support facilities but the pressing need of the air transport promoters for direct financial assistance in the form of subsidies, capital assistance, or grants was ignored by the Treasury and the Air Ministry.<sup>19</sup> For

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17. Quoted in Peter G. Masefield, "Some Economic Factors in Air Transport Operation", Journal of the Institute of Transport, XXIV (March, 1951), p. 81.
18. See AIR 1/2101 and CAB 24/105 for "Brief Summary of the more Important Steps taken by the Air Ministry for the Assistance of Civil Aviation", published as an appendix to Cmd. 770 (1920). One M.P., J.T.C. Moore-Brabazon, during the debate on the second reading of the Aerial Navigation Bill, even argued that the Government should stay out of regulating civil aviation. "Commercial aviation is a commercial proposition, and if people are going to carry passengers in their machines they are going to have to pay if they kill people in those machines and the right body to regulate and inspect machines is Lloyd's, and not the Government". Hansard, CXII, February 17, 1919, col. 677.
19. Sir F. Banbury, Chairman of the Select Committee on

George Holt-Thomas and the other air line developers, civil aviation required a careful blending of direct and indirect government support, private initiative and public response.<sup>20</sup> Given the success of this synthesis a new Imperial design would see Cape Town and Delhi, Canberra and Ottawa brought into close community with London; Imperial air routes would girdle the globe with Imperial aircraft flying the King's mails and subjects in the conquest of time and distance. It was a magnificent dream. Few anticipated the problems which lay ahead to frustrate the translation of these ideas into reality.<sup>21</sup>

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19. (continued) National Expenditure, challenged even the small amount of the Air Vote directed to civil aviation. In the House he noted, "Then I happened to come across... a little item of about £500,000 a year to be spent on civil aviation. I dare say it is a very excellent thing, but why should we subsidise it by spending £500,000 a year on it I do not know". Hansard, CXVI, June 4, 1919, col. 2140. For a tabled summary of annual British air estimates and expenditures, 1919-1939, see Higham, Britain's Imperial Air Routes, appendix VII, pp. 344-47.
20. For a general outline of their views, see Holt-Thomas, Aerial Transport (London, 1920), and A. Instone, The Early Birds (London, 1938). See also Holt-Thomas, "Commercial Aeronautics", Aeronautical Journal, XXI (October-December, 1917), pp. 369-89, 420-25.
21. Some, like Major-General J.E.B. Seeley, the Under-Secretary of State for Air, could comfortably forecast that "I see no reason why, within the lifetime of nearly all of us, you should not have great air routes to every part of the British Empire" (quoted in The Times, January 22, 1919, p. 10), and noted in the House that "We are far more advanced than any other country in the preparations made for civil flying". Hansard, CXIII, March 13, 1919, col. 1516. A book by one Captain Swinton, British Aircraft Industry (London, 1919), argued that in the not too distant future, South Africa would be only 2½ days away from the United Kingdom by aeroplane, an idea

British official interest in civil aviation was a recent development in 1919, although interest in air matters went back a decade. In 1909, Asquith, as Prime Minister, appointed a standing committee to "advise in matters connected with the problem of flight, whether by means of aeroplanes or dirigibles", and this committee reported annually to the Prime Minister until the formation of the Air Ministry in 1917.<sup>22</sup> In 1910, Great Britain was a participant in the first International Conference on Aerial Navigation (ICAN) held in Paris. There an important decision was taken; the British delegation rejected a German proposal to establish "freedom of the air", arguing with maritime precedent in mind that national sovereignty extended upward as well as outward. This stand was confirmed in legislation in the Aerial Navigation Act of 1910.<sup>23</sup> It was an adherence to

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21. (continued) scorned by the editor of The Aeroplane, C. G. Grey. See the Aeroplane, February 19, 1919, p. 808. The best general survey of the problems faced by civil aviation in the Empire between the wars is still Higham, Britain's Imperial Air Routes. For the early period, see Eric Birkhead, "The Beginnings of British Civil Air Transport, 1919-1924", and his "The Financial Failure of British Air Transport Companies, 1919-1924", Journal of Transport History, IV (May, 1960), pp. 133-45.
22. AIR 1/725, Enclosure 102/1. Typed three page account of the Formation of the Advisory Committee for Aeronautics. Asquith announced its formation to the House of Commons, May 5, 1909. See Report of the Advisory Committee for Aeronautics, 1917-1918, Cd. 9145 (1918).
23. Higham, Britain's Imperial Air Routes, p. 19.

principle which Great Britain would live to regret as the 1920's and 1930's demonstrated too clearly the difficulties associated with establishing Imperial air routes across a national-minded Europe and Central Asia.<sup>24</sup> Nonetheless, in the few years of air activity before World War I, the United Kingdom had been coming to grips with the problems of the aeroplane and aviation with interest if not enthusiasm.

In war the focus of interest in aviation turned on the military application of the aeroplane. Rushed on to the world's stage to play a key role in the battle for Europe, the aeroplane made an exciting and impressive debut. Air power developed as did the interest of generals and politicians alike. The British aircraft industry which had manufactured 211 aircraft in all of 1914 was turning them out at the rate of 4,000 a month at the end of the war.<sup>25</sup> Close to 200,000

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24. Imperial Airways were the major suffering inheritors of the British position, having to traverse Europe to reach Africa and Central Asia to reach India, and it moved H. Burchall (General Manager [Commercial] of Imperial Airways) to complain of international political difficulties "based upon the uncertain and shifting foundations of national prejudices and aspirations". In "The Politics of International Air Routes", International Affairs, XIV (January-February, 1935), pp. 89-107. See discussion in Higham, Britain's Imperial Air Routes, pp. 19-20, and below, chapter IV.
25. Reader, Architect of Air Power, p. 63. It is interesting to note that in 1917, no 1914 aeroplanes were still flying, losses and obsolescence having taken their toll. Ibid., p. 59. From the beginning of 1919 to 1923, the British aircraft industry had produced only 200 civil and military aeroplanes. During the same period, France had produced 3,300, a sorry commentary on the respective states

men and women were employed in the industry and allied trades. <sup>26</sup> While there was no civil aviation activity, at the Armistice the Royal Air Force numbered some 290,000 officers and men, most of whom were learning and developing the new skills of aviation. <sup>27</sup> In a few short years, aviation growth and potential had become too large to be ignored. Although pre-war flying had done little to impress anyone with its civil or commercial possibilities, improved aircraft design and performance, and the great numbers of people involved in the whole aviation industry in the last years of the war strongly suggested that post-war civil aviation would bear little resemblance to its pioneer beginnings. There was the dawning of the idea that perhaps much of this great war machine could be utilized as a new form of transport in the years of peace ahead. It was with an eye to the future then, that the British Government

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25. (continued) of health of the two rival aircraft industries and a denial of British hopes for keeping the industry 'alive'. See Hansard, CLXI, March 14, 1923, cols. 1610-11.
  26. Reader, Architect of Air Power, p. 62, notes 177,000 employed in March, 1918. By 1922, these numbers had been reduced to about 2,500.
  27. At the Armistice, there were 30,122 officers and 263,140 men in the ranks of the Royal Air Force. By March, 1920, demobilization had thinned the numbers of all ranks to 29,730. Hansard, CLXI, March 14, 1923, col. 1610, and Saunders, Per Ardua, p. 281. It is not clear just how many pilots were trained in the war-time air services, but an important by-product of demobilization was the persistence with which many pilots sought continuing flying careers in civil aviation. For the story of one, Alan Cobham, see chapter III.

formed the Civil Aerial Transport Committee in May, 1917, under the chairmanship of Lord Northcliffe.<sup>28</sup> This was the first of many such committees established by the British Government over the two decades between the wars charged to examine and report upon the whole question of British and Imperial air transport.<sup>29</sup> The Committee's Report, completed in February, 1918, was a most comprehensive document, ranging over almost every aspect of civil aviation.<sup>30</sup> Of special interest was its stress upon the potential importance of air transport to the Empire, particularly the Dominions. "It is obvious", the Report stated, "how important a bearing the improvement in inter-

28. The Committee was asked to report on "the steps which should be taken with a view to the development and regulation after the War of aviation for civil and commercial purposes from a domestic, an imperial, and an international standpoint". The Report of the Committee is set out as Report of the Civil Aerial Transport Committee, Cd. 9218 (1918). See also notes in AIR 19/108, Air Routes, 1918-1919, and AIR 1/2423, Reports by and to the Civil Aerial Transport Committee, 1917-1918. Lord Northcliffe chaired only the first meeting, then departed on a mission to the United States. His replacement was Major J. L. Baird, the Under-Secretary of State for Air, and the Committee Report is often referred to as the Baird Committee Report.
29. In all, some eight major committees and a number of short-lived cabinet committees reported on civil aviation questions from 1918-1938. This reflects to some extent an abiding concern with the special problems of civil aviation, as it does the British faith in the committee or commission solution to difficulties in policy elaboration. As often as not, however, this technique postponed decision-making at the expense of immediate action and progress.
30. For a discussion of the Baird Committee Report, see Higham, Britain's Imperial Air Routes, pp. 20-3.

imperial communication is likely to have on that greatest of problems, the problem of the future relation to one another of the self-governing States of the British Empire." <sup>31</sup> It was the first government document to suggest the feasibility of linking England with South Africa by air. <sup>32</sup>

The Committee urged the Government to take early action and set out an air policy. Noting that future traffic would include the mails, passengers and goods, the Committee was confident

that demands for aerial services to provide such carriage will rise immediately at the conclusion of the war, and that it is imperative that every endeavour should be made to prepare for these demands. <sup>33</sup>

The recommendations and observations of the Committee were born out of a reasonable assessment of the possible post-war situation, and the Report could have been a good starting point for the development of an imperial air policy. One can only speculate on what might have been the case for civil aviation in Great Britain (and by

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31. Baird Committee Report, p. 13.

32. The Committee did not elaborate any serious proposal for a London-Cape Town air service, although it did suggest that both East and West African routes could be operated. The Committee focused attention on the England-India route via Egypt and so established the primary goal of subsequent Imperial air route policy. AIR 19/108, proposals in typescript. See also Higham, Britain's Imperial Air Routes, p. 23.

33. Baird Committee Report, p. 9. The Committee thus expressed an optimism and a sense of urgency which the Government did not share.

implication in its dependent empire in Africa), had a policy been ready and waiting at the peace. But the Report was ignored by the Lloyd George Government and neither in 1918 nor the years which followed did Great Britain have a civil aviation policy, an omission only partly excused by the overriding concern with war and the establishment of peace. The development of a policy designed to promote civil aviation at home and in the Empire had to await the arrival of Sir Samuel Hoare as Secretary of State for Air in 1922.<sup>34</sup> Thus, for almost four years, the Empire lacked determination and far-sighted leadership in its civil aviation development. British Africa, with the exception of South Africa, probably suffered more than Great Britain whose lead and leadership it had to follow.<sup>35</sup>

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34. See below, chapter II, for a discussion of Sir Samuel Hoare as Air Minister, 1922-1924 and 1924-1929.

35. See above, p. 7, and below, chapter II. While obvious that the depressed state of the British economy did inhibit civil aviation progress at home and in the Empire, neither Churchill nor Guest, the Air Ministers before Hoare, brought the sort of enthusiasm to civil air transport questions which might have kept British and British African air development apace with progress elsewhere. South Africa was not dependent upon British initiative, but it too failed to provide Civil Aviation with adequate support in the early years. As late as 1925, C. G. Grey lamented that "South African aviation appears to be in a rather bad way", blaming it on the fact that "neither the Government nor the people in South Africa yet appreciate the possibilities...." Aeroplane, June 28, 1925, p. 78; May 6, 1925, p. 438. See chapter VII for a study of the development of air transport in South Africa during the period leading up to the establishment of South African Airways as the Union's 'chosen instrument' in 1934.

The situation was allowed to continue despite the urgency and importance of the matter argued within and without the fort. Major-General Frederick Sykes, Chief of the Air Staff in 1918, set out the many questions concerning post-war air policy in a memorandum to the Secretary of State for Air, and warned,

All of them, I think, admit of, and may urgently demand, immediate consideration, in order that a clear Government policy may be defined in regard to commercial aviation. We have complete monopoly of all the art and application of aviation in its various forms, and disintegration may soon result if, when peace comes, we are not in a position to put into execution a definite and well considered plan. 36

Added weight was given to this warning by the Ministry of Reconstruction in 1919. A publication on civil aviation argued that its development was "not merely a scientific or commercial question", but a question "of the first importance from the point of view of national security". The pamphlet added, "it is vital to the security and prosperity of the

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36. AVIA 2/1780, Commercial Post-War Aviation Policy, 1918. Sykes to Weir, November 9, 1918. Of course Great Britain did not have a 'complete monopoly' in aviation development in any sense, but as one of the leading powers in air progress, Sykes did not want to see such progress dissipated in an unplanned and disorganized peace. Sykes also argued "the establishment of Government control of commercial aviation on economic lines and on a revenue basis", although he set out no guidelines as to how this might be achieved.

Empire that at any cost this country should lead the world in civil aerial transport".<sup>37</sup> Here, as elsewhere, the argument drew strength from the idea that civil aviation could be to the Royal Air Force what the merchant marine was to the Royal Navy; a reservoir of trained men and experience.<sup>38</sup>

The House of Commons, as often as not apathetic in matters of civil aviation in later years, took up the question of a civil aviation policy in the debate on the 1919-1920 Air Estimates. William Joynson-Hicks used history and maritime analogy to extol the virtues of aviation and empire, pointing out that,

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37. Ministry of Reconstruction, 'The Future of Aerial Transport. Pamphlet. Reconstruction Problems No. 34 (London, 1919), pp. 2-3. The study leaned heavily on the Report of the Civil Aerial Transport Committee.
38. The Future of Aerial Transport, p. 20. "The maintenance of an Air Force backed by a strong commercial air fleet is as vital to the safety and prosperity of the British Empire as the maintenance of a strong Navy and a strong Mercantile Marine." It added that "the aircraft industry must be kept vigorous in order to respond to any possible war emergency of the future." The study thus shared with the Report of the Civil Aerial Transport Committee (p. 11) and Sir Frederick Sykes (see his Aviation in Peace and War, London, 1922, p. 104) the view that the best argument for civil aviation was its usefulness as a 'back-up' to the military and a 'prop' to the aircraft manufacturing industry. Only with the establishment of Imperial Airways in 1924 was civil aviation divorced from these ideas, at least to the extent that they were no longer the primary arguments for support. See below, chapter II, and Birkhead, "The Beginnings of British Civil Air Transport", p. 96.

Years ago we had command of the sea because we had the coaling stations of the world. To-day we can have command of the air because we have the landing strips of the world. 39

Another Conservative M.P., Colonel P. B. Malone, was not sure "that everything is being done to further the development of commercial aeronautics", and added,

It is hardly necessary to tell the House of the enormous possibilities and commercial developments which lie before commercial aeronautics. Take, for example, the case of South Africa. If it were possible to transport by air some of those valuable commodities such as diamonds or gold, instead of sending them by sea, enormous sums could be saved. 40

39. Hansard, CXIII, March 13, 1919, cols. 1532-33. Joynson-Hicks was an occasional spokesman on air matters in the House while Conservative member for Twickenham (1918-1929). His interest in aviation dated back to 1912, and in 1916 he wrote and published The Command of the Air, an amateur treatise on military aviation.
40. Hansard, CXIII, March 13, 1919, cols. 1539-40. The idea that "enormous sums could be saved" in transporting precious metals and diamonds by air was a persistent theme during the 1920's and 1930's. In 1926, Hoare hoped that a permanent air service would grow out of the Khartoum-Kisumu experimental service (see chapters II-III) and that it would carry and obtain revenue from the carriage of gold from the Kilo and Moto mines in the Congo. Air Ministry, The Approach towards a System of Imperial Air Communications (London, 1926), p. 10. Sir Donald Cameron, Governor of Tanganyika, noted that the company bidding on the East African air service, would always be in a favourable position for carrying gold from the Kilo mines even when the railway was through to Stanleyville as for one thing the insurance was cheaper by air than by rail [my italics] and much time of course would be saved.
- AVIA 2/1857, Khartoum to Kisumu Air Service - Question of the Institution of a Permanent Service to South Africa, 1929. Note of a Meeting at the Colonial Office, June 10, 1928, p. 2. Higham notes that about £12,600,000

The national press, led by The Times and the foremost aeronautical journal, the Aeroplane, likewise gave strong support to civil air transport development.<sup>41</sup> Thus from many voices in the nation in the early post-war years came the demands that Great Britain set out and pursue an air policy. The arguments were consistent and straightforward in pointing out the benefits to be derived from British

40. (continued) in diamonds and "somewhat more than that in gold" were exported annually to London from South Africa. The freight charges on gold alone amounted to £204,000, and time in transit cost £100,000 in lost interest. Higham, Britain's Imperial Air Routes, p. 152. Imperial Airways and the local carriers transported bullion on African services after 1932. Before "enormous sums could be saved", a regular service had to be provided and mine operators convinced of the safety of aeroplane transit.
41. The Times, September 10, 1919, p. 10, lashed out at the lack of Government policy, especially its failure to move ahead with an airship development plan. The editorial noted, "the only decided policy apparent is the intention to shirk as much responsibility as possible on the plea of economy". The Aeroplane, C. G. Grey's weekly mouthpiece, reflected the often harsh views of its editor, an interested and critical spokesman on all air matters for three decades. (See Thurstan James, "Charles Grey and his Pungent Pen", Journal of the Royal Aeronautical Society, LXXIII [October, 1969], pp. 839-50). He was particularly keen on airship possibilities in international and Imperial air communications, and doubtful of the aeroplane for long-range operations, even suggesting that "it would not be surprising if the aeroplane proved to have already settled down to approximately its final form, and if developments for many years were restricted to engine and other details". Aeroplane, April 2, 1919, p. 1388. See also his "The Aeroplane and the Empire", Overseas, III (June, 1918), pp. 27-32, and "Aircraft on Imperial Routes", United Empire, XIII (January, 1922), pp. 11-3.

action: national prestige, defence capability, commercial gain, and an empire united as never before.<sup>42</sup> The Imperial Government could not help but hear the appeals for action and support, but it could ignore them and for the most part it left its manservant, the Air Ministry, to answer the critics.<sup>43</sup>

The establishment of a civil air transport policy, and in broader terms an imperial air policy, demanded aggressive and open-minded leadership, confidence, imagination, and above all else, capital and the will to use it. With a Government as preoccupied with the problems of peace as it had been with war, none of these were in sufficient supply to sponsor an infant Air Ministry and its Department of Civil Aviation. Too little money, too little interest, and a shortage of staff and facilities precluded the Air Ministry from doing the job its critics demanded. C. G. Grey was not

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42. All of which meant that the Government must elaborate a long-range policy and provide financial assistance. The question of 'national prestige' alone as a benefit of civil air transport development did not go unnoticed, but unfortunately, until the formation of Imperial Airways in 1924, the idea of a 'national prestige' airline, a 'chosen instrument', made little impact upon Government considerations. See Higham, Britain's Imperial Air Routes, p. 39.
43. For the official statements of the Government in summary form, see the semi-annual Reports on the Progress of Civil Aviation, drafted by the Department of the Controller-General of Civil Aviation and issued as Command Papers, 418 (1919), 800 (1920), 1073 (1920), 1342 (1921), 1559 (1921), and 1710 (1922).

wide of the mark in suggesting that in the Air Ministry after the Armistice, "there followed something like chaos".<sup>44</sup>

Lord Weir of Eastwood resigned as Secretary of State for Air in December, 1918, and in the cabinet re-shuffle following the 'coupon election', Lloyd George appointed Winston Churchill to preside over the War Office and the Air Ministry.<sup>45</sup> The dual appointment did not go unnoticed. The Times, while not questioning Churchill's massive intelligence or ability, had doubts about the wisdom of burdening any one man with such responsibility. "If Mr. Churchill", noted an editorial in early January, 1919, "is able to deal with all the questions arising at both the War Office and the Air Ministry at the present time and to make adequate provision for the future of both Services and commercial flying he is indeed a superman."<sup>46</sup>

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44. C. G. Grey, A History of the Air Ministry (London, 1940), p. 88.

45. Churchill took up the offices January 15, 1919. Andrew Boyle suggests that Lloyd George's appointment of Churchill as both Secretary of State for War and Air has never been satisfactorily explained (Trenchard, pp. 325-27), but the Prime Minister's attitude towards the Air Ministry (and possibly the Royal Air Force) is clear in his remarks to Churchill; "Make up your mind whether you would like to go to the War Office or the Admiralty, and let me know by to-morrow. You can take the air with you in either case; I am not going to keep it as a separate department." Quoted in Churchill, The World Crisis. The Aftermath, p. 53. Churchill chose the Admiralty but Lloyd George shifted him to the War Office to handle the demobilization problems there.

46. The Times, January 13, 1919, p.4.

A superman he was not and if his performance as Air Minister was consistent it was unexceptional. In the Churchill story this was an indifferent interlude in an otherwise brilliant record of government service. <sup>47</sup>

The War Office, with the immediate problems of demobilization and the planning of a peace-time military policy, demanded first consideration. The Air Ministry and the Royal Air Force were still question marks in the minds of British Government and military leaders, and there were serious doubts as to their future as separate entities. <sup>48</sup> Churchill did not ignore the problems of his second office, but he worked without any special enthusiasm or excitement, viewing the appointment as an experience rather than a challenge. Much of the initiative and work he left in the hands of subordinates. He was no expert in air matters but he was prepared to seek out and make use of those who were. <sup>49</sup>

47. Seely, the Under-Secretary of State for Air, resigned in frustration and protest over the little time Churchill seemed ready to spend on air matters. In the House he attacked both Churchill and the Government for combining offices in a way that gave Air such a low priority. Hansard, CXXVI, March 11, 1920, cols. 1602-04.

48. Boyle, Trenchard, pp. 317ff; Reader, Architect of Air Power, p. 82; Saunders, Per Ardua, pp. 281-86.

49. Churchill knew a great deal about an air force operating in time of war, but he had much to learn about how to run an air force in peace. As to civil air transport, it is probably fair to say that he knew nothing, and there he could draw comfort from the fact that he was far from being alone. "Nobody in Britain", wrote one air historian, "...had any clear idea of how to set about the business. [Even] the flying men were not

In so doing Churchill left a larger mark upon the history of Imperial civil air transport development than his contemporaries imagined or later historians record. 50

While no great policy emerged from Churchill's two years in the Air Ministry, and clearly civil aviation suffered through its most difficult years, a firm base of knowledge and experience was set down and the problems were at least identified. Ideas of what was later to be Imperial aviation policy were widely canvassed during the Churchill years in office, and much of the credit for these developments must go to his penchant for gathering information and advice in order to establish the facts of a matter. The consequences for British and Imperial air development cannot be ignored. The African Empire in particular profited briefly from this atmosphere, and became a focal point of air interest under Churchill. 51

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49. (continued) experts in transport". F.A.deV. Robertson, British Aviation (London, 1940), p. 11. See below, pp. 29-31.
50. No serious historian of British and Imperial civil aviation has given Churchill more than scant reference. and then only in terms of his memorable dictum, 'civil aviation must fly by itself'. Hansard, CXXVI, March 11, 1920, col. 1622. Sykes viewed his coming into office as a "national calamity" (From Many Angles [London, 1942], p. 266), and while in office saw little to make him change his mind (ibid., pp. 269ff.).
51. See below, pp. 31-3. This does not suggest that Churchill himself took an especial interest in aviation development in Africa per se, but he was amenable to ideas forthcoming for African air services, for they fitted well into his own broad and hopeful view of the Empire.

In the first few months of office, Churchill moved with a swift and sure hand that denied any suggestion of indifference. He persuaded Trenchard to return as R.A.F. Chief of Staff and moved Sykes into the newly-created Department of Civil Aviation as Controller-General. <sup>52</sup> Trenchard's appointment was probably the most important single factor in assuring R.A.F. survival as an independent military force. <sup>53</sup> Churchill admired the brusque but able Air Marshall who, with Churchill, kept the R.A.F. intact in the face of Admiralty hostility, Treasury penny-pinching, and an apathetic Prime Minister. Under Churchill, Trenchard and the R.A.F. had almost a free hand and were thus able to blaze trails in Africa and the Middle East for civil aviation to follow in later years. <sup>54</sup>

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52. Major-General Sir Frederick Sykes had been appointed Chief of the Air Staff in 1918 by Lord Weir, then Air Minister. Churchill wanted Trenchard back, an idea urged by Weir who now felt that Sykes "lacked the resilience and force of character to salvage what was necessary from the wartime wreckage" (Boyle, Trenchard, p. 328). Trenchard hesitated at the thought of being a party to Sykes' dismissal, but Churchill insisted. "You leave Sykes to me. Civil flying is going to be under the Air Ministry. We'll call Sykes 'Controller of Civil Aviation' and console him with a G.B.E.". Quoted in Boyle, ibid., p. 329. This approach said a great deal about Churchill's views on civil aviation. Clearly, he did not think that it merited a first-rate man in charge, although as it turned out, Sykes did a creditable job until his departure in 1922.
53. 'Boom' Trenchard (1873-1956) is remembered as the 'Father of the Royal Air Force' for his efforts. He was Chief of the Air Staff 1917-1918 and 1919-1929.
54. R.A.F. 'trail-blazing' was most marked in Africa, but

Sykes' appointment and the establishment of a Department of Civil Aviation at least indicated the conviction that civil air transport required separate and special consideration.<sup>55</sup> It did not answer the questions as to how and in what way civil aviation should be developed. There were no precedents to follow and little experience to use as a guide. Sykes was placed in the most difficult position of having to develop a civil air policy at home and in the Empire without the resources to initiate or implement any such action. Enthusiasm was not enough. The fact that a recognizable civil air transport policy could not be identified until Sir Samuel Hoare and Imperial Airways appeared on the scene, was no reflection on the Controller-General's ability or grasp of essentials. Indeed, Sykes had a much clearer picture of

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54. (continued) they pioneered and flew the Cairo-Baghdad beginning in 1921, several years before they flew any major African routes. They did survey the Cairo-Cape route while Churchill was in office.
55. The point has been raised that it would have been more logical to place civil aviation under the Board of Trade and not the Air Ministry, in other words, a divorcing from the Royal Air Force in much the same way as the Merchant Marine was separated from the Royal Navy. See Grey, History of the Air Ministry, p. 89. One explanation lies in the fact that while most contemporary observers could see that navy and merchant marine ship requirements were quite different, and were not easily interchangeable, few realized that aircraft design would pursue two separate paths for civil and military purposes. See Robertson, British Aviation, p. 11. One M.P., Joseph Batey, noted the parting of the ways in aircraft development in 1923 and argued that aircraft for civil purposes must be constructed so as to be convertible to military aircraft at an hour's notice! Hansard, CLXI, March 14, 1923, Col. 1643.

what could be done and how it should be done than his Secretary of State. For three years Sykes was civil aviation's most passionate advocate, and from platform and printed page he urged the Government and industry to take action. If he failed in his appointed task, he was a victim of circumstances beyond his control. He stumbled as did all concerned with civil aviation in these years along a road which seemed to lead in every direction but the right one. <sup>56</sup>

Nonetheless, these few years after the war raised questions and hopes of considerable importance to the developmental history of civil air transport in Great Britain and her African Empire. Churchill, if not particularly air-minded, was Empire-minded, and it was likely this latter concern that warmed his reception to the first proposal for an "Imperial Air Transport Company".<sup>57</sup>

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56. Sykes' major hurdle was Churchill, whom he saw as guilty of short-sightedness in civil aviation matters. Sykes stumped for subsidies, and urged development within the Empire which would link up ultimately as an Imperial air network. See CAB 24/116, Memorandum by the Controller-General of Civil Aviation, October 29, 1920; also Aviation in Peace and War, p. 129. Sykes contributed numerous articles to journals including "The Air Routes of the Empire", Modern Transport, II (February 7 & 14, 1920), pp. 19-20 and 19-20, "Imperial Air Routes", Geographical Journal, LV (April, 1920), pp. 241-70, "Civil Aviation", Aeronautical Journal, XXIV (November, 1920), pp. 579-94, and "Aviation and Air Transport", Journal of the Institute of Transport, II (March, 1921), pp. 207-16.

57. AVIA 2/1706. "Imperial Air Transport Company" - Draft Charter, February 6, 1919.

It was as well the first serious proposal to link Cairo to Cape Town via British East and Central Africa. Major-General W. G. Salmond, Air Officer Commanding the R.A.F. in the Middle East, visited England in March, 1919, and in company with Sykes presented Churchill with a draft charter of a company to be formed to organize civil air transport on the Cairo-Karachi-Australia and Cairo-Cape Town routes.<sup>58</sup>

The charter noted that:

the existence of a powerful British Company, controlled by those of Our Subjects in whom We have confidence, and having its principal field of operations in Egypt, Mesopotamia, Southern Persia, India, Straits Settlements to Australia, and in Sudan, Uganda, East Africa, Central Africa, Rhodesia and South Africa, would be advantageous to the commercial and other interests of Our Subjects in the United Kingdom and in Our Colonies....That the future interests of Our Subjects in the United Kingdom and in Our Colonies largely depend upon the development, under a strong organization, of air transport. 59

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58. Ibid. Note that the first proposed Imperial routes were to begin in Cairo, not London. In the first place, the British military presence in Egypt in 1920 was sufficient to assure that all aviation was in British hands and that an Imperial air service could operate from there. Secondly, both proposed routes extended through British territory or spheres of influence, with the assumption that there would be no difficulties in obtaining air rights of passage enroute. To initiate an Imperial route from London to Cairo meant not only obtaining rights of passage from France and Italy, but also landing and other ground facilities to cater for limited range aeroplanes. Negotiations to obtain such rights dragged on for almost ten years, in part because of European obstructionism, in part because Great Britain was reluctant to grant foreign air lines like rights for British territories.

59. Ibid.

Churchill's reaction was one of general approval. He asked Salmond to provide further details, which he outlined in a separate memorandum.<sup>60</sup> Salmond deplored the lack of any policy aimed at air route development, and pointed out that "private companies are agitating in Egypt, Sudan, and India for concessions, but nothing can be done owing to the uncertainty of the Governments concerned as to the policy to be followed". He added, "The Air in the Middle East and Africa constitutes a realm to be explored and developed."<sup>61</sup>

Salmond had already initiated a survey of the Cairo-Cape Town route with Air Ministry concurrence before Churchill took office.<sup>62</sup> His special concern was that Great Britain should act to be first in the field in Africa where British control from Egypt to South Africa would facilitate rapid development. He rejected the idea that private commercial interests should be left to organize the route, and likewise set aside the possibility of a state-owned air line. He saw the chartered company

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60. Ibid. Salmond submitted a memorandum on commercial flying in Egypt, the Middle East, and Africa to Sykes, March 12, 1919. "He took me to see Winston as a result and Winston expressed general approval, said the proposal was a big Imperial project and wanted further details." Salmond to Trenchard, April 10, 1919.

61. Ibid. Salmond memorandum, "Air Service Requirements in the Middle East and Africa with their Special Relation to Air Routes", March 12, 1919. See also AIR 19/108, "Air Routes, 1918-19".

62. AIR 2/120. See below, p. 58.

organization as the best possible compromise between private and public interests, an organization which would thus recognize the rights and interests of private companies and at the same time assure the Government's supreme authority. <sup>63</sup> No doubt, Salmond had in mind the Vickers Company as recipients of a Royal Charter. <sup>64</sup>

In January, 1919, Messrs Vickers Limited, like Handley Page and other British aircraft manufacturers, were casting about the world for new markets. As yet there were few commercial air lines to purchase aircraft, and military demands had almost stopped as peace brought demobilization and retrenchment. <sup>65</sup> One answer to the situation appeared

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63. AVIA 2/1706. Salmond Memorandum. "As in Rhodesia and formerly in India a Chartered Company developed national interests with great gain to the State, so let the same principle be applied to the development of air supremacy, commercial and political...."
64. Ibid. While Salmond makes no specific reference to Vickers in his correspondence with the Air Ministry, his note that "private companies are agitating" suggests he was well aware of Vickers ideas for an African service. No other British company had advanced a serious proposal. The idea that Vickers should operate under a Royal Charter rather than, say, as a company incorporated under the Company Acts, appears to stem from Salmond's own interpretation of the meaning of a Royal Charter. The very title suggested the "full authority of the Imperial Government" which would "clear the air from all doubt on the part of the Governments concerned as to what air transport organization they could rely on...." Private enterprise alone would lack this prestige, while neither state financial support nor state-ownership would assure his hopes for a strong company "whose business enterprise and efficiency is untrammelled by Treasury control...."
65. At the beginning of 1919, there was only one registered British air line, Air Transport and Travel, and no air

to be the establishment of air transport organizations by the manufacturers themselves, thus creating their own demands for aircraft and servicing, and at the same time widening their interests to include air line operation. Vickers looked to both Egypt and West Africa as possible areas of commercial promise. <sup>66</sup> In a letter to the Foreign Office they set out a detailed proposal for a flying boat service to operate out of Cairo as far south as Kisumu, stating that:

in the first instance, a Syndicate be formed to survey the whole route between those places, and that, on concessions being granted in Egypt, the Soudan, Uganda and British East Africa for flying and for the obtaining of sites for repair shops, etc., a Company should be formed.... <sup>67</sup>

The route offered special advantages to air line establishment, Vickers argued; a favourable climate year round, great gains in time over existing rail and steamboat

65. (continued) lines commenced regularly scheduled operations until August, 1919. With the exception of the British Aerial Transport (BAT) FK 26, the first British aircraft designed and built expressly for air transport services in 1919, the first aircraft used were converted war-time models (e.g., the Handley Page O/400 and the Vickers F.B. 27B Vimy Commercial) of which there was an embarrassing surplus. The aircraft industry viewed the situation with concern, but some members responded with imagination. Vickers, for example, developed a strong interest in airships.
66. AVIA 2/1694, Civil Aviation in Egypt, 8/2/19-18/4/20. Also CO 96/605, Use of Aircraft in the Gold Coast, 22/10/18-30/11/19. Handley Page Limited looked to South Africa, South America, and hoped as well to establish a Brindisi(Italy) - Egypt service.
67. AVIA 2/1694. Vickers Limited to Foreign Office (Curzon), January 27, 1919.

services, and the possibility of developing branch lines "in a country that is almost wholly undeveloped as regards transport". Repair depots would be established at Cairo, Khartoum and Kisumu to service the twenty-four Valentia Flying Boats required for the service. No problem was seen in staffing these depots, according to Vickers, for "native labour in Egypt has been fully exploited by the R.A.F.", and "hundreds of trained mechanics already exist". The proposal envisaged a service which would take 4½ days to cover the 2,440 miles with overnight stops at Wadi Halfa, Khartoum, Hillet and Mehagli. It concluded:

Any consideration of the probably commercial success of an aviation project must be prefaced by the remark that commercial aviation is an entirely new thing. One can only deal with potentialities. These are extremely good. 68

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68. Ibid. The proposed scheme set out an interesting comparison of times and fares (in pounds sterling) between existing rail and steamboat services and an air service:

<u>Sector</u>	<u>Rail/Steamer Fare</u>	<u>Air Fare</u>	<u>Surface Time</u>	<u>Air Time</u>
Cairo-Kisumu	118.10.0 (with food)	125.0.0	40 days	4½ days
Khartoum-Kisumu	65.10.0 (no food)	67.10.0	23-30 days	2½ days
Shellal-Wadi	7.10.0 (with food)	8.15.0	30 hours	2½ hours
Rejaf-Nimule	Human portorage only - £35	4.0.0	7-10 days	1 hour
Khartoum-Rejaf	30.10.0 (no food)	37.10.0	6-8 days	2 days

It was not planned to serve food aboard any of the air services.

The scheme received a good deal of attention and support for a few months in early 1919. <sup>69</sup> Salmond was not alone in seeing the need for the establishment of British air supremacy in the area. Curzon at the Foreign Office concurred with the general outlines of the proposal and instructed Allenby, the United Kingdom High Commissioner in Egypt, to assist the 'syndicate' in obtaining the necessary concessions. <sup>70</sup> Allenby too argued that the whole question of British air policy must be given early consideration by the Air Ministry, and in the special case of Egypt by the Foreign Office as well. In a long letter to Curzon he tied the undecided air situation to the still unsettled state of Anglo-Egyptian relations. While the R.A.F. maintained their own air bases in Egypt, civil aviation was in the hands of the Egyptian authorities. <sup>71</sup>

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69. Curiously, the Vickers proposal was not submitted for study to the Advisory Committee on Civil Aviation until November, nearly six months after Vickers were advised that the concession could not be granted! Weir noted that "we have no definite reference as to what the Secretary of State desires", and asked, "what exact help do Messrs. Vickers require? Until this information is obtained, I do not think that my colleagues or myself can proceed further unless Mr. Churchill asks us to report on some definite question". AVIA 2/1694. Weir to F.G.L. Bertram, Secretary to the Advisory Committee on Civil Aviation, November 28, 1919.
70. AVIA 2/1694. Curzon to Allenby, February 7, 1919. The Colonial Office was likewise assuring cooperation in Uganda and British East Africa.
71. AVIA 2/1694. "With regard to aerodromes,...all [except R.A.F.]...were declared a monopoly of the Egyptian Government by a Sultanian Decree of March 24th last." Allenby to Curzon, April 18, 1920.

There was a 'ban' on civil flying in the country,<sup>72</sup> but, Allenby warned, if the Egyptian Government decided to allow a British or Anglo-Egyptian company to commence operations, it might not find it "practicable to exclude purely Egyptian or foreign companies from fair competition". What was needed was British action --- a policy and an agreement with Egypt which would secure British air rights in Egypt --- and British capital. "Recent events", he wrote, "have given me ground for thinking that any further uncertainty in the matter may prove increasingly embarrassing."<sup>73</sup>

Egypt, of course, occupied a central place in any planning of an Imperial air transport scheme. It was to become, in the phrase of the day, 'the Clapham Junction' of the Empire.<sup>74</sup> It was also the most vulnerable link in any planned chain of Imperial air communications. While British influence was strong, and the pressures which Great

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72. Actually, there was not a 'ban' on civil flying as such, but as no aerodromes had been licensed for civil flying as yet, civil aircraft were effectively prevented from operating.
73. Allenby noted that the French had recently requested information for French civil aviation interests with designs on Egypt. AVIA 2/1694. Allenby to Curzon, April 18, 1920. The joint Handley Page/Italian interest was also of concern.
74. The origin of the expression is obscure, although Sykes used it on occasion and appears to have given it popularity. See his "Imperial Air Routes", p. 244. See too The Times, February 7, 1920, p. 13.

Britain could bring to bear considerable, Egypt was not a colony or even British territory and could not be treated as such. Any British plans to push air routes to the east or south were contingent upon Egyptian cooperation. To British authorities, 'cooperation' in this case meant that any British proposal for aeroplane or airship operation required Egypt to grant the favoured organization exclusive rights of establishment and operation. British fears were not that Egypt would proscribe civil aviation indefinitely, nor that British companies would be excluded from flying in and from Egypt. The concern was that the French, or the Italians, or even the Germans would be given competing concessions. For strategic and political reasons, neither the Air Ministry nor the Foreign Office found such a possibility desirable. <sup>75</sup>

Fortunately for Great Britain, these worst fears were not realized for the Egyptian Government rejected the Vickers proposal, considering it 'premature' to initiate civil flying in the country. <sup>76</sup> It was a welcome respite for Great Britain, as yet undetermined on a civil aviation policy for the Empire.

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75. The situation is reviewed in AIR 2/201, "Memorandum on Civil Aviation in Egypt (Legislation and Organization), 1920-21, August 4, 1920. See also AVIA 2/1671, "Civil Aviation in Egypt", a report by Squadron Leader Long, Air Consultant to the Egyptian Ministry of Communications, June 22, 1922. For expanded discussion see chapter II.
76. AVIA 2/1694. Allenby to Curzon (telegraph), April 25, 1919, and Sykes to Vickers, May 14, 1919.

But if the Egyptian action temporarily set aside the possibility of foreign aviation interests moving in, it also dashed whatever hopes were held to initiate imperial air transport in Africa. While there was no guarantee that such a venture would have been successful, there is no doubt that better chances of success were offered in 1919 than in the several years following. The post-war recession and the consequent government response in a policy of economic retrenchment had not yet made its full impact. Private enthusiasm still ran high as the first British air lines running to the continent had still to taste the dregs of failure and in so doing discourage investor and government alike.<sup>77</sup> Not until Tony Gladstone and Sir Alan Cobham put forward their ideas for air transport development in British Africa from 1925 onwards was the Cairo-Kisumu route idea revived, and the extension of the service as far south as Cape Town had to await the efforts of Imperial Airways in 1932. In short, indecision and procrastination in 1919 delivered a sharp setback to civil aviation progress in the African empire.<sup>78</sup>

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77. The experience of the pioneer British air lines in the United Kingdom is adequately discussed in Higham, Britain's Imperial Air Routes, pp. 19-75. See too Eric Birkhead, "The Financial Failure of British Air Transport Companies, 1919-1924".

78. In contrast, the French were forging ahead with civil aviation development in their African empire in North and West Africa. A government policy of generous subsidies, the geographic fact that France did not have to negotiate with foreign powers to fly the

Still, Churchill does seem to have taken his cue from the Salmond memorandum. In May he called upon Lord Weir to chair an Advisory Committee on Civil Aviation whose first task was to consider the question, "How best to organize Imperial Air Routes".<sup>79</sup> The Committee's Report on Imperial Air Routes, and a later Report on Government

78. (continued) route France-North Africa, and imaginative private enterprise combined to effect the establishment of a regular service along a line Toulouse-Casablanca-Dakar by 1925. This was a mails only service, but plans were being pursued to carry passengers and to link Senegal with South America. A readable introduction to these developments is Jean-Gérard Fleury, La Ligne (Rio de Janeiro, 1942), and R. Mauny, "Pionniers de l'Aviation en A.O.F.", Tropiques (October, 1955), pp. 32-7. See also articles under general title "L'Age de l'Air en Afrique", L'Afrique Française, 1920-22, and C.-J. Celhan, "L'Aviation et les Colonies", ibid., XXX (January, 1920), pp. 17-9. The first French flight in Africa was at Dakar in 1911, an indication of early French Air Force interest in a role for the aeroplane in Africa. In 1919, the F.A.F. was making a complete survey of the Sahara. Aeroplane, March 19, 1919. The British Air Ministry kept a watchful and perhaps envious eye on these activities. Note, for example, Air Ministry, Synopsis of Progress of Civil Aviation in Foreign Countries, Cmd. 476 (1919).
79. "I have decided that the time has come to appoint a strong standing committee to assist me in dealing with the problems arising in connection with civil aviation", Churchill to Weir, May 19, 1919, quoted in Reader, Architect of Air Power, p. 83. Members of the committee included Lord Inchcape, Sir James Stevenson, Colonel J.T.C. Moore-Brabazon, Mr. Charles I. de Rougement, Mr. H. White-Smith, Professor L. Bairstow, Trenchard, Sykes, and Sir W. Arthur Robinson, Secretary of the Air Ministry. In general the committee represented big business and finance, the aircraft manufacturers, the Royal Air Force and the Department of Civil Aviation. Curiously, there was not a direct representative from commercial air transport interests. See AIR 1/362, Air Ministry, Advisory Committee on Civil Aviation, Report on Imperial Air Routes, Cmd. 449 (1920) for committee membership. See too AVIA 2/1714 for Churchill/prospective members correspondence.

Assistance for Development of Civil Aviation were grafted on to the already considerable body of knowledge and advice in the hands of the Air Minister.<sup>80</sup>

In the first report the Weir Committee dealt only with "heavier-than-air machines" (proposing to deal at a later date with "lighter-than-air craft"),<sup>81</sup> and only with the linking of the United Kingdom to the "main outlying portions of the British Empire", namely Canada, Newfoundland, South Africa, India, Australia and New Zealand, adding Egypt as an afterthought. Ignoring the current interest in African operations, the Committee argued that "the proper place for initial action is the route from this country to India, and ultimately thence to Australia", with the Egypt-India sector to receive first attention.<sup>82</sup> As to who should operate the route, the Committee agreed that the Royal Air Force should continue with plans to open the route and establish and maintain airfields along the way, but that eventually

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80. AIR 1/362, Report on Imperial Air Routes, October 30, 1919. AIR 1/2101 and CAB 24/105, Air Ministry, Advisory Committee on Civil Aviation, Report on Government Assistance for the Development of Civil Aviation, April 20, 1920, Cmd. 770 (1920).
81. Report on Imperial Air Routes, p. 3. Apparently no report was made on lighter-than-air craft (airships).
82. Ibid. The Committee was "convinced that this section is the sphere in which experience can be most readily and usefully obtained, as the conditions of aerial navigation on this section are judged to be more favourable than elsewhere".

private enterprise, state-aided, should establish a civil air service. <sup>83</sup> Government assistance in this case would include the provision of "meteorological and wireless information and the like", and "what may be called Air Ports". <sup>84</sup> Additional support could come from guaranteed air mail revenue, and the Committee recommended that the Air Ministry and the General Post Office collaborate to set out the terms of a mail contract and call for tenders. <sup>85</sup> For the most part, these were the limits of Government support suggested by the Committee, although they admitted:

83. Ibid., pp. 4-5.

84. Ibid., p. 4. Reader, Architect of Air Power, p. 86, notes that "the Committee can perhaps claim credit for having coined the phrase 'air ports', always printed in two words and obviously regarded by them as a neologism".

85. Report on Imperial Air Routes, p. 4. "It would seem that the first step is to ascertain on what terms arrangements can be made for the carriage of mails by air --- the carriage of express goods and of passengers being relied on as ancillary to the carriage of mails." [My italics]. Higham (Britain's Imperial Air Routes, p. 25) points out that "unfortunately" this latter piece of advice was ignored by London, but adopted by the United States with great success. Throughout the period under study, there was a debate as to whether "mails only" aeroplanes should be employed to service the Empire routes ---- the advantages being that smaller, faster, less sophisticated aircraft could be used more cheaply and provide more frequent service. The British Government never did agree, indeed, passenger comfort and accommodation seemed to take first priority at least until the introduction of the Empire Air Mail Scheme in 1937. It is doubtful, as well, whether the Post Office could have been swung to the idea at this early date, despite the conviction of many, like Sykes, who argued that "mails --- at all events for the time being --- are the basis upon which commercial aviation...must develop". "Civil Aviation", Aeronautical Journal, XXIV (November, 1920), p. 580.

That the necessity for additional expenditure on the development of these ports for purely civil purposes in order to meet the increase in frequency of the services should not be overlooked, though only experience can show what such expenditure may be. 86

At no point in this first report did the Committee consider direct Government assistance in the form of subsidies to any private air line operator intending to establish air services on imperial routes,<sup>87</sup> nor did they entertain the idea of an imperial company to carry the banner of British prestige across the world. For what was to be one of the greatest and most demanding tasks faced by the Empire - the establishment of a chain of imperial air communications - the Committee was quite content to fall back on what they considered to be tried and true British practice. In defending the proposal that the organization and development of imperial air routes should lie in the hands of private enterprise "with some measure of State aid behind it", the Committee pointed out:

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86. Report on Imperial Air Routes, p. 5. Churchill was in general agreement with the Report and "the nature of the assistance to be given by the State". CAB 24/93. C.P. 191, Churchill Memorandum, November 22, 1919. He described the Report as "this first instalment of an Imperial air policy which cannot but have most important and far reaching results in the consolidation of the Empire".

87. Report on Imperial Air Routes, p. 5.

That it is in this way that the development of British trade and industry has been attained in the past, and that it best secures the initiative and drive which are vital in the undertaking now under review.... at this stage the Committee hold that the case is one for the application of the traditional British method of private initiative and private enterprise.... 88

It was a view shared by many in these early years of British aviation.<sup>89</sup> It merely confirmed Churchill's own ideas on the relationship of government to civil aviation. In the debate on the Air Estimates in March, 1920, he stated:

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88. Ibid., p. 4.

89. Civil aviation was caught up in a general dislike of state intervention, despite its acceptable history in other areas, and a general desire to return to 'normalcy' with its consequent de-control of industry as had been necessary during the war. See Birkhead, "The Beginnings of British Civil Air Transport, 1919-1924", p. 31. The expressed need for government economy was thus only a partial explanation to the slowness of the British Government to accept the subsidy principle. Trenchard stormed against any direct government assistance, noting that "It is not a system on which the British Empire has built up any of its great industries" (Report on Government Assistance, p. 9); Sir Sefton Brancker, the Managing Director of Air Transport and Travel, stated, "Personally, I am against subsidies (Proceedings of the Air Conference, 1920, Cmd. 1157 [1921], p. 28); and as late as 1923, Sir Samuel Hoare could state to the House, "The House does not like subsidies. I do not like subsidies". Hansard, CLXI, March 14, 1923, col. 1620. In marked contrast, the French, Great Britain's major European and Imperial air transport rivals, commenced support of the infant aviation industry shortly after the war had ended. A valuable study of the early French experience is M. D. Tolles, A History of French Subsidies to Commercial Aviation (Northampton, Mass. and Paris, 1933).

Civil Aviation must fly by itself; the Government cannot possibly hold it up in the air. The first thing the Government has got to do is to get out of the way, and the next thing is to smooth the way....any attempts to support it by floods of state money will not ever produce a really sound commercial aviation service which the public will use, and will impose a burden of an almost indefinite amount upon the Exchequer. 90

This general hostility to the subsidization of civil air transport was the major hurdle to be cleared in the first five years of British and Imperial civil aviation development. While most were aware of the problems associated with developing a new form of transport, few seemed ready to admit that the problems were such that only sufficient capital and resources would resolve. 91

The danger was that civil air transport could well become caught in a vicious circle of impossible circumstances. Private investors were not prepared to come forward until they were assured that air transport could operate safely,

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90. Hansard, CXXVI, March 11, 1920, col. 1622. It may be that too much was made of this statement at the time, for it was said almost as an aside in the course of a much more serious defence of his holding two offices (War and Air). Still, it captured the moment and became, as Higham has noted, "the key sentence in British air transport history". See his Britain's Imperial Air Routes, p. 40.

91. The very root of pioneer air line troubles lay in the 'shoe-string' basis upon which they started and operated. 'Devil-may-care' pilots, converted war machines, and the energies and imagination of the developers were no substitute for the capital assistance which would enable modernization and development to proceed apace until the air transport business was established on a permanent footing. The realization of what was required to achieve this end dawned slowly in Government and private sectors alike.

regularly, and swiftly, and in so doing attract public use for mail, the shipment of goods, and travel. This would mean revenue and a good chance of making a profit. However, to make air transport efficient and attractive to private capital investment, the first air lines needed better equipment, better ground facilities, more extensive promotion and public education, all of which required the administration of capital in heavy doses. Only the Government was in a position to act, and action meant more than merely to 'smooth the way'. 92

To the credit of the Weir Committee, their second report, the Report on Government Assistance for the Development of Civil Aviation, faced the realities of the situation even as Churchill was holding firm to the idea that civil aviation must pay its own way to success. While pointing out that "a healthy industry can only find a sure foundation in individual faith, adventure and effort", 93

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92. Nor was it a question of the Government 'getting out of the way'. The problem still remained as to how much capital assistance was necessary to put civil aviation on a sound commercial basis, or at least to justify public expenditure. An editorial comment that "one hundred million pounds spent on civil aviation would be money well spent", was as unreasonable as it was impossible. Modern Transport, II (February 7, 1920), p. 1. A more likely comparison was made with the French Government's financial support; in 1921-22, for example, France was subsidizing French companies in the amount of £1,328,600, while Great Britain gave £85,000 to theirs (Higham, Britain's Imperial Air Routes, p. 45). In short, support meant success, economy meant failure, and the sums required were such that only the Government could provide if it would take the whole question of air development seriously.

93. Report on Government Assistance, p. 3.

the Report introduced the idea of "national interests", and saw these as determinants in the question of direct government assistance to civil aviation. "From our review of the general situation", the Report noted,

and from the evidence given before us, we have come definitely to the conclusion that, in spite of the indirect assistance so far recommended and in course of being provided, the development of civil aviation so far attained may yet stop short, and that the operational experience which is essential to that development may cease. We think that national interests demand that such a risk should be avoided, and we have accordingly been led to consider whether the provision of a measure of direct assistance cannot be justified. 94

In this second report, completed in 1920, the Committee was in a better position to assess the situation than it had been in its first report in 1919. Clearly the few British air services operating to the continent were struggling to survive in the face of heavily-subsidized French competition.<sup>95</sup> Mindful of the continued stress on national economy, the

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94. Ibid., p. 6.

95. The Report was published in July at which time the following British air services were operating:

Aircraft Transport and Travel: London to Paris.  
London-Amsterdam-The Hague-Rotterdam.

Handley Page Transport: London-Paris.  
London-Brussels.

Realistically, the British companies needed to charge about £10 for London to Paris; the subsidized French were charging £5. Unfortunately, the only detailed financial records of air line operation during this period are those of Daimler Airway, which commenced operations in April, 1922. See Birkhead, "The Financial Failure of British Air Transport Companies, 1919-1924", and "The Daimler Airway, April, 1922 - March, 1924", Journal of Transport History, III (November, 1958), pp. 195-200.

Committee still felt that the troubled state of British and Imperial civil aviation justified a "departure from the traditional British policy of leaving trade and industry to take care of themselves".<sup>96</sup> Here was the first serious approach to the idea that reasons of 'national prestige and national defence' were sufficient in themselves to argue the case for direct government financial support of civil aviation. Although the argument was not fully accepted until Imperial Airways was formed in 1924, the Report made clear that commercial considerations alone could not dictate the progress of civil aviation development in Great Britain and the Empire.<sup>97</sup> The Committee did not anticipate that government assistance would always be necessary, but direct aid was essential in the first few years, and it recommended that a maximum sum of £250,000 be paid to companies operating on approved routes in the financial years 1920-21 and 1921-22.<sup>98</sup>

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96. Report on Government Assistance, p. 6.

97. Ibid. "There is undoubtedly serious risk that the lead in aviation attained by this country during the war may be lost unless further assistance is forthcoming for civil aviation. The failure of civil aviation would result, not only in a loss of British prestige in a new and potentially important sphere of commercial activity, but would also re-act unfavourably on service aviation...."

98. Ibid., p. 7. "Payments...should be calculated on the basis of 25 per cent of the total certified gross revenue of each company (exclusive of the Government grant) earned by the carriage of passengers, mails or goods."

Rather surprisingly, Churchill appears to have accepted the recommendation,<sup>99</sup> as did Sykes.<sup>100</sup> So too did the first Air Conference held in London in October.<sup>101</sup> It strongly supported the Report and unanimously adopted a resolution which read:

The Air Conference, 1920, desires to record its emphatic opinion that the rapid development of civil aerial transport is vital to the interests of the Empire, not only as a means of developing its communications, but also as an essential element in its defence, and endorses the recommendations of Lord Weir's Advisory Committee on Civil Aviation and urges their adoption by His Majesty's Government. 102

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99. AIR 1/2421. Secret memorandum prepared by Churchill and printed for the Cabinet, May 7, 1920. Noting that the Weir Committee proposal limited the Government liability to £250,000 over the next two years, Churchill wrote, "If the whole sum is earned, it will mean that within two years aerial transport companies will have extracted by genuine business from the pockets of the public £1,000,000 in payments..., and I am of the opinion that should the companies succeed in doing this, civil aviation will have established itself on a commercial basis. By means of rigid economy I hope to be able to find the first half of this sum from the Air Estimates for the current financial year." See too CAB 24/105, C.P. 1265.
100. CAB 24/116, Memorandum by the Controller-General of Civil Aviation, October 29, 1920, p. 5.
101. AIR 1/2101, Report of the Air Conference, October 12, 13, 14, 1920, subsequently published as Proceedings of the Air Conference, 1920, Cmd. 1157 (1921). Held at the Guildhall in London, the conference was attended by most of the key figures in British civil aviation circles, including all the commercial operators, and Sykes. Churchill attended briefly to deliver a speech.
102. Proceedings of the Air Conference, p. 4.

In general, the national press lent its support to the Report and the Air Conference resolution, one newspaper censuring the Government for its "unimaginative correctitude which shudders at the thought of public assistance to a new industry", <sup>103</sup> another stating firmly, "we think Lord Weir is right". <sup>104</sup> Five months after the Report was submitted, Weir, in a letter and memorandum which Churchill circulated to his cabinet colleagues in November, stressed his continued faith in the rightness of the Report's recommendations. "Before you decide", he wrote Churchill, "I wish to make a suggestion".

Go out to Croydon, which is the first complete terminal aerodrome in the world, and watch it at work for a couple of hours. See the machines with their passengers, goods and mails arriving and departing to Paris, Brussels, Amsterdam. Speak to the passengers, go into the custom-house, examine the character of the goods. The whole thing is full of romance and practical possibilities. The service may be irregular, many of the arrangements very crude, but quite definitely the work is started and is being done. The possibilities are being disclosed and a new era in communication is being opened up. This has all been done in eighteen months. Think what might be done with some help in the next two years. <sup>105</sup>

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103. CAB 24/116. Newspaper extracts appended to Sykes' memorandum of October 29, 1920, printed for the Cabinet by Churchill, November, 1920. Pall Mall Gazette, October 12, 1920.
104. CAB 24/116. Morning Post, October 14, 1920.
105. CAB 24/116. Letter and Memorandum, Weir to Churchill, September 28, 1920, p. 3. Also quoted in Reader, Architect of Air Power, pp. 94-95.

In the face of these many arguments, the cabinet remained unmoved. The insistence upon government economy was more than a match for the forces arrayed against it, and the Government could always count on the apathy of the general public. Only when all British air services to the continent were closed down during the winter of 1920-21 was Churchill able to include a modest amount for subsidies to civil aviation in the Air Estimates for 1921-22. It was almost too little too late. <sup>106</sup>

The whole subsidies question with its wider implications of the role of government in civil aviation development was as relevant to the case for air transport in the dependent empire as it was in the United Kingdom. While the Dominions and India were responsible for their own internal air transport development and were quite prepared to let the

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106. The Treasury fought the idea in June, 1920, noting that it was "in full agreement with Air Marshall Sir Hugh Trenchard's Minority Report...." (Trenchard was the only member of the Weir Committee to submit a minority report, rejecting the idea of subsidies, although Lord Inchcape curiously signed the Report then added, "in the present state of the country's finances I am not in favour of subsidising any aviation company".). The Treasury letter of June 15 went on, "their Lordships desire to associate Themselves with the view expressed by the Secretary of State...that 'Civil Aviation must fly by itself' ...." See Reader, Architect of Air Power, pp. 93-94. The proposed subsidy by Churchill, to which the Treasury had to agree, was in the amount of £60,000 (Air Ministry Communiqué 635, January 8, 1921), although when the subsidy scheme went into effect on March 19, 1921, it provided for an Air Ministry maximum liability of £88,200 in the financial year ending March 31, 1922. See Higham, Britain's Imperial Air Routes, pp. 42-3.

United Kingdom take the lead in initiating Imperial air services, the colonial administrations, particularly in Africa, had to follow the British lead.<sup>107</sup> With the exception of South Africa, and to a lesser extent, Southern Rhodesia, nowhere in British Africa were there the men, the resources, or the funds to promote and organize civil aviation independently of Great Britain. There was interest, even enthusiasm, but it was scattered among the white Africans and here, as in Great Britain, a few voices raised were not enough.<sup>108</sup> As long as British aviation stumbled on the path to a better future, African air transport ambitions could but stumble along behind.

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107. While an unwillingness to spend money on civil aviation study or experiment explains to a large extent African colonial administrations' apparent lack of enthusiasm, a general skepticism about civil aviation possibilities appears to have taken its cue from Great Britain. As well, British Governments in Africa were primarily interested, if interested at all, in an air link with the United Kingdom, and not local or inter-colonial services. An Imperial link was thus an Imperial responsibility in the hands of the British Government in London. There were some exceptions to this attitude; Gold Coast and Nigeria in 1919-1920 and again in 1929-1931, and the Sudan, Uganda and Kenya in 1924-1929. See below chapters II-V and chapter VIII.
108. Only in South Africa and in the Rhodesias did the indigenous white Africans attempt to promote and establish civil air transport services during these early post-war years. Inadequate financing, poor equipment, and the failure of either Government or public to respond to these efforts accounted for their general failure. Harry Klein, Winged Courier (Cape Town, 1955) provides the best account of the early South African experience. Southern Rhodesian civil aviation history appears in a number of works by Jack McAdam (see bibliography). See also chapters VI and VII below.

Nevertheless, against a background of government stubbornness on the subsidies question, the concern for government economy and laissez faire economics, and an imperial preoccupation with airship possibilities,<sup>109</sup> aviation and the aeroplane were taking their first, albeit hesitant, steps to establish air transport in British Africa. The pioneers were not the rugged individualists of British experience, but officers and men of the Royal Air Force, in 1918 beginning a long and important association with air transport development in Africa.<sup>110</sup> Along with

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109. With the possibilities suggested in the successful two-way crossing of the North Atlantic by the airship R.34 in 1919, a great ground-swell of ideas and support for the airship as the new agent of empire appeared. Churchill supported the airship as well (AIR 1/2421, Air Council Minutes - Airship Proposals). By and large, the thinking was that the airship would fly the long-range imperial routes with aircraft operating on feeder lines, and the added suggestion was that a commercial company be formed backed by the Governments of Great Britain and the Dominions (see A. H. Ashbolt, "An Imperial Airship Service", United Empire, July, 1921, pp. 499-502). The Imperial Conference of 1921 established an Imperial Air Communications Committee under the chairmanship of Captain Frederick Guest, and its only report devoted little space to aeroplanes. However, its proposed scheme for an imperial airship service, accepted by the Conference, was rejected by India, South Africa and New Zealand. See Maurice Ollivier, ed. and comp., The Colonial and Imperial Conferences from 1887 to 1937, vol. II (Ottawa, 1954), appendix 3, pp. 403, 449-54; also Conference of Prime Ministers and Representatives of the United Kingdom, The Dominions, and India. Summary of Proceedings and Documents. Cmd. 1474 (1921), appendix III, p. 45. The most recent serious study on British airship history is R. D. Higham, The British Rigid Airship, 1908-1931 (London, 1961).
110. Too little importance has been attached to the role played by the Royal Air Force in the development of air transport in British Africa. While their flights

French civil and military air activities in West Africa and the Sahara, Belgian air transport experiments in the Congo, and the promotions of local air enthusiasts in Southern Africa, the R.A.F. shared the task of ushering the dark continent into the air age. 111

The idea of linking Cairo to Cape Town was, of course, the Cecil Rhodes dream of an 'all-red route' through Africa. In late 1918, when Major-General Salmond received Air Ministry approval to survey the route for air services, the dream was still very much alive. The armistice with

110. (continued) of survey from Cairo to South Africa (annually beginning in 1926) and Khartoum to West Africa (biennially beginning in 1925) were made largely with strategic considerations in mind, there is no question but the information they gathered and the preparation of routes and route facilities they made were of great value to later commercial flights. Detailed reports on every flight were made to the Air Ministry. See AIR 5 and AIR 20 series, Air Historical Branch, R.A.F. Flights and Surveys, 1919-1938, chapters 1-200.
111. For brief reviews of pioneer civil aviation in the French and Belgian empires in Africa, see R.E.G. Davies, A History of the World's Airlines (London, 1964), pp. 12, 15, 28-9, 71-3. In addition to published sources already noted (see footnote 78), French progress is discussed in Antoine de St. Exupéry, Courier Sud (Paris, 1929), and J. Dagnaux, "Dans le Ciel du Sahara", Revue de Paris, XXVIII, part 5 (September 15, 1921), pp. 410-39. In the Congo, the Belgians operated the first regularly scheduled air line in Africa. See Commandant Cornelius "L'Aviation au Congo Belge", Congo, I (1926), pp. 463-76, L. Blin Desbleds, "Airways in the Belgian Congo", African World, West African Monthly Supplement (April 30, 1927), pp. vi-vii, Commandant Orta, "L'Aviation au Congo Belge, ses Débuts", Congo, II (1927), pp. 769-95, and M. J. Smeyers, "L'Aviation Marchande au Congo Belge et la Liason Belgique-Congo", Congrès International et Intercolonial des Transports (Paris, 1931), pp. 229-40. See also Flight, June 9, 1921, p. 394. South African pioneer air work is discussed in Klein, Winged Courier, pp. 1-76.

Turkey on October 31 had brought R.A.F. military operations to a halt in the Middle East, and Salmond, presiding over a large command in Egypt which had little to do, looked south to Africa where the opportunity to establish a first imperial air link could not be ignored. <sup>112</sup> Africa was not a complete stranger to British military aviation; the Royal Naval Air Service had operated in East Africa during the war, <sup>113</sup> and the Royal Flying Corps had constructed an aerodrome at Khartoum in 1915 during the campaign against Ali Dinar, Sultan of Darfur. <sup>114</sup> In Egypt, the war had produced several major aerodromes and numerous landing strips from which R.F.C. and later R.A.F. aircraft flew and became more familiar with the northern part of the

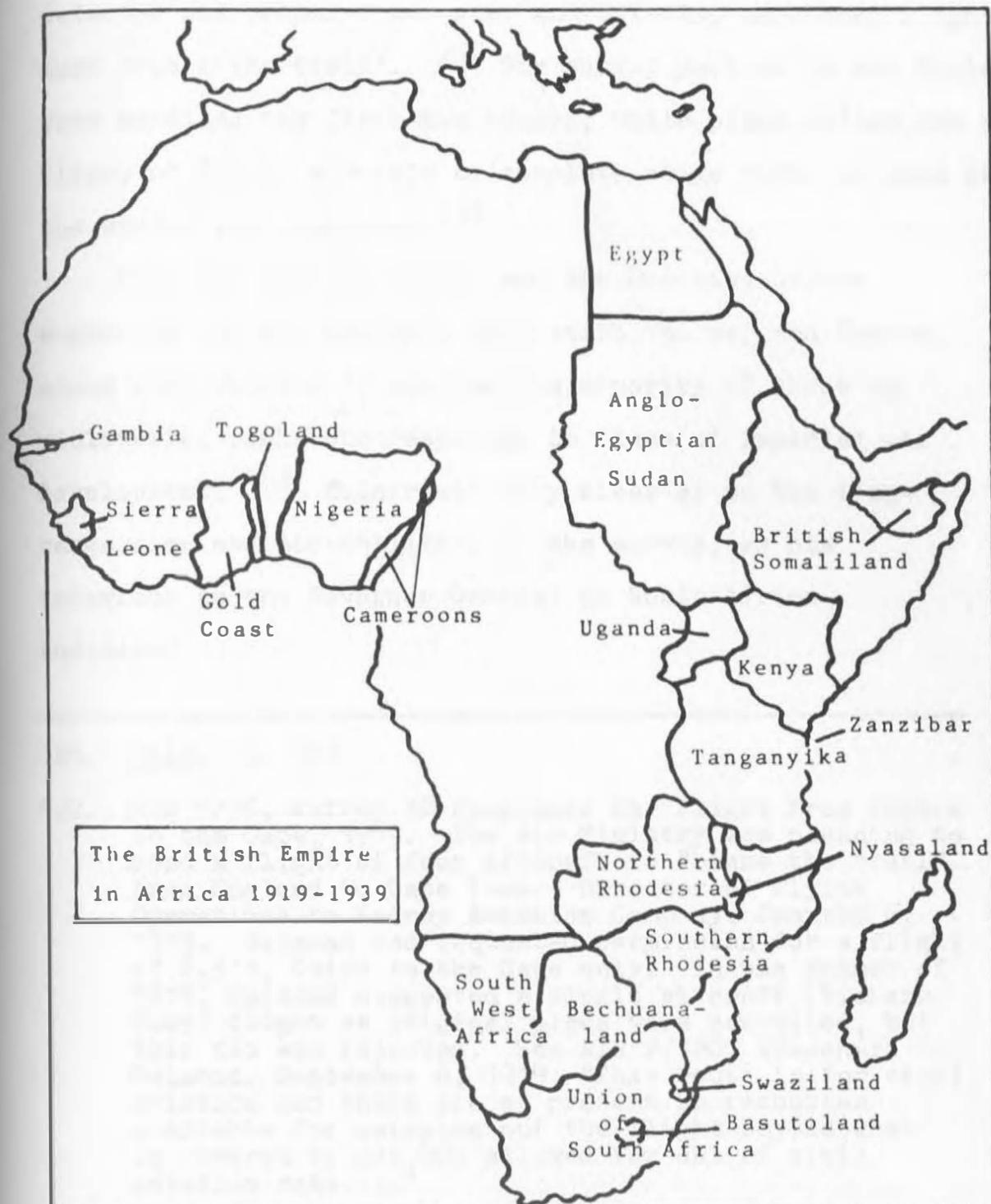
112. At the same time the R.A.F. was promoting the Cairo-India route, a priority already noted as receiving support from the Weir Committee. A Cairo-Delhi flight was made successfully in late 1918 in a R.A.F. Handley Page O/400 by Captain Ross Smith and Major-General Sir John Salmond, and a through flight from England to India was made in December, 1918-January, 1919 in a Handley Page V/1500 by Squadron Leader A.C.S. MacLaren and Lieutenant R. Halley. The African route, while obviously a greater physical challenge, promised no political difficulties.
113. AIR 1/725 (3), 106/1, Royal Naval Air Service Operations in East Africa 22 Nov 1914-28 Jan 1917. 26 page typed narrative by Wing Commander J. T. Cull; also AIR 1/674, Destruction of the German Cruiser 'Konigsberg' in the Rufigi Delta, East Africa, July 6 and 11, 1915. See general summary in H. A. Jones, The War in the Air, vol. III, pp. 1-68.
114. The Times, June 10, 1919, p. 10.

projected Cairo-Cape Town route.<sup>115</sup> Even South Africa was in parts familiar to at least some British aircrew; one aircraft with one pilot was on hand to help the South African Government quell a native demonstration on the Reef in the spring of 1919.<sup>116</sup> These experiences indicated that the air force was not approaching an air service survey of Africa without some appreciation of the enormity of the task before them. Some information was available, but a great deal more was required.<sup>117</sup>

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115. The major air bases were at Heliopolis, Sollum, and Mersa Matruh. See W. T. Blake, "From Cairo to Cape Town", African World and Cape-Cairo Express, January 3, 1920, pp. 390-91.
116. AIR 1/21, Johannesburg - Use of Aeroplanes with Disturbances. Buxton to Milner, April 4, 1919, "Lieutenant Gearing and the aeroplane which is here have been applied for by Ministers [request by F. S. Malan] for demonstration purposes and consequent moral [sic] against the natives on the Reef". The Union Defence Department had neither aeroplanes nor pilots in the country at the time, all South African pilots were still with British Forces in the United Kingdom.
117. Higham notes that "so short of information was the Air Ministry that it appealed to readers of the Geographical Journal in May, 1919 for any material they might have on the route" (Britain's Imperial Air Routes, p. 147). This is somewhat misleading; spotty but nonetheless important information was in hand from war-time experiences, and a great deal more information about local conditions was being supplied by the Colonial Office. In short, the Air Ministry had access to a much wider range of useful contacts than suggested in an appeal to readers of the Geographical Journal. By the time this 'appeal' was made, the R.A.F. survey parties had been almost six months in the field.

In December, 1918, Salmond sent out three survey parties to organize and establish the route.<sup>118</sup> A veil of secrecy appears to have surrounded the beginnings of this important operation; it was neither publicly announced or heralded, and as late as the end of January, even the usually well-informed The Times could only note, "we understand that surveys are being made...."<sup>119</sup> Not until May did the Air Ministry issue a definitive statement on the progress and purposes of the African survey.<sup>120</sup> It saw the establishment of the route as requiring a three stage approach; first, the whole route must be studied carefully, taking full advantage of local knowledge and information, so as to enable the survey parties to plot the line of least resistance; secondly, aerodrome, fuel-dump, repair depot, and emergency field sites must be

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118. AIR 2/120, Proposal to send Major Court Treatt and Survey Party to Rhodesia re Aerial Route from Cairo to the Cape. Major Long and party departed from Cairo to survey the route as far south as Nimule; Major Emmett and party shipped to Mombasa and proceeded inland to survey the Nimule-Abercorn section; Major Court Treatt and party proceeded to Cape Town to work northward. Although the number of survey parties in the field is generally accepted as three, there were in fact four, but the one under Captain Shortridge which proceeded from Lourenco Marques to survey the Abercorn-Bulawayo section was under the overall command of Major Court Treatt. The Times, June 10, 1919, p. 10.
119. The Times, January 30, 1919, p. 8.
120. Air Ministry, "Notes on Air Routes: I. To South Africa", Geographical Journal, LIII (May, 1919), pp. 339-43.



The British Empire  
in Africa 1919-1939

Dominion Status: Union of South Africa

Colonies and Protectorates: Basutoland, Bechuanaland, British Somaliland, Gambia, Gold Coast, Kenya, Nigeria, Northern Rhodesia, Sierra Leone, Southern Rhodesia, Swaziland, Uganda, and Zanzibar

Mandates: Cameroons, Tanganyika, Togoland, and S.W. Africa

Special Status: Anglo-Egyptian Sudan and Egypt

selected and prepared for use; and thirdly, an actual flight must 'blaze the trail'.<sup>121</sup> The survey parties in the field were handling the first two stages, while plans called for a flight of R.A.F. aircraft to complete stage three as soon as the survey was complete.<sup>122</sup>

Both the Foreign Office and the Colonial Office supported the Air Ministry initiative, Milner and Curzon, along with Churchill, seemingly a minority of three in ministerial ranks who responded to ideas of imperial air development.<sup>123</sup> Milner was very clear as to the long-range aims and possibilities of the survey, as his telegraph to the Governor-General in South Africa indicated:

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121. Ibid., p. 339.

122. AIR 1/35, Fairey 3C Seaplanes for Flight from London to the Cape, 1919. The Air Ministry was planning to send a flight of four aircraft to "blaze the trail" from England to Cape Town. Director of Flying Operations to Fairey Aviation Company, January 8, 1919. Salmond had requested permission for a flight of F.5's, Cairo to the Cape only. In the summer of 1919, Salmond suggested a single aircraft (Vickers Vimy) flight as original plans were cancelled, but this too was rejected. See AIR 2/120, Trenchard to Salmond, September 8, 1919, "This route is for civil aviation and there are at present no resources available for carrying out the flight beyond what is covered by £15,000 allowed for out of civil aviation vote...."

123. Lloyd George's attitudes have already been noted. There is no evidence that any one else in the cabinet or ministerial ranks took the slightest interest in civil air transport matters.

Immediate purpose of scheme is to ascertain the practicability of an air route.... Ultimate object is establishment of such a route as a permanency, for the advancement of Civil Aviation, and the formation of an additional link with the Union of South Africa. 124

The survey and establishment of the route took the best part of a year to complete, Sykes announcing the route was open on December 27, 1919.<sup>125</sup> In all, the R.A.F. had put up an impressively good show. A 5,200 mile route had been laid out with 43 airfields and landing grounds constructed in the face of incredible difficulties.<sup>126</sup> The climate, the terrain, the plant and animal life, all posed their special problems peculiar to Africa. Tropical rains could wash out an airfield in a matter of hours, the heat could shorten the tempers of men and machine alike, the great Sudd area of southern Sudan and the high plateau country of central and southern Africa posed problems of airfield location, grass and bush growth was ever a menace to cleared areas, and the abundant animal life was either

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124. AIR 2/120. Milner to Buxton, May 5, 1919.

125. The Times, December 27, 1919, pp. 11-12, gives the full text of the Air Ministry Communique. Sykes noted that there were still formidable problems of operation, but "within present lifetimes, the highlands of East Africa may even be the Brighton where busy city men seek a week-end's recreation, and cities like Johannesburg and Cape Town may be to London as Manchester or St. Andrews are today". (p. 11).

126. The airfields along the route were spaced about 124 miles apart, most of them little more than refueling stops to accommodate aeroplanes which in 1919 had an average maximum range of 250 miles. Local labour did

dangerous or destructive. <sup>127</sup> Even the lowly ant gave trouble and in so doing captured the attention of every historian of African aviation. <sup>128</sup>

With the recall of the survey parties, the Air Ministry's appointed task was nearly complete. <sup>129</sup> Two major problems were as yet unresolved; (1) how and by whom was the route to be maintained in a state of operational readiness, and (2) who was to make use of it? The first question was of the most immediate concern; some £55,000 in all had been spent on preparing the route and it was unlikely that the Treasury

126. (continued) the heavy job of clearing trees (90,000 at one site) and removing stones and rock outcrop (1,000 wagon loads at another site). AIR 2/120. Report No. 4, Major Court Treatt to A.M. and Headquarters, R.A.F. Middle East, September 24, 1919.
127. See "Notes on Air Routes: I, To South Africa", pp. 339-343; L. Walmsley, "The Aeroplane in African Exploration", Geographical Journal, LIV (November, 1919), pp. 296-97; W. F. Willis, "A Survey for Aerodromes in Africa", Geographical Journal, LV (June, 1920), pp. 459-64; L.E.O. Charlton, Deeds that Held the Empire. By Air (London, 1940); Klein, Winged Courier, pp. 37-38; all contain brief descriptive accounts of the 'physical' problems of the air route to the Cape. Willis noted, "Woe betide the crew of an aeroplane who has to land in the Sudd....They would never get out". (p. 460). Klein discusses the labour involved in clearing seventy acre sites. (p. 38). The survey party original reports are in AVIA 2/115.
128. AIR 2/120. Treatt to A.M. and Headquarters, R.A.F. Middle East, September 24, 1919. A discussion of general difficulties including the removal of 25,000 tons of anthills at Ndola. See Klein, Winged Courier, p. 38, and others, all of whom have drawn attention to the battle against the ant.
129. AIR 1/120, Recall of Major Court Treatt and Survey Parties on Aerial Route from Cairo to the Cape, October 23, 1919.

would approve additional money for maintenance. This would also require keeping R.A.F. personnel scattered down the length of Africa at a time when the R.A.F. establishment was already cut to the minimum. Accordingly, the Air Ministry approached the Colonial Office with the request that the Governments in Uganda, Kenya, Tanganyika, and the Bechuanaland administration be made responsible for the upkeep of the aerodromes in their respective territories.<sup>130</sup> Lord Milner telegraphed the several administrations in July 1920:

Air Ministry consider that as practicability of Cape-Cairo flight established Imperial responsibility at an end and that further development will be mainly commercial and sectional, but it is important that control of aerodromes should be maintained. They consider that maintenance should be paid for by local Governments but this would be nothing more than keeping ground clear without responsibility for any buildings, workshops, stores, etc. Arrangement would be reconsidered in three years if no progress....I am aware that aerodromes at present of no value to your administration but expense should be small and it is very desirable that they should not be allowed to revert to bush. 131

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130. AVIA 2/69, Civil Aviation, British East Africa, Policy, 1920-1922. J. A. Webster, Secretary, Air Ministry, to Under-Secretary of State for the Colonies, November 19, 1919; "the Council are of the opinion that on terms and from a date to be agreed, it would be desirable that these Aerodromes should be controlled by the Government of the State in whose Territory they are situated...." The Colonial Office concurred, H. Lambert to Webster, November 25, 1919.
131. AVIA 2/69, Civil Aviation, Policy - British East Africa, 1920-1922, Milner to Governors of Uganda, Kenya and Tanganyika, July 23, 1920. The major airfields in question were Jinja (Uganda), Kisumu (Kenya), and Mwanza and Tabora (Tanganyika).

All the African administrations agreed to maintain their sections of the route. <sup>132</sup> While the annual expenditures were small enough to cause no discomfort, the greater problem was in finding suitable personnel to take charge of the aerodromes. <sup>133</sup> The almost complete lack of knowledge about airfields and aviation generally prompted the Air Ministry to send out a form letter set of instructions for local use. The copy sent to the District Political Officer, Tabora, read, in part:

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132. Ibid., Sir Horace Byatt (Tanganyika) to Milner, August 16, 1920; Sir Robert Coryndon (Uganda) to Milner, July 28, 1920; Sir Edward Northey (Kenya) to Milner, July 31, 1920. Egypt, Rhodesia and South Africa likewise assumed responsibility for aerodromes in their states. The Sudan agreed to maintaining their airfields in return for a £300 per annum reimbursement from the Air Ministry. See Air Ministry, Half-yearly Report on the Progress of Civil Aviation, October 1, 1920 - March 31, 1921, Cmd. 1342 (1921), p. 15.
133. AVIA 2/1757, Cape to Cairo Aerodrome Facilities Available. Captain W. K. Sutton of the No. 3 Survey party (Cape Town to Abercorn) estimated that to keep airports free from anthills and jungle, "4 boys would be required at a monthly salary of about 20/- or approximately £50 p.a.". AVIA 2/69, Byatt to Milner, August 16, 1920, telegraphed costs in Tanganyika; "estimated Rupees, 1,000 per annum at Tabora and same amount plus Rupees 500 initial expenditure Mwanza.... Zimba can be kept clear". He added that there was no European available to oversee the third station. In some cases, the local authorities were fortunate enough to have ex-R.A.F. personnel available to organize aerodrome maintenance and even handle all air matters generally. See AVIA 2/66, Responsibility of Government of Uganda for upkeep of Jinja Aerodrome, 1920, which discusses the use of Mr. R. Wickham (ex-R.A.F. and ex-survey party), newly-appointed District Agricultural Officer at Jinja to take care of air matters.

Grass should be kept as low as possible. After rains, special attention paid to ruts on ground caused by running water. These should be filled in immediately.

It is to be noted that Natives are careless in regard to the replacing of soil and turf after the removal of woods, etc. Attention must be given to this matter. When informed of the possible arrival of a machine a movable "T" of white calico should be placed 50 yards inside the Aerodrome with the head of the "T" pointing into the wind and two smoke fires placed diagonally on the edge of the ground. 134

The formal handing over of the Cairo-Cape Town route facilities by the Air Ministry to the British Governments in Africa took place on October 1, 1920, and R.A.F. survey party members still on the route headed back to Cairo. 135 Orders-in-Council and instructions for the use of Colonial Governments were being prepared so as to provide for control and supervision of civil aviation in the African colonies, and also to give effect to the International Convention on Air Navigation in the colonies, 136 and with these preparations

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134. AVIA 2/70, Civil Aviation, Tanganyika Territory. Maintenance of Aerodromes, Policy, 1920-1921. Court Treatt to D.P.O., Tabora, September 22, 1920.
135. AVIA 2/69. The Colonial Office and the Treasury concurred with the transfers. Stores and petrol left behind by the survey parties were to be disposed of by the local governments and credited to the Air Ministry, to be applied against original survey costs. In all, the survey and preparation of the route cost the Air Ministry £55,000. See Higham, Britain's Imperial Air Routes, p. 148.
136. AVIA 2/33, Draft Order-in-Council entitled "The Air Navigation (Colonies and Protectorates) Order-in-Council, 1921; AVIA 2/121, Air Navigation Act, 1920. Draft Order-in-Council for Colonies and Protectorates based on Draft Air Navigation Order, 1922; AVIA 2/179, Civil Aviation - Notes for Use of Colonial Governors; AVIA 2/180, Civil Aviation - Information for Guidance of Colonial Governors.

in hand, the R.A.F. and the Air Ministry retired from the field to await the first civil air transport exploitation of the route. <sup>137</sup> More pressing demands on R.A.F.

capabilities were developing in Somaliland where the 'Mad Mullah' was raising a storm against British authority, and attentions were diverted from R.A.F. achievements on the Cape route to operations in the Horn of Africa. <sup>138</sup>

137. For most who had participated in the development of the route, special awards were granted in the form of notations made in their personal records. AIR 2/110, Special Rewards List (Officers, Airmen and Civilians) for Flights to Egypt and For Work on Aerial Routes in Africa.
138. AIR 1/23, Somaliland Operations, 1919-1920; AIR 1/36, British Somaliland Report by Major W. L. Birch, 1919; AIR 5/846, Royal Air Force Operations, Earlier History, 1918-1920; AIR 5/1422, Gordon Report on Somaliland Operations. See also F. W. Bowhill, "The Air Operations in Somaliland", Royal Air Force and Civil Aviation Record, I (November, 1920), pp. 410-18, and F. A. Skoulding, "With 'Z' Unit in Somaliland", Royal Air Force Quarterly, II (July, 1931), pp. 387-96. The success of the R.A.F. operations in British Somaliland strengthened the case for its survival as an independent military organization and as an efficient and less costly formation to maintain in the field for imperial policing duties. This latter point was confirmed in Cairo in March, 1921, when the Colonial Office conference passed military control in the Middle East from the Army to the R.A.F. From this time, the R.A.F. proceeded with the opening of the Cairo-Karachi air route, beginning with air mail services as far as Baghdad in June, 1921. See R. M. Hill, "Experiences in the Cairo-Baghdad Air Mail", Journal of the Royal Aeronautical Society, XXXII (May, 1928), pp. 385-410.

In February, 1920, the Cairo-Cape route had yet to be flown by anybody. No commercial operator had come forth, nor with the civil aviation situation in the United Kingdom deteriorating rapidly was one likely to gamble on the African route. But five aeroplanes did attempt to fly the route, four from England, and one R.A.F. machine from Cairo. <sup>139</sup> The proposals to fly the route were greeted with considerable enthusiasm and a more sober appreciation that this would be a test "to see if Africa can be flown safely and traversed easily". <sup>140</sup> The story of these flights quickly proved that flying in Africa was neither safe nor easy, a tale of disaster which encouraged critics

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139. Captains Cockerill and Broome set out in a Vickers Vimy sponsored by The Times (AVIA 2/48 and AVIA 2/99); Major Brackley and Lieutenant Tymms in a Handley Page aircraft sponsored by the Daily Telegraph (AVIA 2/50); Major Cotton and Lieutenant Townsend in an Airco machine sponsored by Aircraft Transport and Travel Limited (AVIA 2/51 and AVIA 2/88); Lieutenant-Colonel van Ryneveld and Major Brand in a Vickers Vimy, the "Silver Queen", financed by the Department of Civil Aviation (AVIA 2/49). On February 25, 1920, the Air Ministry announced that a R.A.F. flight was enroute to the Cape from Cairo with Major Welsh and Captain Halley, as well as two mechanics, flying a Vickers Vimy. The Times, February 26, 1920, p. 14.

140. The Times, February 4, 1920, p. 15. The African World and Cape-Cairo Express (January 3, 1920) noted the preparations being made for the several flights and saw this as "a remarkable triumph for British initiative in civil aviation".

as it discouraged enthusiasts and pioneers.<sup>141</sup> Only one of the five original crews made it to South Africa, Lieutenant-Colonel Pierre van Ryneveld and Captain C.J.Q. Brand, and then only after two major crashes and the use of three aircraft in all.<sup>142</sup> Both were knighted for the achievement following precedent established in the case of the Atlantic and Australian route pioneers in 1919.<sup>143</sup>

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141. The Times-sponsored flight, carrying Dr. Chalmers Mitchell as scientific observer and reporter, crashed at Tabora; Brackley and Tymms ended their attempt abruptly at Sherek; Cotton and Townsend only reached Italy; the R.A.F. flight from Cairo crashed at El Derr on the Nile just two days after its departure. The story of the England-South Africa flight attempts has been told in detail elsewhere; see Charlton, Deeds that Held the Empire, pp. 131ff., W. E. Johns, Some Milestones of Aviation (London, 1935), pp. 136ff., and Geoffrey Dorman, Fifty Years Fly Past (London, 1951), p. 130. Throughout February, 1920, The Times featured reports from their flight by Dr. Mitchell; see C. C. Turner, My Flying Scrap Book (London, 1946), pp. 47-53 for a personal reminiscence of the Brackley-Tymms flight. Turner, an air correspondent for the Daily Telegraph, was a member of the crew.
142. See Klein, Winged Courier, pp. 41-8; South African Airways, Fifty Years of Flight (Johannesburg, 1970), pp. 20-4; and P. Jac. Strydom, "Aviation Comes to South Africa", Royal Air Force Quarterly, IX (April, 1938), pp. 185-200. The "Silver Queen" was irreparably damaged in a crash near Assouan. Van Ryneveld and Brand set out in a second Vimy from Cairo, "Silver Queen II", to force land at Shirati, south of Kisumu, and N'Dola, before crashing again on take-off at Bulawayo. They completed the trip in a South African Government D.H. 9, arriving in Cape Town, March 20, after 109½ hours in the air.
143. AIR 2/142, Policy Regarding Awards in Connection with England to Cape Town Flights during January-February, 1920. There was controversy as to what awards to give van Ryneveld and Brand and their two crew members. Churchill and the Air Ministry were against knighthoods; the trip was not as difficult as the Atlantic crossing

Clearly, the establishment of an England-South Africa air link was going to be a much larger undertaking than Air Ministry hopes had imagined. <sup>144</sup> Few were as pessimistic about the route's future as Leo Walmsley who argued that

143. (continued) or the long Australian route, the R.A.F. had prepared the route beforehand, and, moreover, both men were serving officers, which meant at best an O.B.E. and a C.B.E. The Air Ministry decided on A.F.C.'s to van Ryneveld and Brand, and A.F.M.'s to the riggers. Smuts in South Africa was up in arms, and both Buxton, the Governor-General and Lord Milner were quick to point out that a lesser award than those granted Alcock, Brown and the Smiths could well give 'trouble' in South Africa if the situation was interpreted by Nationalist elements as a slight to South Africa and its two South African heroes. Smuts urged K.B.E.'s (Civil) or nothing. Writing to E. Marsh (Churchill's Private Secretary), H. C. Thornton (Private Secretary to Milner) noted: "Lord Milner does not think that the C.B.E. and O.B.E. for the officers in question would be acceptable. On the other hand he thinks it is very important, for political reasons, that everything should be done at present to encourage the right type of Dutch South African. He is, therefore, very anxious not to have to refuse the recommendation put forward by General Smuts...." (April 19, 1920). Milner, pointing out that he had only K.C.M.G.'s to offer for political reasons, urged Churchill to recommend K.B.E.'s; "I am sorry to have had to put Smuts' back up at this moment. He is in a very tight place just now & is all we have to rely on in South Africa", Milner to Churchill, May 5, 1920. Churchill relented in the end and the two 'trail-blazers' of the Cape route received their K.B.E.'s.
144. Clearly, the Air Ministry had treated the route as sufficiently prepared and ready to handle any traffic. See AVIA 2/115, Civil Aviation - Compilation of Route Directions Cairo-Cape Town and England to Australia, 1919-1922, and AVIA 2/1757, Cape to Cairo Aerodrome Facilities Available. The salient information was put together and published as Strip Map of the Route to Cape Town (H.M.S.O., 1920), intended, no doubt, for the route users the Air Ministry believed would be coming forward. See Higham, Britain's Imperial Air Routes, p. 148.

the whole idea was impracticable, and besides "wireless telephony" and the airship would rob the aeroplane of whatever advantages its supporters claimed.<sup>145</sup> Nor could many agree with the apparent enthusiasm of the Nation, which noted that despite the failures of the Cape route attempts, it represented "another triumph for that plastic little animal called man". Referring to a Mr. Johnson (of Rolls Royce) who had said "Central Africa has always resisted, with ill-temper, the inroads of civilization", the Nation replied, "the aeroplane is breaking down that resistance, and old Africa will have to endure it with what temper she may".<sup>146</sup> Knowledge was no longer the problem; enough was known of the difficulties which Africa presented to the air transport world. Whether or not the route would come alive after initial failure would depend upon a number of developments. The first and most obvious need was for better aircraft, the second and more important qualification was the need for adequate financial support

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145. Leo Walmsley, "The Recent Trans-African Flight and its Lesson", Geographical Review, IX (1920), pp. 149-60. See also C. G. Grey, "On the Cairo-Cape Performances", Aeroplane, March 31, 1920, pp. 651-52. The Times commented glumly that "the art of flying across Africa is to know how to crash". Quoted in Fifty Years of Flight, p. 23.
146. "Shrinkage of Earth: Flights from Cairo to the Cape", Nation, XXVI (March 13, 1920), pp. 804-806.

to encourage commercial air transport to take to the field. Neither of these developments were to take place until the Government and the air transport operators in Great Britain had settled the problems of civil aviation development plaguing early Great Britain - Europe operations. When these were resolved in 1924 with the formation of Imperial Airways, only then was the African route approached once more, this time by Alan Cobham on behalf of the Air Ministry, Imperial Airways, and others, in 1925.<sup>147</sup> Thus, for five years, British Africa was largely unseen and unheard on the stage of aviation progress.

While the Cairo-Cape Town route and the subsequent flight of van Ryneveld and Brand dominates the history of civil aviation in British Africa during these first few years after the war, there were local activities directed to establishing civil air transport as an internal and inter-colonial form of communications and transport. In Rhodesia, George Holt Thomas, already busy in the United Kingdom, negotiated for his company, Aircraft Transport and Travel Limited, to act as "Sole Concessionaires for the operation of official Aerial services for the carriage of mails or otherwise, whether by Aeroplanes or Airships in and throughout Rhodesia...."<sup>148</sup> In South Africa, a number of

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147. See below, chapters II and III.

148. AVIA 2/1711, Civil Aviation - Concession in Rhodesia to Mr. Holt Thomas, 1919, correspondence Holt Thomas, Sykes, and D. O. Malcolm (Rhodesia House). Two companies were formed in Rhodesia, Airoad Motors in 1920 and Rhodesian Aerial Tours in 1922, but both went into liquidation shortly thereafter. See chapter VI.

developments suggested considerable enthusiasm; in Johannesburg, on March 28, 1919, a meeting chaired by the mayor decided to form an aero club, the objects of which were "the education of the people in the development and possibilities of aeronautics, [and] to encourage the establishment of aerial services of all kinds...." <sup>149</sup> Towards the end of 1919, Handley Page, Ltd. formed a South African subsidiary, The Handley Page South Africa Transport Ltd., with the object of "establishing regular air services between the principal cities of the Union and ultimately a service from Capetown to Cairo". <sup>150</sup> Major Alistair Miller amalgamated two companies to form South African Aerial Transports, Ltd., in June, 1919 in Johannesburg, a forerunner to his later success with Union Airways, 1929-1934. <sup>151</sup> Finally, in West Africa, the Gold Coast received proposals from Vickers, Ltd., and from Captain A. J. Swinton, who desired "to enter

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149. Aeroplane, April 9, 1919, p. 1434. Another conference was held in January, 1920 "to consider the best method of controlling and developing civil aviation in South Africa". See Jane's All the World's Aircraft (London, 1920), p. 53a.

150. Klein, Winged Courier, p. 51. See The Times, January 16, 1919, p. 7.

151. AVIA 2/1717, Particulars of South African Aerial Transport, Navigation and Survey Company, 1919, whose ultimate aim was "a service between the principal cities of South Africa". Hopes were also held for the Nieuport and General Aircraft Company, Limited (Cape Town), of which little is known. See Jane's, (1920), p. 52a. The Times, February 13, 1919, p. 7, reported an unnamed company was being formed in South Africa to import four aircraft for a Johannesburg-Cape Town and a Johannesburg-Durban service.

into negotiations with your Government on the question of Aerial Transportation".<sup>152</sup> Both Governor Guggisberg in Accra and Governor Clifford in Lagos approached the Colonial Office and the Air Ministry, requesting a study be done in the two Colonies, and the Woods Report represented the first serious look at civil air transport possibilities in British West Africa.<sup>153</sup>

In short, a slumbering Africa was awakening to the air age, if only in fits and starts. In no sense can one speak of a general development of 'air-mindedness' at this time in British Africa, even among the white Africans, the group most likely to respond to ideas of Empire and an air link with Great Britain. While many were progress-conscious, and some aware of the great commercial and political possibilities of air transport development, few were enthusiastic. Black Africans were even less concerned with air transport, an apathy born of ignorance not skepticism.<sup>154</sup> For both groups

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152. Ghana National Archives, File 17073/18, Aeroplanes - Employment of in the Colony. Swinton to Clifford, January 2, 1919.

153. CO 583/82. Clifford to Colonial Office, July 16, 1919. See below chapter VIII for full discussion of the Woods Report and early proposals in West Africa.

154. Black Africans had little or no experience with aeroplanes as yet. A very few had observed pre-war experiments in South Africa, French West Africa, and the flights of McLean and others up the Nile to Khartoum in 1912. Others had witnessed military operations during the war, and later in South Africa and Somaliland. In October, 1919, a group of Basuto Chiefs visited the United Kingdom, and while touring the Central Aircraft Company's aerodrome at Northolt, the Paramount Chief and one other were treated to a ½ hour flight about

of Africans, a great deal more knowledge, experience, and faith was needed to bring them face to face with the realities and possibilities of air transport. The important feature of these first few years of aviation in Africa is that the seeds of future growth were planted; ideas were not to die, but rather to lay dormant until Great Britain acted to link her sprawling Empire with a chain of imperial air communications. In the meantime a few, a very few, in Africa kept the door open for the coming of the aeroplane. 155

Churchill left the Air Ministry early in 1921 to become Secretary of State for the Colonies, and Captain Sir Frederick Guest became the new Air Minister. 156

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154. (continued) London. The Paramount Chief was "very proud of being the first of his race to fly". The Times, November 1, 1919, p. 9. During the R.A.F. Cairo-Cape survey, Chief Khama in South Africa was sufficiently intrigued to want an aerodrome constructed in his district. Aeroplane, April 16, 1919, p. 1530.
155. The "few" were mainly in South Africa and Rhodesia, but they included the R.A.F. whose continuing role in Africa will be discussed in chapter II and subsequent chapters.
156. F. E. Guest (1875-1937), was Churchill's cousin, his mother the sister of Lord Randolph Churchill. Initially, when Churchill moved to the Colonial Office, he took Air with him, a second case of Air having to share one Minister with another department. In the House, Seely found this "indefensible" and perhaps "tragic", as did Sir D. Maclean. Churchill compounded the folly by departing for Egypt to a conference on colonial matters during the course of the debates on the Air Estimates. The Times, March 2, 1921, p. 17. Guest was appointed full-time Air Minister in April, a move greeted with satisfaction by The Times, April 5, 1921, p. 5.

Changes were in the wind for civil aviation in Great Britain as slowly but surely hard facts and experience were eroding the idea that "civil aviation must fly by itself".

Nevertheless, for the Air Ministry some difficult times still lay ahead as the search for economy reached "almost panic proportions in the slump of 1921".<sup>157</sup> The fact that some money was found to assist civil aviation directly in 1921, and indeed after the 'Geddes Axe' in 1922,<sup>158</sup> was a sure indication that the British Government, if not the British public, was taking a more serious view of civil aviation development. For the moment Africa was out of sight and out of mind, but the consequences of changing British attitudes and policies towards civil aviation forecast opportunities for Africa, even if these were not understood at the time. By the end of 1921, the British companies operating air services to the continent were

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157. William Ashworth, An Economic History of England (London, 1960), p. 390.

158. See Committee on National Expenditure (Sir Eric Campbell Geddes, Chairman), First Interim Report on National Expenditure, Cmd. 1581 (1922), pp. 96-97. Noting that the 1922-23 civil aviation estimates (providing for both direct and indirect assistance) were only £180,000 less than the amount provided for 1921-22, the tough-minded committee pointed out that "civil aviation has not made the progress which its supporters anticipated", and while agreeing to a continuing subsidy policy of £200,000 maximum per annum, recommended the civil aviation vote estimates be reduced by £400,000. The decision to retain direct subsidies to the air line operators was fortunate for civil aviation. In the 1921 fiscal year the Air Ministry paid out £75,625, in the 1922 fiscal year, £181,752.

surviving, something they had not been able to do in the bleak winter of 1920-21. Ideas were already growing and taking shape of a national or imperial air transport company, one which could compete fairly and squarely with foreign competition instead of British companies competing with each other. <sup>159</sup> This trickle of ideas was to become a flood of realities in the years ahead when Sir Samuel Hoare presided over the Air Ministry, Sir Sefton Brancker headed the Department of Civil Aviation, and Imperial Airways commenced its embrace of Empire. <sup>160</sup> For an African Empire so much in need of improved transport and communications, the future was louder with promise than the quiet of the moment suggested.

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159. AVIA 2/1826, Movements towards combination on the part of British Companies operating Continental Air Lines. Sefton Brancker, on behalf of Holt Thomas interests, was urging the establishment of an Empire Airmail scheme and the formation of a National company. See Higham, Britain's Imperial Air Routes, p. 46.

160. See below, chapter II.

## CHAPTER II

SAMUEL HOARE AND SEFTON BRANCKER:CIVIL AVIATION AND EMPIRE, 1922-1929

Let us make the air a highway of peace, and the aeroplane an instrument, not for severing nations and destroying civilized life, but for making closer and more constant the unity of Imperial thought, Imperial intercourse, and Imperial ideals.

Sir Samuel Hoare, 1926. <sup>1</sup>

From the early months of 1921 until late in 1923, civil air transport in Great Britain struggled to survive. By the autumn of 1923, three British air lines were operating to the continent, <sup>2</sup> and despite the British Government commitment to support their efforts with direct financial assistance, it was becoming clear that this support was not enough to offset the competitive advantages enjoyed by the French and other European carriers. Three successive subsidy schemes had been introduced by the Air Ministry during the period, <sup>3</sup> each designed to compromise the claims

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1. A.M., The Approach Towards a System of Imperial Air Communications, p. xi.
  2. The three companies were Daimler Hire, Ltd. (Daimler Airway), operating to Amsterdam and Berlin, Handley Page Transport, Ltd. running from London to Paris, and Instone Air Line, Ltd. London to Brussels. British Marine Air Navigation Co. Ltd. operated an amphibian service in 1923 only between Southampton and the Channel Islands. The latter company had plans to operate services to Le Havre and Cherbourg but these never materialized.
  3. The Cross-Channel Committee under the chairmanship of

of the air line operators and the Treasury demands for economy, but if the air lines enjoyed a certain stability of operation after late 1922, the fact remained that the future of British civil air transport looked grim.<sup>4</sup>

Enthusiasm and perseverance were keeping the infant industry alive at a time when more lasting therapy was needed.<sup>5</sup> Until the end of the Lloyd George administration in October, 1922, there was little evidence that the British Government was prepared to meet head on the problems of air transport development either in the United Kingdom or in the dependent Empire. The appointment of Guest, a political lightweight, as Air Minister to fill Churchill's shoes in 1921, and the subsequent down-grading of the Civil

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3. (continued) Lord Londonderry was appointed by Churchill in March, 1921, and its recommendations produced the so-called 'temporary' scheme of assistance to the air lines. The same Committee under Lord Gorell set out a 'permanent' scheme which went into effect in April, 1922. Sir Sefton Brancker, the Director of Civil Aviation introduced the 'revised' scheme in September, 1922. This last scheme dictated the terms of government assistance to the air lines until the formation of Imperial Airways.
  4. Higham (Britain's Imperial Air Routes, p. 51) argues that the air lines enjoyed a measure of stability because they were receiving an assured amount from the Government and were free to carry only remunerative traffic. However, it is doubtful if any of the operating companies could draw much comfort from these factors. Their financial position was always precarious, always insufficient to meet Government aims of seeing 'civil aviation fly by itself'. See Birkhead, "The Financial Failure of British Air Transport Companies, 1919-1924".
  5. See Peter Brooks, "The Development of Air Transport", Journal of Transport Economics and Policy, I (May, 1967), pp. 1-2.

Aviation Department to a mere directorate with its head no longer a member of the important Air Council strongly suggested a Government not ignorant of but apathetic to the problems and potential of civil air transport development. <sup>6</sup>

British Government policy generally turned on economic considerations in this period of air transport stagnation. The clouds of depression continued to hang heavy on every horizon and their presence dictated the mood of the moment. But economic arguments alone were not responsible for the lack of government initiative in civil aviation. The question of subsidies to the operating air lines had not been answered to everyone's satisfaction, <sup>7</sup> and the public at large had yet to indicate genuine support for air travel.

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6. One consequence of the down-grading of the Civil Aviation department was the resignation of Sykes as Controller-General even though Guest pointed out that the office would be retained for one more year. Hansard, CLII, March 21, 1922, cols. 301-06. Sykes entered Parliament in 1922 and was appointed Governor of Bombay in 1928.
  7. The widespread repugnance to the subsidization of private enterprise (as noted in chapter I), and the Government view that subsidies were but an interim measure designed to help civil aviation for its first few years contributed to the confusion as to what should be done for British air lines. Not surprisingly, Labour members in the House of Commons took an active part in criticizing Government efforts. Joseph Batey argued for nationalization (Hansard, CLXI, March 14, 1923, col. 1643), while F. H. Rose appeared to see the whole question of civil aviation in terms of a plaything for the rich. "I do not believe that civil aviation has more than very limited potentialities", he said, "I believe it may be made a luxurious and costly mode of travel for a very few rich people". Ibid., col. 1649.

In part, it was less a question of whether there was money available to assist civil air transport but more to the point to ask whether money should be spent in the form of direct financial assistance to private industry.

According to Lord Gorell, the Under-Secretary of State for Air, before the government would emulate the French in the subsidization of air lines, "there would have to be not merely much greater agreement as to the degree to which subsidies can assist the permanent health of the industry, but also a substantial public desire for the expenditure of large sums in this direction".<sup>8</sup>

As well, airship interest remained to divide civil aviation attention, and with the introduction of the Burney proposal in 1922, airships captured imperial imagination in a way which the aeroplane did not.<sup>9</sup> From this time

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8. Proceedings of the Second Air Conference, February 7 and 8, 1922. Cmd. 1619 (1922), p. 30. Curiously, earlier in this same speech Gorell noted that "one of the first points which must, I think, strike anyone coming fresh to a study of Civil aviation is the decided increase in the interest taken by the public in the air". Ibid., p. 8. The fact remained that while British air lines carried some 34,605 passengers between August 1919 and the formation of Imperial Airways, this hardly suggested that the British public had "taken to the air". High fares, a doubtful safety record, a varying regularity of service, and the few select routes in operation all contributed to a general public apathy and a small demand for air services. See Birkhead, "The Beginnings of British Civil Air Transport", p. 119.
9. The Burney Scheme, which proposed an imperial airship service, was submitted for Admiralty consideration in August, 1922, only five months after the Government had given up on airship plans with the failure to obtain

until the fateful crash of the R.101 in France in 1930, airships competed with aeroplanes for Government support and interest and in so doing drained much of the available energy and money from Government sources which might have been enlisted in the service of aircraft development and air line operation. <sup>10</sup>

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9. (continued) Empire support. See The Times, March 7, 1922, p. 12. In the Lloyd George Government, both Churchill, the Secretary of State for the Colonies, and R. S. Horne, the Chancellor of the Exchequer, objected to the costs to the state in the proposals (CAB 24/137, separate memoranda by Churchill and Horne), but the Conservatives in power adopted the Burney Scheme as the basis for an imperial air policy. See CAB 27/233, Airship Development, 1924. The Labour Government of 1924 rejected the Burney Scheme but not airships, and it was the Labour plan of parallel government and private (Burney and Vickers interests) airship development which prevailed until 1930. See Hansard, CLXXIII, May 14, 1924, cols. 1344-45 for Ramsay Macdonald's outline of Labour policy on airship development and rejection of Burney 'monopoly' proposals. Airships were the focus of imperial consideration at the Imperial and Imperial Economic Conferences of 1923 (see AVIA 2/1832 Imperial Economic Conference, 1923 - Air Communications Committee) where the Air Communications Committee under the chairmanship of Samuel Hoare was set up to "discuss the financial, technical and operational details of the Burney scheme with a view to ascertaining how far and in what way it is possible to ensure Imperial co-operation". Imperial Economic Conference, 1923. Record of Proceedings and Documents, Cmd. 2009 (1923), p. 363. The interest in and enthusiasm for the airship can be noted extensively in contemporary literature. See C. D. Burney, "Airships and their Uses, both as Commercial Vessels and in Time of War", Journal of the Institute of Transport, VI (July, 1925), pp. 454-67; F.L.M. Boothby, "Airships for the Empire", United Empire, XV (March, 1924), pp. 154-65; R. V. Goddard, "The Influence of Air Communications to British Africa", Cambridge University Colonial Services Club Magazine, I (No. 1, 1928), pp. 41-43; J. B. Seely, "The Empire and the Air", United Empire, XIV (October, 1923), pp. 579-82; and Duke of Sutherland, "Airships and the Empire", Empire Review (December, 1923), pp. 1351-56. See Higham, The British Rigid Airship, 1908-1931, especially pp. 236-59 for the development of the Burney proposals.

These several factors, then, all pointed to a crisis in civil aviation development, with the Lloyd George Government largely to blame. A 'no policy' situation which had developed under Churchill was allowed to continue under Guest, and was still being criticised by air enthusiasts. The ageing Lord Milner complained that "aviation...is smitten with paralysis. This country will soon be the most backward of all great European nations in the struggle for the conquest of the air".<sup>11</sup> Sefton Brancker, speaking for the Air League of the British Empire, stated "the fact [is] that the Civil Aviation department has never had a policy. It has merely been a flag in the wind of political necessity".<sup>12</sup>

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10. In 1924, the British Government was committed to spending £1,350,000 on airship development over the next few years, or an estimated £4,800,000 over 15 years. Hansard, CLXXIII, May 14, 1924, col. 1345. See Higham, The British Rigid Airship, p. 259. Both the Conservative and Labour commitment to airship development was thus more openly generous than was the case with aeroplane and air line development, and curiously, government financial assistance was never given the strong criticism received in proposals to subsidize the aeroplane proposals. With the ultimate failure of the airship schemes (an 'inside' view of this failure is given in Nevil Shute, Slide Rule, London, 1968, pp. 54-149), it is worth speculating on what might have been the extent and pace of imperial air route development had airship money been directed to aeroplane operations. This airship distraction accounts in part for the fact that Great Britain lumbered slowly along behind France and Holland in linking up its Empire with air communications.
11. Lord Milner, Questions of the Hour (London, 1923), p.20.
12. Proceedings of the Second Air Conference, February 7 and 8, 1922, Cmd. 1619 (1922), p. 87.

What these critics were saying was true, and to the point. The British Government was attempting to meet the problems of civil aviation on an ad hoc basis with little thought to a distant future and less to the air needs of an empire. The rhetoric of government spokesman was no substitute for action. Guest spoke of "the one great empire which has spaces and distances which are unbridgeable except by air, and surely, it should be to those definite possibilities that a great deal of our future attention should be turned".<sup>13</sup> He saw the future course of British air transport development outlined more clearly than did some of his colleagues, but Guest was no wiser than his government peers in clinging to a 'civil aviation must fly by itself' philosophy, an approach to air transport rapidly being overtaken by events.<sup>14</sup> In short, Guest, as the Air Minister, could only speak the Government's mind, not change it. In the larger story of British and Imperial air transport development, Guest is a forgotten

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13. Ibid., p. 7.

14. Guest insisted that "sooner or later civil aviation must fly by itself, and that the Government's duty should be limited to facilitating, stimulating and liberating". Ibid., p. 5. While this aim governed British civil air transport policy from 1921 onwards, it is interesting to note that in 1923 the total amount voted to support civil aviation was £287,000, but by 1938 the total for Vote 8 (Civil Aviation) in the Air Estimates was £2,925,000 of which £1,102,503 was in the form of subsidies. See Higham, Britain's Imperial Air Routes, pp. 345-46. In circumstances dictated by the demands of foreign competition, expanding operations, and rapidly changing technology, civil aviation moved further and further away from a position of flying

Minister. His finest contribution was his appointment of Major-General W. Sefton Brancker as Director of Civil Aviation, a man whose energy and enthusiasm for the task at hand has not been matched since. <sup>15</sup>

In October, 1922, Andrew Bonar Law replaced Lloyd George as Prime Minister of Great Britain, and in the general election which followed in November, he led the Conservative party into power and a political prominence which was to dominate British politics until 1945. <sup>16</sup> The full dimensions of this triumph were not then fully realized, but in retrospect the return of the Conservatives to power signalled the beginning of a new age, one less tied to the war years and the Edwardian era which had

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14. (continued) by itself. A final admission of the failure of this aim was the establishment of a state-owned enterprise, British Overseas Airways Corporation, in 1940.
15. Brancker (1877-1930) was from 1922 to 1930 the Director of Civil Aviation, thus presiding over the department during its most important years of development. A pilot himself, and the first man to receive the Air Force Cross in 1918, he was active in civil air transport with George Holt Thomas and Air Transport and Travel until his appointment as Director in 1922. He remains the best-known of Great Britain's civil aviation department heads, and his career is celebrated in two biographies; Basil Collier, Heavenly Adventurer: Sefton Brancker and the Dawn of British Aviation (London, 1959), and Norman MacMillan, Sir Sefton Brancker (London, 1935).
16. This does not ignore the Ramsay Macdonald Labour Governments of 1924 and 1929-1931, nor his National Government of 1931-1935. The demise of the Liberal Party during the period and the too brief moments of power for Labour gives the age a distinctively Conservative cast.

preceded them, and more committed to the realities of the moment.<sup>17</sup> For civil aviation, the Conservative party victory could only promise a brighter future. In Conservative doctrine the idea of empire and a loyalty to British prestige were cardinal tenets, and both suggested strongly that a more sympathetic response would be made to appeals for air transport and communications support and development. The appointment of Sir Samuel Hoare as Secretary of State for Air in 1922 and his elevation to cabinet rank in May 1923 in the first Baldwin government confirmed the notion that the Conservatives were prepared to give more than casual consideration to the problems of civil air transport.<sup>18</sup>

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17. Commenting on the end of the Coalition and the return to power of the Conservatives, a critical C. L. Mowat noted, "And thus ended the reign of the great ones, the giants of the Edwardian era and of the war; and the rule of the pygmies, of the 'second-class' brains began...." See his Britain between the Wars, p. 142. This is hardly a fair assessment, albeit that hindsight must look rather grimly at the British experience in the inter-war decades. If the 'old order' had returned in the shape of the Conservative Party, new faces were in the ranks with new ideas. The end of the Coalition and the subsequent general election also brought new strength to the Labour Party and promised a Parliament stronger for the presence of a one party Government and an effective opposition. Thus, a new age began for Great Britain and the Empire, an age which included the aeroplane.
18. Bonar Law, in the formation of his cabinet in October, 1922, did not see fit to include the Air Minister in the cabinet, in part suggesting a less than active interest in air matters, in part a wish to work with a smaller cabinet than his predecessor, Lloyd George. Hoare's exclusion from the cabinet was criticized in the House by one influential air pioneer, J.T.C. Moore-Brabazon. See Hansard, CLXI, March 14, 1923, col. 1658.

From 1922 to 1929 Hoare worked with Brancker to develop a civil air transport policy for Great Britain and the Empire, and laid the foundations upon which all subsequent British civil air policy has been built. Hoare brought a keen mind and a business-like approach to the Air Ministry, talents which complemented perfectly the energy and rhetoric of his Director of Civil Aviation. Hoare grasped the essentials, Brancker worked out the details, and between the two of them they gave air transport purpose and direction. <sup>19</sup>

18. (continued) Hoare later admitted that Bonar Law was never an enthusiast in aviation terms and most likely would not have approved the million pounds plan for Imperial Airways. Nonetheless, Bonar Law was sufficiently interested to ask Sir Herbert Hambling to take on the job of investigating the civil aviation situation and he urged Hambling to get the companies to amalgamate. See Pudney, The Seven Skies, p. 66. Baldwin was more air-minded and accepted the Hambling Committee and the Samuel Hoare view that a national or imperial air line was necessary with generous state support. Hoare wrote that "the romantic streak in his [Baldwin] complex character had reacted to the wide horizon and undiscovered opportunities of the air". Quoted in ibid., pp. 66-67.
19. Their relationship has never been fully discussed, but Hoare held Brancker in high regard even though he often had to curb his impolitic and enthusiastic junior. Hoare recalled that,  
     Brancker had the faults of his great qualities. He was a superb propagandist, and when he spoke or wrote in public, his enthusiasm swept away the words of caution in his official briefs.... Curzon and the Foreign Office were shocked by his unorthodox style and I had constantly to explain away his flights of oratory.  
 Quoted in Pudney, The Seven Skies, p. 91.

Hoare came into office with no background in air matters, a factor which does not appear to have affected his performance as Air Minister. Indeed, his major qualification for office, aside from his reputed business sense, was his unabashed faith in the British Empire and its future. Looking back at his early days in office, Hoare wrote that when he came in, "British civil aviation was then on the brink of collapse".<sup>20</sup> He went on to outline his approach to the problems he saw all about him:

This was the depressing state of affairs when I arrived in the Air Ministry in October, 1922. I knew nothing about the technical problems of air transport services, but as a Conservative who had been brought up in the days of Rudyard Kipling, Joseph Chamberlain and Milner, I saw in the creation of air routes the chance of uniting the scattered countries of the Empire and the Commonwealth [sic].<sup>21</sup>

This was a view that was to characterize British civil air transport policy particularly after 1927. Hoare had first to settle the problems plaguing British air lines operating to the continent. When these were rationalized in the formation of Imperial Airways in 1924, Hoare was able to shift gradually the aim of air transport from Europe to Empire, and in so doing lead Great Britain into a new dimension of imperial expansion.<sup>22</sup>

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20. Samuel Hoare (Viscount Templewood), Empire of the Air (London, 1957), p. 89. Hoare (1880-1959) was three times Secretary of State for Air, 1922-1923, 1924-1929, and 1940. Empire of the Air is a readable autobiographical account of his association with the Air Ministry.

21. Ibid., p. 90.

22. While there was always support for airships as the aircraft of Imperial air communications, it was not

As one air historian has noted, 1923 was a year of decision for British civil air transport.<sup>23</sup> Hoare, like his predecessors in office, had to tackle the difficult problems associated with subsidies, French competition, airship development, an aircraft manufacturing industry in decline, and a Royal Air Force whose future remained clouded in doubt. For Hoare, the most pressing problem facing civil aviation was the question of financial assistance. In the House he agreed that a subsidy scheme which provided for some £200,000 a year in cash, grants in aid and equipment to three air line companies, whose combined fleets totalled 20 aircraft and who employed altogether only 18 pilots and 117 other employees, was most unsatisfactory.<sup>24</sup> But, in Hoare's view, if subsidies were

22. (continued) until after the formation of Imperial Airways, an air transport firm equipped only with aeroplanes, that aeroplanes came to rival airships as possible exploiters of Imperial air routes. In shifting aeroplane emphasis from the Continent to the Empire, Hoare could point on one hand to the continued difficulties of operating in the United Kingdom or to the Continent, and on the other to the defense needs and imperial mission to be satisfied throughout the Empire. "It seems to me", Hoare spoke in the House, "that the development of Empire air communications should be the very basis of our civil flying policy." Hansard, CXCII, February 25, 1926, col. 773. This in essence was the view Hoare pressed on the Government until its acceptance in 1928. See AVIA 2/1846, Committee on the Future of British Commercial Air Transport. Report, 1927.
23. Higham, Britain's Imperial Air Routes, p. 64. The Government also announced that the Royal Air Force Home Defence organization would be strengthened to fifty-two squadrons, a commitment which suggested that the R.A.F. need no longer fear its dismemberment.
24. Hansard, CLX, March 1, 1923, col. 2161. It was a question of giving too much money for too little

not successful, "it is the system and not the companies that are wrong".<sup>25</sup> To right this wrong and to bring order to the continuing chaos of crisis, Hoare appointed a committee under the chairmanship of Sir Herbert Hambling to consider:

the present working of the scheme of Cross-Channel Subsidies, and to advise on the best method of subsidising Cross-Channel Air Transport in future, on the assumption that H.M. Government would be prepared to continue to make provision for this service at the rate of £200,000 per annum for a further term of years - say, three years. 26

The terms of reference did suggest a rather narrow view, confining the Committee to consideration of only Cross-Channel services and for only three years ahead, but on January 24th, 1923, the terms of reference were amended to read:

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24. (continued) results, a point Brancker put quite clearly in his speech to the Second Air Conference and before he was appointed to the Air Ministry. Noting that at first the Air Ministry was against subsidies (as he had been himself), "with the irony of fate, the Civil Aviation department have gone wildly the other way and are now giving too much for very limited results". Proceedings of the Second Air Conference, Cmd. 1619 (1922), p. 87.
25. Hansard, CLXI, March 14, 1923, col. 1619.
26. A.M., Civil Air Transport Subsidies Committee, Report on Government Assistance to Civil Air Transport Companies, Cmd. 1811 (1923), p. 2. The three members of the Committee were all drawn from the 'City'; Hambling (1857-1932) from Barclay's Bank, Sir Joseph Broodbank from the London Dock Companies and the Port of London Authority, and Hoare's younger brother, Oliver J.G. Hoare.

To consider the present working of the scheme of Cross-Channel Subsidies and to advise on the best method of subsidising Air Transport in future. [my underlining] 27

With these wider terms of reference the Committee was able to propose the creation of a new organization, "a commercial organization run entirely on business lines with a privileged position with regard to air transport subsidies".<sup>28</sup> The Committee's Report on Government Financial Assistance to Civil Air Transport Companies thus recommended a monopoly air carrier to carry the British flag in the face of foreign competition. The acceptance of this idea by the Baldwin Government and Hoare in 1923 was a decisive moment in British Imperial air transport history. As a direct result of the Hambling Committee recommendations, Imperial Airways was formed, initially to serve Europe, ultimately to link Great Britain with its Empire.<sup>29</sup>

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27. Ibid., p. 3.

28. Ibid., p. 16.

29. With remarkable speed the Hambling Committee submitted its one and only report to Hoare by the middle of February, and it was published on February 23. The Times gave strong support to the committee recommendations (February 24, 1923, pp. 10-11, and February 27, p. 12), but by October it was wondering why no action had been taken upon them (October 13, 1923, p. 13). The delay appears to have turned largely on difficulties in obtaining Instone Air Lines agreement to the terms and status of the new company. See AVIA 2/1826, Movements towards combination on the part of British companies operating Continental Air Lines; AVIA 2/1830, Subsidisation of Civil Aviation - Enquiries arising out of the Report of the Civil Air Transport Subsidies Committee; and AVIA 2/1831,

Neither the Hambling Committee Report nor the agreement signed between the British, Foreign, and Colonial Corporation, Ltd. and the Air Ministry for the formation of the "Imperial Air Transport Company, Ltd." spelled out an 'imperial mission' for the new organization,<sup>30</sup> although The Times did note with some satisfaction that the term 'Imperial' rather than 'National' was used to identify the new company.<sup>31</sup> While

29. (continued) Enquiries arising out of the Civil Air Transport Subsidies Committee - Correspondence with Instone Air Lines Ltd., 20.6.23 -. Agreement was reached and the formation of a "national company" was announced in early December. See The Times, December 5, 1923, p. 14, also December 20, p. 13.

30. The Hambling Committee Report did comment:

A further point that has been impressed upon us by nearly all the witnesses has been that the London-Paris and London-Brussels services are too short to be more than commercially experimental, and that a company can only be self-supporting by the development of new and longer routes.

Report on Government Financial Assistance to Civil Air Transport Companies, para. 33, p. 14. The British, Foreign, and Colonial Corporation was the issuing house charged to form and register with the least possible delay under the Companies Acts 1908 to 1917 "a Company limited by shares with an initial share capital of not less than One million pounds divided into 1,000,000 shares of £1 each and will guarantee the subscription of 500,000 of the said shares". A.M. Agreement made with The British, Foreign, and Colonial Corporation, Ltd., providing for the formation of a Heavier-than-Air Air Transport Company to be called the Imperial Air Transport Company, Ltd. Cmd. 2010 (1923), p. 3. Page 4 of the Agreement noted that the company was formed "with the object amongst others of (1) acquiring consolidating and extending the aerial transport businesses carried on by Handley Page Transport Limited Instone Air Line Limited Daimler Hire Limited and British Marine Air Navigation Company Limited and/or (2) establishing an Air Transport Service to operate equivalent services to those now in operation by such companies. [my underlining].

31. "For it suggests that the Air Ministry, at any rate, are taking a long view of the ultimate scope of the new

it was clear that the company was formed in the first place to resolve the continuing difficulties experienced by the several subsidized air transport companies operating United Kingdom-Europe services, and with the long-range view of placing British civil aviation on a self-sufficiency basis, the monopoly position given to the new company assured that when and if Imperial services by aeroplane were developed, the Imperial Air Transport Company would be the 'chosen instrument'. 32

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31. (continued) concern...." The Times, December 28, 1923, p. 5. A former Chief Accountant with the company wrote; "The Statute of Westminster was still to come; 'Empire' and 'Imperial' were still dignified, fashionable and descriptive words. It was inevitable that the title and quality 'Imperial' should be included in its name...." A. J. Quin-Harkin, "Imperial Airways, 1924-40", Journal of Transport History, I (November, 1954), p. 199. A 'National' prefix to the name of the new company probably stemmed from the proposal submitted by the Directors of Instone Air Lines in May, 1923, calling for the formation of a 'National Aerial Transport Company'. See AVIA 2/1831 for a bound copy of the 58 page proposal. One historian of the period notes that among the several names suggested for the new company was 'British Aircraft Transport Service', a name which won some support until George Woods Humphrey (General Manager [1925-1930] and Managing Director [1930-1938] of Imperial Airways) pointed out that its abbreviated form would be 'BATS'. Pudney, The Seven Skies, p. 67.
32. The first prospectus issued by Imperial Airways in 1924 did state that it was proposed to maintain the existing services of the old independent air lines, and, to develop the same further by the establishment of new routes and, by the extension of the company's activities further afield, ultimately linking up all parts of the British Empire. Quin-Harkin, "Imperial Airways", p. 201. Both the monopoly status and an implied Imperial role for the new company owed much to the influence of Holt Thomas who had proposed a similar scheme in 1922. See AVIA 2/1826 for his scheme and the great bulk of Holt Thomas-Air Ministry correspondence.

Imperial Airways, Ltd. came into being April 1, 1924, the Labour Government carrying out the Hambling design without change. <sup>33</sup> Hoare's appointee as chairman of the company, Sir Eric Geddes, likewise remained. <sup>34</sup> Geddes' selection, like that of the three members of the Hambling Committee, was consistent with Hoare's view that civil

33. The first Labour Government under Ramsay MacDonald had come into office in January with Lord Thomson of Cardington as Secretary of State for Air. While it rejected the Conservative commitment to the Burney airship scheme because of its promise of a private monopoly position, curiously, Labour made no effort to intervene in the new monopoly of Imperial Airways. See Higham, Britain's Imperial Air Routes, p. 69, for brief discussion. The full details of the birth and formation of Imperial Airways Limited (the name was formally changed from the more cumbersome Imperial Air Transport Company Limited in the spring of 1924) need no re-telling here. In addition to Higham's Britain's Imperial Air Routes, see Pudney, The Seven Skies, chapter VI; A.E.W. Salt, Imperial Air Routes (London, 1930); and A. J. Quin-Harkin, "Imperial Airways, 1924-1940", pp. 197-215. See too AVIA 2/1833, Imperial Air Transport Company, Limited - Execution of Agreement, 1924.
34. Sir Eric Geddes (1875-1937), a former Minister of Transport and best-known at this time as the author of the 'Geddes axe' proposals while Chairman of the 1922 Committee on National Expenditure, was chairman of the Dunlop Rubber Company at the time of his appointment as Chairman of Imperial Airways in late 1923. See The Times, December 5, 1923, p. 5. Geddes accepted the Hoare offer on condition that he could bring in with him his number two man at Dunlop, George Beharrel; Hoare accepted. Geddes continued as chairman of both companies until his death in 1937. Unfortunately, he left no papers of account dealing with his long and important association with Imperial Airways. From private correspondence with his son, Sir Reay Geddes, in January, 1970.

aviation must be placed on a business basis. "I want to get civil aviation out of the atmosphere of adventure", he stated in an interview with The Times,

so that it shall be regarded seriously and judged by the serious tests which one would apply to other forms of traffic or transport.<sup>35</sup>

The formation of Imperial Airways with its guaranteed subsidy of £1,000,000, a monopoly over a ten year period, and the Government commitment to establish an Imperial airship scheme were sure signs that Great Britain had taken the first steps along the road to a settled civil air transport policy. Much of the credit must be given to Hoare. Admittedly he was able to draw upon a considerable amount of experience by the time he took office, and there is little doubt that the situation as he found it in 1922 was such that almost any change of direction in air aims or policy development would produce better results than had been shown thus far.<sup>36</sup> But the

35. The Times, May 24, 1923, p. 12. This interview followed Hoare's first trip in a civil aircraft, a tour of British routes in Europe.

36. The Treasury was the major stumbling block to any plan designed to put the British civil air transport system on a self-supporting basis. As well, there was the major task of encouraging an 'air-mindedness' in Government thinking. One major source of support for Hoare and the Air Ministry came from Australia where civil aviation was enjoying early and unprecedented success. "These evidences of success", Hoare wrote,

were arriving in London at a most opportune moment. I urgently needed some striking example of practical air transport with which to persuade the Government and the Treasury that there was much to be gained from civil air services.

fact remains that it was Hoare who guided the destiny of British and Imperial civil aviation policy through its formative years and, along with his chief subordinate, Brancker, established a strong British presence in the world of civil aviation. By 1925, Hoare was ready to set in motion his Imperial policy, and the lines along which this was to be pursued were firmly established by the time he left office in 1929. In brief, Hoare's civil air transport policy de-emphasized European air services, gave priority to the establishment of a London to Karachi air service, and, most important, brought the British Empire in Africa within the expanding compass of British civil air transport. 37

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36. (continued) Empire of the Air, p. 91. The best account of Australian civil aviation history remains D. M. Hocking and C. P. Haddon-Cave, Air Transport in Australia (Sydney, 1951).
37. The British Government accepted the general outlines of this policy in late 1927. See AVIA 2/1846, C.P. 238(27), Memorandum by the Secretary of State for Air on the Future of British Commercial Air Transport, October 6, 1927. See also CAB 24/188 for same. The new emphasis on Empire was accepted by the Cabinet Committee on the Future of British Commercial Air Transport chaired by P. Cunliffe-Lister, the President of the Board of Trade. Note the Committee Report dated December 23, 1927 in AVIA 2/1846, C.A.T. (27) 7 (Revised); also CAB 27/354 and CAB 24/190 for proceedings and memoranda.

Despite the apparent Government and indeed general preoccupation with airships on Imperial routes, the linking of Great Britain and India, and the question of British aeroplane services to Europe, Africa was neither forgotten nor ignored. Both the Colonial Office and the Air Ministry shared the view that the African Dependencies were ripe for development, the former thinking in terms of general economic development, the latter in terms of improving and accelerating transport and communications. At the 1923 Imperial Conference Lord Devonshire, Secretary of State for the Colonies, argued that "the British West and East African colonies both in area and population provide our greatest opportunity and the widest scope for material development", <sup>38</sup> a view shared by Amery, his Conservative successor in office. Amery approached Africa with an almost missionary zeal and spoke of "the vast backwood regions of Africa, inhabited by primitive peoples whom we are only beginning to lift up from the most elementary barbarism...." <sup>39</sup>

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38. Imperial Conference 1923. Appendices to the Summary of Proceedings. Cmd. 1988 (1923), p. 24.

39. Imperial Conference 1926. Appendices to the Summary of Proceedings. Cmd. 2769 (1926), p.111. Leopold S. Amery (1873-1955) was Parliamentary Under-Secretary of State for the Colonies 1919-1921, Secretary of State 1924-1929, and Secretary of State for the Dominions 1925-1929. He developed a growing and enthusiastic respect for the aeroplane. Speaking at Stellenbosch in 1927 on a South African tour, he outlined a trip he had just completed, "a twenty or twenty-five days' journey in an ox-wagon. I did it in an aeroplane in the morning in about three hours". Amery, The Empire in the New Era (London, 1928), pp. 70-1.

Nonetheless, he was a keen supporter of civil aviation and the ultimate plans of the Air Ministry for services in Africa. In Amery's view, the future of British Africa was tied to improved communications.<sup>40</sup> With special reference to East Africa he noted:

I think that, from the point of view of the establishing of white civilization as a guiding influence over the whole of East Africa, it is very important that the region should be in close contact both with England one way and with the white civilization rooted in the native soil in the south. 41

For Amery and the Colonial Office, here was reason enough to support any proposed air link between Cairo (and ultimately Great Britain) and Cape Town.<sup>42</sup> It tied in well with Brancker's noticeable enthusiasm for air services to Africa. "Think what it would mean to the British settlers in Central Africa", wrote Brancker in 1925, "to receive the London newspapers every morning only a few days after publication".<sup>43</sup>

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40. "I inherited from Lord Milner", he wrote, "the conviction that the twin keys to development were improved communications and research". See his My Political Life, vol. II, War and Peace (London, 1953), p. 340.

41. Imperial Conference 1926. Appendices, p. 215.

42. The Colonial Office naturally gave higher priority to the establishment of a Cairo-Cape Town route through the Empire in Africa than did the Air Ministry whose first concern was the Indian route. Both the Colonial Office and the Colonial Governments gave active and encouraging support to civil air transport proposals for African development. See below, chapters III and IV for their role in the Gladstone/Cobham plans for a Khartoum-Kisumu air link, the work of Frederick Tymms in studying the possibilities and problems of African air development, and the establishment of the Cairo-Cape Town route in 1931-32.

43. Quoted in Basil Collier, Heavenly Adventurer, p. 187.

Brancker and Hoare both expressed the Air Ministry's interest in Africa, giving aeroplanes and airships consideration as possible agents of air progress. In 1923, Brancker's own Imperial scheme featured a Mombasa - Aden route, and within two years it was to be linked to Cairo to join the London-Cairo-Delhi airship service, while feeder lines were to connect Mombasa with Zanzibar, Dar es Salaam and Nairobi.<sup>44</sup> Initially, Hoare was more restrained than Brancker about African possibilities, but the Air Ministry under his guidance gave the air route to Cape Town a high priority.<sup>45</sup> Hoare's air policy included the promotion of Royal Air Force long-distance flights in Africa and elsewhere, pioneering efforts which contributed in no small way to the later development of commercial services.<sup>46</sup> By 1929, with preparations for the opening

44. AVIA 2/186, Memorandum on Civil Aviation, 1923. 25 page brief submitted by Brancker to Hoare (n.d.), outlining a £500,000 10 year support policy scheme. Brancker was convinced that civil aviation could be made self-supporting, mainly by reducing costs with the use of metal airframes, longer life engines, and other engineering and design improvements. See AVIA 2/175, Notes on Economic Prospects of Air Transport. Brancker Memorandum, January 7, 1923.
45. It came to rank ahead of the Imperial route beyond India and the trans-Atlantic route to Canada and the West Indies, not for strategic or potential traffic reasons, but because the 'all-red route' was thought to be easier to initiate either politically or operationally. Nonetheless, the Indian route was always first as an Imperial air goal.
46. AIR 2/287, Proposed Flight from Cairo to Cape Town and Nigeria, 20.2.25 -. See below this chapter and chapter VIII.

of the Cairo to Cape Town route well under way, an unusually excited Hoare exclaimed to the House, "What a thrilling project", <sup>47</sup> and so voiced the growing enthusiasm of the Air Ministry for African air development.

While the Air Ministry and the Colonial Office thus shared a faith in the future of the aeroplane in Africa, their mission was to translate this faith into policy, and to persuade and educate the British Government to African air needs. The argument for Africa and its air future was couched in the language of imperialism; Great Britain must exercise its 'trust' in Africa, a continent in need of improved transport of all kinds; <sup>48</sup> Great Britain must act or risk the danger of a potential air supremacy in Africa being usurped by ambitious foreign powers --- France, Belgium, Italy and Germany; <sup>49</sup> Great Britain must awaken

47. Hansard, CCXXVI, March 7, 1929, col. 608.

48. The primary transport needs were in rail, road and water transport development, the "cheap transport" so vital to general economic and social progress. See, for example, Lugard, Dual Mandate, p. 5, 461, passim. Air transport was never regarded as a substitute for existing forms of transport, but rather as a complement, fitting into a general development of African transport. See Brancker, "Co-operation in Transport", Journal of the Institute of Transport, X (November, 1928), pp. 11-28. A good brief study of African transport in the inter-war period is Lord Hailey, An African Survey (London, 1938), pp. 1537-1610.

49. A close watch was kept on French and Belgian Activities in Africa by the Air Ministry (see the annual Reports on the Progress of Civil Aviation, 1925-31), and the two leading aviation journals, Aeroplane and Flight. Italy at this time was developing its North African Empire and looking to Egypt as a departure point for further air expansion. See AIR 2/780. Minute 53, Hoare to Brancker

to the fact that the air age had come to conquer distance, "the great enemy of Imperial solidarity".<sup>50</sup> The Imperial appeal for African air progress was supported by the fact that British Africa, unlike India, Burma or Malaya, had significantly large white British populations, especially in Kenya, the Rhodesias and South Africa.<sup>51</sup> This suggested not only that it was in Imperial interests to strengthen and improve the lines of communication between these white communities and the metropolis, but that further white settlement in Africa could be encouraged if air communications assured a regular and more rapid contact with 'home'. This was in line with the contention stated by Brancker, among others, that much of Great Britain's economic and social ills could be cured if more Britons were to emigrate to various parts of the Empire.<sup>52</sup> An Air Ministry memorandum,

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49. (continued) and C.A.S., April 16, 1928, for A.M. attitude to Italian proposals for an Italy-Egypt service. The Germans were active in South Africa, much to Great Britain's dismay. See AIR 2/290, Proposals by Messrs. Junkers for a South African Air Service, 10.9.25 -. For discussion, see chapters IV and VII.
50. Samuel Hoare, "Aviation and the British Empire", Scottish Geographical Magazine, XLV (January, 1929), p.3.
51. In 1935-36, the European populations were given as, Kenya, 17,997, Southern Rhodesia, 55,419, Northern Rhodesia, 9,913, and South Africa, 2,003,512. Hailey, African Survey, p. 109. Apart from their place in an Imperial design, the white communities were recognized as those sectors of African society most likely to want and use air transport facilities. They were relatively affluent and deemed able to support a novel but expensive form of transport denied to the great majority of black Africans.
52. In 1925, Brancker argued, "What is our greatest failure in the British Empire? It is that we have too many people in this country, and too few in our Overseas Dominions.

probably authored by Brancker, to the 1927 Colonial Office Conference noted:

The main deterrent of the masses to emigrate is the feeling of separation which is conjured up in the imagination of the prospective settler. The establishment of rapid communications which will bridge the gap of separation will do more than anything else to remove distaste from the idea of setting out for unknown far distant lands. 53

Additional arguments for aviation were wed to the Imperial hopes for Africa from 1924 onwards. 54 At the first, the airship was regarded as the aircraft which would fulfill the Imperial mission while the aeroplane would serve local needs and provide 'feeder' services to the Imperial airship routes through Cairo and to South Africa. 55

52. (continued) Here we are overcrowded and have a million people not fully employed; there they are sparsely populated and calling for men". "Commercial Aviation", Journal of the Royal Society of Arts, LXXIII (June 5, 1925), p. 657.
53. Colonial Office Conference, 1927. Appendices to the Summary of Proceedings. Cmd. 2884 (1927), p. 100.
54. There is scant reference to the potential of African air transport development in the years 1920-23, a disappointing interlude after the flurry of 'excitement' in 1919-20. With the formation of Imperial Airways in 1924, a settled policy of airship development established by the Labour Government, and a commitment to establish an air route to India, Africa once again comes into focus. 1924 is, in effect, a turning point in British African air transport history. An Air Ministry summary of various route proposals being 'aired' or studied in 1924 included three African services: (1) Cairo-Nairobi, (2) Cape Town-Pretoria, and (3) Aden-Mombasa. AVIA 2/216, Imperial Air Communications - Proposed Links in the Chain, Summary, 10.4.24.
55. The Air Ministry was firmly committed to this idea from the beginning. In 1922, Lord Gorell, the Under-Secretary of State for Air was "convinced that the main air lines of the British Empire will be primarily airship lines

In 1926, Hoare continued convinced that the airship was necessary for fast long-distance flight, illustrating African possibilities by recalling a successful German airship flight from Bulgaria to East Africa and return in 1917. <sup>56</sup> A former Governor of the Gambia pointed out to Brancker that Bathurst should be developed as a 'Clapham Junction' to serve airship routes to South America and South Africa. <sup>57</sup> Thus, the aeroplane for a few years after 1924 was cast in a lesser although still important role in Imperial air policy. Aside from its military application,

55. (continued) with branch aeroplane connections running off from them". Second Air Conference. Proceedings, p. 13. In 1925, Brancker argued that "airships are not rivals to aeroplanes....I am of opinion that you should never fly less than, roughly 1,000 miles in an airship, and never more than a 300 miles stage in an aeroplane". "Commercial Aviation", p. 655.
56. A German L.57 airship left Jamboli (Bulgaria) at 0800 hours on November 21, 1917 with a crew of 22 and 10 tons of military supplies for the German forces fighting in East Africa. It arrived at the Daka Oasis in East Africa at midnight of the next day, but quickly turned about and flew back to Jamboli, arriving on the 25th of the month, a non-stop trip of 4,200 miles in 96 hours. A.M. (Hoare), The Approach towards a System of Imperial Air Communications, p. 11. The German mission was a failure because the airship crew believed intentionally fabricated British radio reports that German forces in Africa had surrendered.
57. AVIA 2/216, H. L. Galway (Governor of the Gambia 1911-14) to Brancker, April 20, 1924.

which was not questioned, and its obvious ability to carry passengers, mail and freight over short distances, Hoare pointed out a wide range of other possible aeroplane uses in his appeal to British Government administrations in the Dominions and Dependencies to initiate air service: aerial survey, forest fire protection, insect spraying, investigation and protection of crops from disease, ambulance and medical duties, fishing protection and shoal observation, prevention of smuggling, conveyance of administrative officers, and the formation of light aeroplane clubs and support for private flying, both of which were important in developing an 'air sense'. 58

This general view of the relationship of airships to aeroplanes in Imperial plans for civil air transport could not and did not last very long. Indeed, the erosion of the idea that aeroplanes could not service Imperial routes began long before the airship programme came to an end in 1930. 59

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58. A.M. The Approach towards a System of Imperial Air Communications, p. 82.
59. The 1926 Imperial Conference gave recognition to the aeroplane and supported the resolution that long-distance aeroplane routes "must be built", while noting that airship development has "great potentialities". See Hoare's review, Colonial Office Conference, 1927. Appendices, p. 94. Priorities were changing; by 1927, Brancker could point out that the Department of Civil Aviation were contemplating three plans: (1) a through connection by aeroplane from London to Melbourne via Karachi, (2) a "branch line" by aeroplane and seaplane Cairo to Cape Town, and (3) an airship service probably from Cardington to Ottawa.

Airships were overtaken by a number of developments: aeroplane performance and load capacity improved, a lowering of running costs coupled to the much lower initial costs made them increasingly attractive economically, and the fact that aeroplanes were available while airships remained in the experimental stage of development gave the air line operators almost a decade to demonstrate the utility of the aeroplane and establish a general confidence in its capabilities and reliability. Alan Cobham won fame for himself and the aeroplane with successful return trips along routes which were to be the Imperial highways of the future. <sup>60</sup>

Imperial Airways, whose limited operations in Europe were nonetheless successful and impressive from the point of view of safety and reliability, won Air Ministry support for an opportunity to develop the Imperial routes in 1927 and so moved the aeroplane into direct competition with the airship. <sup>61</sup> Finally, the Royal Air Force, already

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60. See chapter III for Cobham's African flights. In addition he made major flights of survey to Rangoon and Australia, the former in 1924 with Brancker on board.

61. See A.M., Agreement made with Imperial Airways, Ltd., for the Establishment of a Civil Air Transport Service between Egypt and India. Cmd. 2758 (1926). The India service was thus Imperial Airways' first assignment on Imperial air routes, until this time the intended preserve of the airships. At this time there is little doubt that airship development was not proceeding at the pace originally anticipated. While Imperial Airways' move onto the Indian route was in keeping with the new 'Imperial mission' for the air line as argued by Hoare,

directed to open up the route to India, was commissioned by Hoare to fly to the farthest corners of the Empire with the threefold purpose of 'showing the flag', demonstrating British technology, and studying the routes with an eye to future commercial operation. <sup>62</sup>

"What I am going to try to do this year is to give support to certain long-distance flights within the Empire", Hoare said in his annual statement to the House during the debate on the Air Estimates in 1925. <sup>63</sup> For British Africa it was an important decision for the first two flights proposed were from Cairo to Nigeria and Cairo to Cape Town. <sup>64</sup>

61. (continued) German activity in Persia dictated a British response in the East which could not await the airship. For a general survey of the beginnings of the Indian air route service, see Higham, Britain's Imperial Air Routes, pp. 109-33.
62. As far as the R.A.F. was concerned, long-distance flights were essentially routine training exercises designed to test British defence mobility, the more grand Imperial motives were left to the hyperbole of Hoare and Brancker. The official Air Ministry account of the first Cairo-Cape Town flight noted it was "purely a service flight carried out in the ordinary course of Royal Air Force training...." "R.A.F. Cape Flight (Official Account)". A.M. Communiqué No. 1401. Abridged. Journal of the Royal Aeronautical Society, XXXI (February, 1927), p. 142.
63. Hansard, CLXXXI, March 12, 1925, col. 1678.
64. AIR 2/287. Originally the plan called for one flight; Cairo to Cape Town, returning to Egypt by way of Nigeria. The decision to make two separate flights was probably based on a concern for the difficulties of flying the Cape Town-Nigeria sector along the west coast of Africa. It was easier to route the Nigerian flight through the Sudan and Chad.

The first west African flight was made in November-December 1925 and for Hoare and the R.A.F. it was an "unqualified success".<sup>65</sup> In the House of Commons, Hoare spoke with obvious pride:

The flight that we carried out in the autumn was a flight from Cairo to Nigeria, a flight carried out by one of the units on the spot in Egypt, without any special preparations and with ordinary service machines. The flight was over some very difficult country, a distance of 6,268 miles, and it was completed without any mishap of any kind in 80 flying hours. From the flying point of view, it was an unqualified success, but I am informed that from a political point of view, the broader Empire point of view, it was just as great a success. The amount of interest that was taken in it over this route between Egypt and Nigeria is almost incredible. Hundreds of thousands of natives gathered to see the arrival of the machines, and Emirs in considerable numbers were taken up for joy-rides,...<sup>66</sup>

The R.A.F. flight to Cape Town was similarly successful both as a flying operation and a 'political' demonstration and received a great deal more publicity than the first

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65. See A.M., Memorandum by the Secretary of State for Air to Accompany the Air Estimates, 1926. Cmd. 2589 (1926). Also AIR 5/820, chapter 13, Cairo-Kano Flight. Report by Squadron Leader A. Conningham. Published as Air Publication No. 1202.

66. Hansard, CXCII, February 25, 1926, col. 773.

West African flight.<sup>67</sup> The flight of four aeroplanes followed the route Cairo-Wadi Halfa-Khartoum-Malakal-Mongalla-Kisumu-Tabora-Abercorn-Ndola-Livingstone-Bulawayo-Pretoria-Bloemfontein-Cape Town, a route made familiar during the flurry of African air enthusiasm in 1920, and more recently flown by Cobham on the 1925 survey flight.<sup>68</sup>

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67. As yet, West Africa had no place in Imperial plans for establishing civil air routes, while the Cape flight was regarded as the first step in linking South Africa to the Imperial chain. For A.M. views on the question of publicizing the Cape flight, see AIR 2/299, Publication of Report on R.A.F. Cape Flight. Also Wing Commander C.W.H. Pulford, "The Royal Air Force Flight from Cairo to the Cape", Journal of the Royal United Services Institution, LXXII (May, 1927), pp. 266-79 for an account by the officer who led the flight. The largest response to the West African flight came from critics of R.A.F. use of American Liberty engines in the British-made Fairey III aeroplanes. See AIR 2/287. Letter from the Society of British Aircraft Constructors to the Air Ministry, September 22, 1925, and H. T. Vane (Managing Director of D. Napier & Sons) to Hoare, September 15, 1925. See criticism in Flight, October 15, 1925, p. 666. The Air Ministry blandly replied that these American engines were in routine squadron use and this flight was a routine squadron exercise.
68. Whereas the survey of the route and preparation of the airfields had cost about £55,000 in 1919-20, re-conditioning of the route and transport for the ground parties sent out ahead of the R.A.F. flight to South Africa cost only £3,000. Hansard, CCVI, May 18, 1927, col. 1177. This would indicate that the air facilities enroute were being maintained in reasonable condition by the various British governments. The only maintenance charge on the route to the Air Ministry was the annual grant of £300 to the Sudan. In addition, the annual flights to the Cape cost about £ 23,000 cash. For Cobham's 1925 survey flight, see chapter III.

Both pioneer R.A.F. flights established the British air presence in Africa and were the beginnings of what Hoare later described as "our settled policy to show the Air Force, as the Navy showed the fleet, in the distant parts of the Empire".<sup>69</sup> Ostensibly, the flights in 1925 and 1926, and in succeeding years, were training exercises designed to test British air power capabilities in Africa, but the impact of these efforts was considerably more than the modest first intentions indicated. First and foremost was the fact that the aeroplanes were being introduced to Africans and African conditions, especially in those areas away from the more or less familiar Cape Town route.<sup>70</sup> The R.A.F. flights throughout the 1920's and 1930's were impressive demonstrations of aeroplane capabilities to a Government in Great Britain and to Africans, black and white. Secondly, a policy of regular R.A.F. long-distance flights in Africa answered the charges of some that Great Britain was leaving Africa to rival French and Belgian interests.<sup>71</sup>

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69. Hoare, Empire of the Air, p. 213.

70. The most important of which were the biennial trips to and through British West Africa, but the R.A.F. ranged far and wide as well through the Sudan and British East Africa. (See AIR 5 and AIR 20 Series). For discussion of the impact and importance of the West African flights, see chapter VIII.

71. Impressed and concerned with French and Belgian progress in West Africa and the Congo, a leading aeronautical journal reflected the view of many in civil aviation in asking, "what about Great Britain?" Flight, January 22, 1925, p. 42.

Finally, these service flights argued closely the relationship of military to civil aviation. The aeroplane was the common denominator for both, and if in the one it could provide an Imperial unity in strategic terms, in the other it could fashion a cohesive Empire in terms of civil air transport and communications. 72

If the broad field of Imperial air communications was the central theme in civil aviation development in the last half of the 1920's, it is clear that the African Empire was becoming a growing and important concern in air transport considerations. Cobham and the air force were fast ushering in the beginnings of an air age in Africa in a way which won support and commanded influence in Great Britain and in Africa. Side by side with the growing Government emphasis on an Imperial posture for British civil aviation was an African emphasis which did not displace but certainly rivalled the 'India and points east' preoccupation noted from the beginning in the Air Ministry. 73

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72. As Hoare pointed out, "the civil and military aspects are inextricably connected..." Imperial Conference, 1926. Appendices, p. 192. In the House in comment upon the policy of long-distance R.A.F. flights, Hoare noted, "how important upon the military side are these long-distance flights, and how important they are also from the point of view of laying the foundations for future civil Empire air routes". Hansard, CXCII, vol. 192, February 25, 1926, col. 774.
73. Brancker defended the Indian priority on the grounds that the South African route had not the same "military value". He thought that the Cairo to Cape Town service "would be of particular value to travellers and sportsmen". Quoted in Aeroplane, XXXIII (November 9, 1927), p. 634. C. G. Grey, the Aeroplane editor was critical, noting that if

Outside the Air Ministry, interest in African aviation grew apace. Tony Gladstone and the North Sea Aerial and General Transport Company, a subsidiary of the Blackburn Aeroplane Company, won the Governments of the Sudan, Uganda and Kenya to a proposal to operate an experimental air service between Khartoum and Kisumu. Financial support was provided and the Colonial Office granted a contract for the service in late 1926.<sup>74</sup> Hoare, Brancker, and the Air Ministry held out high hopes for the future of the service.<sup>75</sup> Imperial Airways studied the African situation

73. (continued) the South African route had so little value, why should taxpayers be called upon to subsidize "big-game hunters?" Hoare's position on route priorities remained right through his period in office. In 1929 he stated, "As long as I have been at the Air Ministry I have always regarded, as the first need in any civil aviation programme, the need for starting an air route to India". Hansard, CCXXVI, March 7, 1929, col. 605.
74. A.M., Report on the Progress of Civil Aviation. Cmd. 2844 (1927), p. 45. Uganda and Kenya each agreed to contribute £2,500, the Sudan, £2,000. For a short review of the beginnings of this operation, see East Africa. Special Khartoum-Kisumu supplement, December 9, 1926, 16 pp. See also below chapters III-V.
75. Ibid. See too Hoare statement, Imperial Conference, 1926. Appendices, p. 195. By 1929, the Air Ministry was ready to bring the Khartoum-Kisumu experiment into the larger scheme of a Cairo-Cape Town route. AVIA 2/1857, Khartoum to Kisumu Air Service - Question of the Institution of a Permanent Service from Egypt to South Africa, 2.3.29 -.

in 1925, <sup>76</sup> again in 1927, <sup>77</sup> and finally, in co-operation with the Air Ministry, laid plans for a Cape Town aeroplane service in 1928. <sup>78</sup> In Kenya and Southern Rhodesia, local air interest argued for the development of air transport services, <sup>79</sup> while in South Africa, the British state in Africa from whom the most was expected, developments moved slowly but nonetheless surely towards the establishment of the first operating air line, Union Airways. <sup>80</sup>

76. AIR 2/290. G. Woods Humphrey to J. S. Smit (South African High Commissioner in London), July 12, 1926. Woods Humphrey pointed out that he had had discussions with Major Miller of South Africa "about a year ago" concerning the possibility of Imperial Airways commencing services in South Africa. Despite Air Ministry concern over German interest in establishing air services in the Union, Woods Humphrey had to write that Imperial Airways were not ready for an African operation, and besides the subsidy proposed (£ 8,000 per year) was inadequate.
77. AVIA 2/302, Proposal to operate Aeroplane Tours to Africa and Certain European Countries - Request for Air Ministry Assistance. S. A. Dismore (Secretary, Imperial Airways, 1925-1938) to A.M., September 16, 1927. Imperial Airways planned "Winter Air Pleasure Cruises" in co-operation with Thomas Cook & Sons to Casablanca, Marrakech, Fez, Oran, Algiers, and Tunis, to be operated with Argosy aeroplanes. A cruise was intended to last 35 days for an all-inclusive fare of 435 guineas. The first cruise was planned for January, 1928, then delayed to February, and finally cancelled altogether. While not an 'Imperial' venture, the idea suggested an African and away from Europe interest.
78. See chapter IV.
79. AVIA 2/296, Kenya-Commercial Aviation. Suggestion to establish air routes and light Aeroplane Club, 15.8.27-. The Aero Club of Kenya was formed in 1927 and by 1928 had 300 members, five aeroplanes and plans to extend into Uganda and Tanganyika. A.M., Report on the Progress of Civil Aviation, 1928 (London, 1929), p. 54ff. In Southern Rhodesia, the formation of the Rhodesian Aviation Syndicate in 1927 marked the beginnings of

By 1928, the British House of Commons was showing rare but welcome interest in African air development. Viscount Sandon raised the question of a Cape Town route by way of the Sahara and the Cameroons.<sup>81</sup> Captain Cazalet argued the case by pointing out the use made of aeroplanes by an unnamed settler in East Africa.<sup>82</sup> Captain Garro-Jones argued that civil aviation development in Africa was "the most important, as it is the blackest, spot in the development of civil aviation today".<sup>83</sup> Guest, the former Air

79. (continued) serious civil aviation. See J. McAdam, "Birth of an Airline", typescript in possession of writer. A full discussion of these early interests will be given in chapters V-VI.
80. South African Government interest began with the running of a three month experimental air mail service between Cape Town and Durban by the South African Air Force (see Aeroplane, April 15, 1925, p. 364), and the first offer of a government subsidy for an air transport service. A number of companies were formed and failed due to the inadequate Government support, but Union Airways commenced operations in 1929 and continued with some success until 1934 and the formation of South African Airways. See chapter VII.
81. Hansard, CCXIII, February 22, 1928, col. 1595. This routing would save about 850 miles or over eight hours on the service to Cape Town. However, as most of the route would be over "foreign" territory, the Air Ministry never gave it any serious consideration until the mid-thirties and the availability of longer-range aeroplanes.
82. "I know a settler who employs in the management of his ranch three aeroplanes, and instead of 8½ hours to get to Nairobi he can do it in 40 minutes". Hansard, CCXV, March 28, 1928, col. 290.
83. Hansard, CCXX, July 30, 1928, col. 1879.

Minister, drew special attention to the dangers posed in the air activities of the French and Belgians:

The problem of the development of British interests and dependencies in Africa is one that must be tackled at once. I say that because I know that the linking up of the north and south in that great Continent will very likely be filched from us by other countries.... 84

Guest was prepared to take his concern one step further by giving Africa top priority even over the route to India:

On the Indian route, we pass over territories which we cannot develop. In the other case, we are passing all along the route over territories and tracts of immense potential value,... The resources of Africa are just being appreciated. It is the air which has opened them up. Only in the past four or five years districts have been opened up which were quite inaccessible even in the days of the war, when I was there myself. 85

Finally, air interest in Africa was highlighted by the exploits of private pilots in light aeroplanes bent upon establishing air records for an England to South Africa route. <sup>86</sup> These were demonstrations of daring, and even foolhardiness in some cases, but they flavoured aviation

84. Ibid., cols. 1871-72.

85. Ibid., col. 1872.

86. For capsule histories of these many United Kingdom - South Africa flights, see Benjamin Bennett, Down Africa's Skyways (London, 1932), pp. 66ff, also David Jones, The Time-Shrinkers (London, 1971). Lieutenant R. R. Bentley of the South African Air Force (S.A.A.F.) flew the first solo flight to the Cape. See his "Flying across Africa", Airways, IV (July, 1928), pp. 383-87, and "Some Technical Aspects of the Flight to and from Cape Town", Journal of the Royal Aeronautical Society, XXXII

with a colour and romance otherwise lacking in the pedestrian approach of the Air Ministry and Imperial Airways. Men and a surprising number of women emerged out of aviation obscurity in scattered flying clubs in Great Britain and South Africa to become heroes of the air in their attempts to bring Great Britain and Africa closer together.<sup>87</sup> They were adventurers rather than pioneers but their flights cannot be dismissed summarily as mere 'stunts'. In a very effective way, these private pilots contributed to the growing British interest in Africa and aviation. They stirred up enthusiasm in both Great Britain and British Africa, and their successful flights to and from South Africa argued strongly that a British air link with its African Empire was possible. In summary, these record-setting pilots posed a challenge to the Air Ministry and its 'chosen instrument'. What they could do, could not

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86. (continued) (October, 1928), pp. 872-84. By 1932 when the first Imperial Airways' service arrived in Cape Town, the record time for a Lympne to Cape Town flight was four days, six hours, and 54 minutes, held by Amy Johnson (Mrs. J. A. Mollison).
87. The women, as both pilots and passengers, included Lady Heath, Lady Bailey, the Duchess of Bedford, Peggy Salaman, Amy Johnson, and in 1937, Mrs. B. Kirby Green. The men were more numerous: Bently, P.M.A. Murdock, S. S. Halse, R. F. Caspareuthus, C. D. Barnard, G. Kidston, R. H. McIntosh, and J. Mollison, all of whom flew in the 1928-32 period. Record attempts did not end in 1932, but with a scheduled Imperial Airways service flying the route, much of the excitement and adventure had been taken away.

Imperial Airways with its greater resources and organization?<sup>88</sup>

This, then, was the general background of support and interest against which Hoare and Brancker acted in bringing Africa into the scheme of Imperial air route development. However, there remained a number of questions the answers to which were crucial to the commencement of a firm policy of African air transport development. There was the question of Egypt, that thorn which festered for so long in the Imperial side. There was the ever-present problem of determining the amount and sources of necessary financial support, a problem no less difficult in African air transport than it had been and continued to be in the British experience. Finally, there was the question of Imperial Airways' preparedness to carry out the task of linking Great Britain and her African Empire. These three factors were the major determinants in dictating the delay in initiating air transport services along the Imperial routes in Africa. <sup>89</sup>

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88. Glen Kidston wrote, after his flight to the Cape in 1931, "If I can carry through a single trip like this as a private owner without proper organization, it must stand to reason that a commercial company operating the same route with relays of machines should be able to do it much quicker". Quoted in Bennett, Down Africa's Skyways, p. 199. Kidston took 6½ days to fly to the Cape; Imperial Airways was proposing an 11 day schedule. For full discussion, see chapter IV.
89. There were, of course, other relevant factors; the problem of establishing permanent and suitable airfields, the availability of aeroplanes designed to meet the special problems of African aviation, the installation of radio and meteorological facilities, and the need for Post Office co-operation. All of these were a challenge to the 'chosen instrument' after 1928.

The crucial position of Egypt in Imperial defence considerations was never in question.<sup>90</sup> In the 1920's it became apparent as well that Egypt held the key to the development of Imperial air routes to the east and south, in much the same way as it continued to be vital to the protection of Suez and Imperial shipping interests on the trade route to India and the Far East. The problem for British civil aviation in Egypt was that it was inextricably tied to the growing difficulties of establishing a lasting and satisfactory political relationship between Great Britain and Egypt. Historians have noted that from 1882-1922, "Britain's responsibilities for governing Egypt were never total and her powers were inadequately defined",<sup>91</sup> but the situation after the United Kingdom unilaterally

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90. Control in the Middle East was almost entirely vested in the R.A.F. who maintained a strong presence in Egypt. It was, as Hoare noted proudly, "the only example in the world of countries defended and controlled from the air". Quoted in his A Flying Visit to the Middle East (Cambridge, 1925), p. 3, a work in which Hoare gives an account of a brief trip made by himself and a R.A.F. crew to see the Cairo-Basra mail service in operation. The Colonial Secretary, Leopold Amery went on the flight as well. In 1930, the R.A.F. maintained five major air bases in Egypt: Aboukir, Abu Sueir, Heliopolis, Helwan, and Ismailia.
91. R. O. Collins and R. L. Rignor, Egypt and the Sudan (Englewood Cliffs, 1967), p. 85. For a general review of Anglo-Egyptian relations during the period in question see John Marlowe, Anglo-Egyptian Relations, 1800-1953 (London, 1954), pp. 212-50.

granted Egyptian independence in 1922 was equally unclear. The Declaration was consistent in the British pursuit of a general policy of disengagement from internal Egyptian affairs, but while Egyptian control of its civil aviation was understood, the Declaration reserved to British authority the control of Imperial communications, Egyptian defense, the protection of minorities and foreign interests, and hegemony over the Sudan.<sup>92</sup> Any one of these reservations seriously compromised the control of civil air transport, but the first two especially were the firm basis of the argument for the retention of exclusive air transport privileges by Great Britain.<sup>93</sup>

While the Air Ministry was aware of the Egyptian situation as early as 1919, it does not appear to have deterred the formulation of plans for the development of Imperial airship or aeroplane services to India. Lord Allenby in Egypt shook this complacency in 1923 and awakened the Air Ministry to the realities of the situation. Hearing rumours that plans were being made to initiate an "Empire Air Mail Service" from Cairo to India, Allenby

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92. Marlowe, Anglo-Egyptian Relations, p. 248.

93. See especially AVIA 2/1843, parts 1-4, Egypt - Civil Aviation Policy; Restrictions on Foreign Aircraft in Egypt, 3.5.24 -, and AIR 2/780, Foreign Aviation in Egypt - Policy, 1928, for the problems associated with establishing British civil aviation in Egypt. Although Imperial Airways was able to operate from Egypt from 1927 onwards, not until August 1931 was the company able to come to an acceptable agreement with Egypt on questions of rights, facilities, and operations.

wired the Foreign Office to the effect that such a service could not be instituted arbitrarily.<sup>94</sup> An Air Ministry note to Hoare summed up the situation:

... the convention of February 1922, while legislating for British military and Air Force establishments in Egypt does not cover any civil air stations which would be primarily a matter for the Egyptian Administration to authorize. Lord Allenby's telegram, therefore, is meant as a warning that we should be careful not to treat the proposed establishment of a civil air station in Egypt as merely a matter for the British Government to decide, but rather recognize the supremacy of the Egyptian Government....<sup>95</sup>

As this was essentially a matter for the Foreign Office to negotiate, it placed the Air Ministry in the difficult position of having to plan civil air transport operations on the one hand, while adopting a 'wait and see' attitude on the other.<sup>96</sup> The 1922 Declaration had so defined the relationship between Egypt and Great Britain that an air agreement acceptable to both sides was out of the question. If Egypt was free to exercise absolute air sovereignty, there was every chance that it would obtain membership in I.C.A.N., and thus be free to open Egypt to foreign civil

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94. AIR 2/1183, Empire Air Mail Service - Position as regards Civil Stations in Egypt. Enclosure, 12.5.23, Allenby/FO correspondence.

95. Ibid., D.C.A.S. to Hoare, May 12, 1923.

96. See general discussion of problem by Air Ministry in AIR 5/375, (1) Policy regarding Construction of Airship stations in Egypt, and (2) Establishment of Air Mail Service --- Question of Effect upon status quo of His Majesty's Government in Egypt.

aviation. 97

The Air Ministry position was that special arrangements must be made with Egypt prior to tolerating Egyptian international commitments, and fortunately for Great Britain, the Egyptian Ministry of Communications responsible for civil aviation matters was in no haste to press the matter.

Squadron Leader Long, an Air Ministry expert on loan to the Egyptian Government as Air Consultant, advised a policy of restraint, especially in expenditures, correctly pointing out that there was no immediate future for internal services except perhaps an air-taxi operation, and that the only probable development would be the establishment of an airship centre once the political air had cleared sufficiently to allow an air agreement to be made. 98

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97. I.C.A.N., the International Commission for Air Navigation, was instituted as an organization to administer the Convention Relating to the Regulation of Aerial Navigation, signed at Paris, October 13, 1919 with additional Protocol, signed at Paris, May 1, 1920. See League of Nations, Treaty Series, vol. XI (Lausanne, 1922), No. 297, pp. 173-209. The Convention dealt in the main with the technical details of international flight, but Article I recognised that contracting parties have "complete and exclusive sovereignty over the air space above its territory". Great Britain feared not only that Egyptian subscription to I.C.A.N. might lead to foreign air line operators moving into Egypt, but "she would then have a case for preventing a flight of military aircraft [e.g., R.A.F.] over her soil". AIR 5/375, part I. Brancker to Air Secretary, September 6, 1923. British concern precluded the possibility of an early air agreement with Egypt. See AIR 2/1184, Proposed Air Agreement between England and Egypt, 6.9.22.--.
98. AVIA 2/1671, Civil Aviation in Egypt, 1922. Squadron Leader Long's report to the Egyptian Minister of Communications, June 22, 1922, a 9½ page detailed review of the situation.

The Egyptian Ministry heeded the advice with a grace dictated by lack of development funds and trained personnel to construct a civil aviation organization. <sup>99</sup>

In 1924, with the formation of Imperial Airways and the first glimmerings of the idea that the aeroplane and not the airship would be the first aircraft to service the route to India, the Air Ministry began to give more serious attention to resolving the Egyptian dilemma in concert with the Foreign Office. <sup>100</sup> The obvious difficulty was how to establish Imperial Airways in Egypt with recognition of Egyptian civil aviation authority and at the same time maintain a veto on foreign civil aircraft operating in or through the country. There was more than just defence

99. Ibid. For at least a few years an unprepared Egypt was more content than the Air Ministry to adopt a similar 'wait and see' attitude counselled by Long. However, in 1925, the Egyptian Ministries of War and of Communications submitted joint proposals for the development of military and civil aviation, and The Times (July 21, 1925, p. 13) reported that the Government had set aside £E 150,000 for preliminary expenditures to (1) establish an aviation school at Cairo, (2) send Egyptians to Europe for training, and (3) build up a Flying Corps at Assuit with detachments at Alexandria and Suez. Nothing appears to have come of these proposals, probably because the estimated costs of £E 68,000 for the first year, rising to £ E 322,000 in the third year, and an annual charge of £E 286,000 after five years was well beyond Egyptian financial capabilities. Egypt instead remained satisfied with a British policy which provided advisors and trained Egyptians in the arts and skills of aviation.

100. Of course the airship idea was far from dead. In 1925, the Under-Secretary of State for Air hoped that by the spring or summer of 1926 the construction of an airship mooring site at Ismailia would be complete and ready for a trial flight from England of the R.36. Philip Sassoon,

considerations at issue, although these forever clouded the picture. Toleration of foreign air transport could mean invasion of areas and routes intended for Imperial Airways exploitation, especially to the east, but possibly also southward into Africa. A lesser but still important problem was the need to persuade Egypt to provide civil aviation regulations --- and facilities --- to international standards, and still prohibit Egyptian membership in I.C.A.N.<sup>101</sup> The whole issue came into sharp focus in 1927. The Blackburn Aeroplane Company, a British concern operating in Greece, proposed the development of an Athens-Cairo route, a proposal which had Brancker's endorsement. Although the Air Ministry countered with a proposal for a Blackburn/Imperial Airways co-operative venture, the proposal eventually floundered as it would have allowed a Greek

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100. (continued) Hansard, CLXXXVI, July 22, 1925, col. 2199. Either the R.100 or the R.101 was expected to fly the Indian/Australian route via Egypt in 1927 or 1928. AIR 2/303, Memorandum on Proposed Flight to South Africa and Australia by H. M. Airships R.100 and R.101. These flights were not made although a mooring mast was erected at Grantville (Natal) in South Africa. See Higham, The British Rigid Airship, p. 277.
101. AVIA 2/1843, parts I-IV, Restrictions on Foreign Aircraft in Egypt, 3.5.24-. The need for controls sharpened with the increase of private flights in the late 1920's which required customs and traffic control as well as the provision of ground facilities.

air line to operate into Egypt. <sup>102</sup> There was no way politically in which Great Britain could accept this operation and still deny Egyptian access to the French or Italians. <sup>103</sup> In effect, until 1931, the basis of Air Ministry policy was that a satisfactory formal agreement must be made between Egypt and Imperial Airways, and Egypt must promulgate a set of air regulations. These were the "necessary preliminaries to the removal by H.M.G. of the veto against foreign civil aircraft in Egypt". <sup>104</sup>

102. AVIA 2/1842, Air Route Athens - Cairo. Proposals by Blackburn Aeroplane Co., 24.2.27-. The company was negotiating with the Greek Government to establish a Greek air line with headquarters and facilities in Greece. In the long range view, an Athens-Cairo sector might well have been considered as a possible step in linking up with the proposed Khartoum-Kisumu (expanded to Cairo-Mwanza) service of the North Sea Aerial and General Transport Company, a Blackburn subsidiary. The Air Ministry and Brancker supported the idea in part because of concern for Junkers possibilities in Greece. Great Britain's proposal of a Blackburn/Imperial Airways merger was the only compromise which would meet its first commitment to Imperial Airways and its interest in keeping the Germans out of Greece. It is doubtful if Imperial Airways were much interested at this stage. Geddes was interested in the company's monopoly on Imperial routes. "I do not mind how many little wild-cat schemes come in through Persia or Kenya or anywhere else as long as we can stick to the main routes." AVIA 2/1846, Geddes giving 'evidence' to the Cabinet Committee on Future of British Commercial Air Transport, November 9, 1927.
103. Both of whom were interested in operating to and through Egypt. The French, in 1924, had proposed an Anglo-French joint service to the east with a flying boat service Marseilles-Alexandretta. Imperial Airways declined the offer, and in any case the Air Ministry would not have approved. See Higham, Britain's Imperial Air Routes, pp. 112, 135.
104. AVIA 2/1843. Minute 1, D.D.O.I. to C.A.S., September 25, 1931.

In 1928, both the Air Ministry and the Foreign Office agreed that "the present complete embargo on foreign civil aviation in Egypt cannot be continued indefinitely", <sup>105</sup> Hoare reminding the Foreign Office that the Air Ministry had recognized throughout "that political considerations may arise in the future necessitating some relaxation of the policy of total exclusion". <sup>106</sup> The case for 'relaxation' appeared with the possibility of Italy seeking concessions to operate a weekly service from Rome to Alexandria. <sup>107</sup> For Hoare, here was an opportunity "to clear up the present difficult situation as regards foreign civil aviation in Egypt", <sup>108</sup> and with the Italian proposal in mind, he noted that "we are unlikely to find a more opportune moment for a partial relaxation of the embargo than the present,..." <sup>109</sup> What Hoare had in mind was a quid pro quo agreement with the Italians. "We intend to use any concession we may make", he wrote,

105. AIR 2/780. Minute 53, para. 3(b), Hoare to C.A.S. and D.C.A., April 16, 1928.
106. Ibid., postscript to Minute 53.
107. Ibid., paras. 1-2. Hoare had learned of the "possibility" from Geddes, but did "not want to be too hopeful that this offer from the Italians will, in fact, mature". In fact, the Italian plans did not materialize at this time, although they were in the process of extending their civil air transport operations throughout the Mediterranean.
108. Ibid., para. 2.
109. Ibid., para. 3(d).

as a lever to secure free transit through Europe for our services to the East, which, owing to our geographical situation, is essential to the full development of a system of Imperial air communications radiating from London. We propose in fact to make the concession contingent on our having first secured beyond all doubt a definite 'quid pro quo' from the Italians. 110

It was not a question of granting a concession to operate air services in or through Egypt, but "the time has come", Hoare added, "when we can afford to treat services to a terminal port on the Egyptian coast on a different footing".<sup>111</sup> Hoare's approach marked the beginning of a change in British air policy in Egypt. It was, in a sense, the thin edge of the wedge which would ultimately open Egypt to international air

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110. Ibid., para. 3(e). In 1925, Brancker said that he thought that the Cairo-Cape Town and Cairo-Far East routes would be in operation well before the route from England across Europe and the Mediterranean. Not until 1937 could Imperial Airways schedule a complete air service on to the Imperial routes because of the continuing difficulties in negotiating air rights with France, Italy and Greece. The Italians were especially difficult. Although a joint Air Ministry/Imperial Airways/Italian party surveyed the Italy-Cairo route and a temporary agreement allowed Imperial Airways to operate from Brindisi to Egypt until late in 1929, no permanent agreement was reached until 1934 when Imperial Airways was allowed to fly across Italy as well as from it. A good discussion of British problems in developing trans-European routes is Higham, Britain's Imperial Air Routes, chapter VI.

111. AIR 2/780, Minute 53, para. 3(g). Alexandria was the Egyptian port in question. It was far enough from Suez to remove any concern, and it was the port designated for Imperial Airways use. Great Britain was not prepared to tolerate any foreign air line obtaining a virtual monopoly of use on an Egyptian air base or port.

commerce. <sup>112</sup> The relaxation of the prohibition of foreign aircraft had moved by 1930 to considering transit along predetermined routes across the Canal Zone for foreign carriers, and the acceptance of purely Egyptian companies operating on equal terms with British companies in Egypt. <sup>113</sup>

The course of negotiations between the Air Ministry, Imperial Airways, and the Egyptian Government did not always run smoothly. Hoare complained that his hands were tied until Great Britain made a firm commitment in support of the Air Ministry and Imperial Airways in establishing the Egypt-India air service. He noted that:

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112. In late 1930, K.L.M. was granted the right to operate through Egypt from Athens to link up with its Far Eastern service. In 1932, Misr Airwork, an Anglo-Egyptian concern, commenced domestic operations, and by the mid-thirties, was running international services to Lydda, Haifa, Baghdad, Cyprus, and Aswan. Air France and Ala Littoria also commenced operating through Egypt in the mid-thirties to points east and south to Abyssinia. See Davies, A History of the World's Airlines, pp. 173, 178-79, 199-200.

113. AIR 2/780. Minute 140A, C.I.D. Paper No. 1040-B, Foreign Civil Aviation in Egypt, n.d. Sir John Salmond for the Chiefs of Staff stated:

It was now proposed, in ordinary times, to allow any approved civil aviation enterprise to cross the Canal Zone.... British and Egyptian aircraft facilities would also be allowed within the Canal Zone...

The Foreign Office concurred with these recommendations. The position was accepted by Great Britain and Egypt and, as noted above, K.L.M. became the first foreign carrier to operate through Egypt. This reversed the decision of a 1929 agreement signed between Arthur Henderson, the new Labour Foreign Secretary, and Egypt's Mohammed Mahmoud Pasha, which prohibited other than British or Egyptian aircraft "over territories situated on either side of the Suez Canal and within 20 kilometers of it". Hansard, vol. CCXXXVII, March 25, 1930, col. 332.

During the last three years there have for instance been long and detailed negotiations with every one of the governments concerned. They have come to nothing and in my view they will almost inevitably come to nothing until I am in a position to know how far I can go and what money I have at my disposal. For instance if last year I had possessed this knowledge I feel reasonably certain that I could have carried through an agreement with the Egyptian Government for the section across the Mediterranean. At present negotiations of this kind revolve in a vicious circle. At first they drag on month after month..., and eventually when after long delays I may be able to make some offer, I find that the negotiators have gone off on some other trail. 114

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114. AVIA 2/1846. C.A.T. (27) 6. Proposals by the Secretary of State for Air to the Cabinet Committee on the Future of British Commercial Air Transport, December 14, 1927, pp. 4-5. Still, Hoare felt that the breakdown of treaty negotiations in the early part of 1928 strengthened the Air Ministry's position regarding foreign aircraft in Egypt, for it could continue to take the line with foreign governments that the ban would not be lifted "until the situation has cleared up". AIR 2/780. Minute 53, para. 3(f). Air Ministry and Imperial Airways problems in Egypt were tied to the fact that Egypt was more concerned with signing a general treaty with the United Kingdom than it was merely to agree to the implementation of civil aviation development. However much this situation frustrated the British Air Ministry there was never any inclination to follow the line suggested in the lively but lonely mind of C. G. Grey. Noting that all the British Governments in Africa had co-operated to assure the commencement of the Cairo-Cape Town service, and that South Africa, long a stumbling block, was now a partner to the scheme, "the south end of the line rests on a firm foundation", and Grey added,
- and, if the other end is apt to be disturbed from time to time by the half-baked intelligences which form the Egyptian Government.... Egypt is near enough to England for its Government to be brought to their senses by a little argument impressed by the Navy from Malta and by the Air Force from Heliopolis and the Canal Zone.

Aeroplane, March 20, 1929, pp. 425-26, 428, 430.

Nevertheless, by the time Imperial Airways was prepared to inaugurate its African services, an acceptable agreement had been reached with the Egyptian authorities which gave Imperial Airways cabotage and other rights in Egypt. <sup>115</sup> With both Indian and African services in operation, Egypt had become in fact a 'Clapham Junction' for Imperial air routes.

As proposals for the development of an Imperial African service began to gell, the Air Ministry had to face the now familiar problem of arranging the financial support necessary to subsidize the service. While the Treasury had been persuaded to provide the full subsidy to Imperial Airways for the Indian route, <sup>116</sup> there was no chance that this would be the case for the African route, nor did Hoare

115. AVIA 2/1880, Imperial Airways Ltd. - Interests in Connection with New Treaty with Egypt re African Route, 5.1.31-. Imperial Airways entered into a firm 20 year agreement with Egypt in August, 1931, an agreement which replaced the series of temporary arrangements which had governed operations to that date. Permission was obtained to operate services to and from, as well as through, Egypt with passengers, mails, and goods. See The Times, September 18, 1930, p. 11, December 31, 1930, p. 12, and January 9, 1931, p. 14. On the related question of air regulations, which the Air Ministry had argued were a sine qua non of any lifting of the foreign aircraft 'ban', Great Britain had to rely on the good faith of the Egyptians; air regulations were not promulgated until 1935. See AVIA 2/1843.
116. Initially the Air Ministry/Imperial Airways agreement on the Indian service called for a maximum annual subsidy of £93,000 for five years, with a further Air Ministry commitment to spend £65,000 on ground facilities. A.M., Agreement made with Imperial Airways, Ltd., for the Establishment of a Civil Air Transport Service between Egypt and India. Cmd. 2758 (1926). The agreement was modified in 1928 to provide for a ten year contract with the maximum annual subsidy of £335,000 for

propose otherwise. Addressing the 1927 Colonial Office Conference in London, he pointed out that "long-distance aeroplane routes must be built up upon a co-operative system with each part of the Empire concerned taking its share in their organization".<sup>117</sup> He added,

A successful flying policy must be drawn upon a large-scale map. If we are to succeed in the attempt to build Empire airways and to eliminate the time and distance that now separate us we need the help of the Colonies and Dependencies as much as we need the co-operation of the Dominions. Our flying policy must, in a sentence, be an Imperial policy, and an Imperial policy based upon the combined efforts of the Mother Country, the Dominions, and the Dependencies.<sup>118</sup>

In short, Great Britain was not going to sponsor the Cairo-Cape Town route, despite the fact that it was part of the Imperial design, unless British African Governments could see their way clear to making substantial financial contributions to the costs of operation.<sup>119</sup> The questions

116. (continued) the first two years, subsequently declining to £70,000 in the final year. A.M., Subsidies to Civil Air Transport Services, Cmd. 3143 (1928).
117. Colonial Office Conference 1927. Appendices, p. 94.
118. Ibid., See also The Times, May 20, 1927, p. 13.
119. AVIA 2/1857. Enclosure. Hoare to George Beharrell (Director, Imperial Airways, 1924-1940), January 28, 1929. The contrast in approaches to the Indian route and the African route was most marked. To the 1927 Cabinet Committee, Hoare stressed that "if a South African service is organised, the greater part of the subsidies should be obtained from the African Governments". As to the Indian service, it would go ahead "stage by stage, and subsidies obtained wherever it is possible from the Government of India, the

to be answered boiled down to two which Hoare put to the Conference delegates; "First, how far will the development of aviation benefit your respective countries? Secondly, to what extent can your revenues stand the charge that such a development is bound to impose upon them?"<sup>120</sup> Upon the answers to these questions by British Africa rested the hopes for the 'all-red route' through Africa.

While 1927 marked the shift in civil aviation emphasis from Europe to Empire, three important features of this policy shift affected the financing of the African route. The first was the continuing Air Ministry belief that the "cardinal objective has throughout been to get civil aviation on a commercial footing as early as possible".<sup>121</sup> Hoare argued, "I am sure that this policy is sound and - in the long run - the objective attainable".<sup>122</sup> For Hoare, the very object of a subsidy was "to hasten the time when civil aviation will become an economic proposition".<sup>123</sup>

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119. (continued) Egyptian and foreign governments". AVIA 2/1846. Hoare Proposals to Cabinet Committee, December 14, 1927, p. 6.
120. Colonial Office Conference, 1927. Appendices, p. 94.
121. AVIA 2/1846, Cabinet Committee on Future of British Commercial Air Transport, 1927. C.F. 238(27), Memorandum by the Secretary of State for Air, October 6, 1927, p. 3.
122. Ibid. See also CAB 24/188.
123. AVIA 2/1846. C.A.T. (27) 6, Proposals by the Secretary of State for Air, December 14, 1927, p. 2.

Paradoxically, these statements were made in the context of an Air Ministry appeal to the Cabinet for larger subsidies in order to ensure the survival of Imperial Airways and to develop the Cairo-Karachi route.<sup>124</sup> Nevertheless, it was clear to any African observers that subsidies were still regarded by the Air Ministry as a necessary but last resort to carry civil aviation through an interim period leading to self-sufficiency. Africa was not to benefit from any excess of Imperial largesse, and what monies were required in support would be drawn mainly from African resources.

A second feature of Air Ministry policy in 1927 was the emphasis upon the Indian route, already mentioned as being the priority air service in the Imperial design. It was India, not Africa, to which Hoare directed the attention of his Cabinet colleagues in his argument to persuade them of the benefits to be derived from civil air transport with an Imperial emphasis.<sup>125</sup> India was the goal, according to Geddes in complaining to a Cabinet Committee that Imperial Airways was as yet "fulfilling no Imperial mission".<sup>126</sup>

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124. AVIA 2/1846. Hoare Memorandum, October 6, 1927, "The Future of British Commercial Air Transport".

125. Ibid., p. 6. Hoare argued "a weekly service to India should be our immediate objective".

126. AVIA 2/1846. Minutes of second meeting of Cabinet Committee, November 9, 1927. At a meeting held at the Colonial Office, May 31, 1928, to discuss East African air services, B. E. Holloway (A.M.) pointed out that "the difficulty of the Air Ministry lay in the fact that the Indian route was regarded as having the first call. The Ministry was committed to a heavy subsidy on that route for ten years, which would take all their resources". AVIA 2/1857. Notes, p. 2.

For British Africa, this focus on India could only mean that the Indian route would have first claim on whatever financial support the Imperial Exchequer was prepared to provide. With a Treasury already cautious about the extent of support rendered to civil aviation, British Africa, after India had been served, was not likely to find a mood of generosity.<sup>127</sup>

The third and final feature of British air policy from 1927 onwards which complicated the financing of air services in British Africa was the re-assertion of Imperial Airways'

127. Writing to Beharrel, Hoare noted,

... there is not the slightest chance of the Government agreeing to contribute towards the cost of a Trans-African service, unless the Union of South Africa put up a really substantial proportion of the total subsidy required....

AVIA 2/1857, Hoare to Beharrel, January 28, 1929. At this point Hoare had not been able to obtain any commitment from the Imperial Exchequer. In 1925, Imperial Airways received £137,000 in subsidies from the government for European services only. In 1930, with the addition of the Indian services, total subsidies were £364,650. At the same time, the Air Ministry was required by the Treasury to hold the line on expenditures. Thus, for the A.M. to provide financial support for the African route out of its own resources would mean a cut-back elsewhere. This was not feasible as it would mean unacceptable sacrifices on the Indian route or air defence. For tables on Air Estimates and Expenditures, see Higham, Britain's Imperial Air Routes, pp. 344-47. In discussion of the support required for the Cobham/Blackburn interests to develop the East African service, Holloway pointed out that the A.M. might be able to persuade the Treasury to sanction a £30,000 contribution, but he led out no high hopes. Notes of Meeting at the Colonial Office, May 31, 1928, pp. 2, 4.

monopoly position, a policy which the Committee on the Future of British Commercial Air Transport found "sound and should be continued".<sup>128</sup> For one thing it meant that Great Britain was not prepared to support any other air transport company with designs on developing Imperial air routes in Africa or elsewhere, nor would it provide assistance to independent local or regional air carriers. The first precluded any possibility of the Cobham/Blackburn interests developing the Cairo-Kisumu service, Sir Samuel Wilson pointing out politely that "if and when the Air Ministry felt able to make any contribution towards the subsidy, they would have to consider their commitments to Imperial Airways".<sup>129</sup> As to local services, Hoare emphasized that "the Imperial Government is not prepared to finance air services which are primarily of benefit to the Dominions, Colonies, etc. traversed...."<sup>130</sup> In brief,

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128. AVIA 2/1846, C.A.T. (27) 7 (revised), Cabinet Committee on the Future of British Commercial Air Transport, Report, December 23, 1927, p. 2.

129. AVIA 2/1857. Notes of meeting at Colonial Office, May 31, 1928, p. 2. One of the early problems in the planning of the Cairo-Cape Town route was that the East African Governments and the Colonial Office had entered into an agreement with the Cobham/Blackburn interests and were under an obligation to give the Alan Cobham Company the first option of providing a permanent East African service from Khartoum or Cairo. In the circumstances of conflicting commitments, "it seemed obvious that the two companies should if possible be induced to consider the possibility of co-operating". Ibid., p. 5. See below chapters III-IV for full discussion.

130. AVIA 2/1857, Hoare to Beharrel, January 28, 1929.

what financial support could be obtained from the Treasury for civil aviation was earmarked for Imperial Airways services fulfilling the Imperial mission, first on the Indian route, secondly for a Cairo-Cape Town service. <sup>131</sup>

On the question of priorities, Hoare even appears to have given Imperial Airways first call over Imperial communications. Speaking of the Khartoum-Kisumu route on the occasion of the christening of the 'Pelican', the float plane designated to inaugurate Gladstone's experimental service, Hoare proclaimed:

This project is one which seems to me to be of the most far-reaching importance alike to the Air Ministry and the Colonial Office. From the broad aspect of Imperial air communications, this service is the first link in what will ultimately be one of the most important routes of the Empire, that from Cairo to the Cape.... <sup>132</sup>  
[my italics]

This was the 'grand' view, and from the beginning Hoare saw that this central African route was no mere local service of benefit only to the Dependencies concerned.

131. Ibid. Writing to Sir Philip Cunliffe-Lister, President of the Board of Trade and Chairman of the Cabinet Committee on the Future of British Commercial Air Transport, Hoare argued that "we should in the future concentrate primarily on Imperial trunk routes,... probably in the following order of priority...", United Kingdom-India, Egypt-Cape, India-Australia. AVIA 2/1846. Hoare to Lister (private), October 28, 1927.
132. Quoted in Flight, November 18, 1926. In Hoare's absence on account of illness, the speech was read at a November 15 luncheon by W. Ormsby-Gore, the Under-Secretary of State for the Colonies.

It was a part of what was to be a major Imperial highway of the air, of recognized strategic, political and commercial value to Great Britain and the Empire. But it was not an Imperial Airways venture, and if the Cobham/Blackburn interests and their African sponsors, Kenya, Uganda, Tanganyika, and the Sudan, won rhetorical support from Hoare and the Air Ministry, they did not receive what was most needed, financial assistance. The Indian route and the British Government concern for economy were but two factors dictating the reluctance to subsidize this or any other African aviation experiment.<sup>133</sup> The 'chosen instrument' status of Imperial Airways confined Imperial attention and money to Imperial Airways development and plans. Monopoly triumphed over mandate; the former with the expressed purpose of bringing civil aviation to a point of commercial self-sufficiency, the latter to develop communications and transport in Africa for the benefit of British Africans as well as Great Britain.

For British African Governments outside of South Africa, the British attitude towards supporting air transport meant critical delays in civil aviation development. Since 1922 the Imperial Exchequer had supported the Geddes Report

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133. Hoare hoped as well that the African route would develop out of a 'mosaic' of local and regional air transport services. Beginnings in South Africa, the Rhodesias and East Africa would grow and ultimately link up along the Cairo-Cape Town route to form an all-British air service. The disappointing failures in Africa and the final commitment to Imperial Airways on the African route laid this idea to rest.

recommendations that "the assistance which can be given by the British Exchequer to our African Dependencies must be limited to the most urgent [my italics] requirements which those Dependencies can show themselves to be unable to meet out of their own revenues", <sup>134</sup> an attitude which prevailed in British Colonial policy until the establishment of the Colonial Development Fund in 1929. <sup>135</sup> British African Governments generally had inadequate annual revenues to meet necessary expenditures, and what surpluses did appear were designated to serve more 'urgent' causes of development and welfare than seemed to be the case with civil aviation development. <sup>136</sup> Some Dependencies, like Kenya, Uganda, Tanganyika, and the Sudan, were interested and able to provide some financial support to air transport development, but were nonetheless unable to contribute all that was required. <sup>137</sup> Others in West Africa, Nigeria, the Gold

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134. Committee on National Expenditure, Third Report. Cmd. 1589 (1922), p. 12.

135. See chapter IV for discussion of the Colonial Development Fund and the question of grants to African Dependencies for air transport development. See too AVIA 2/487, Cairo to Cape Town Air Service --- Applications by Colonies interested in Grants from the C.D.F., May, 1930.

136. For a succinct but adequate discussion of the state of the economy and finances of British African Governments, see Lord Hailey, An African Survey (London, 1938), chapter XX, 'Public Finances', pp. 1432-65.

137. For the proposed Cairo-Mwanza air service of the Cobham interests in 1928, an annual subsidy of £130,000 was required in the estimates. Kenya offered a £15,000 contribution, Tanganyika, £10,000, Uganda, £10,000, and the Sudan, £5,000, the total of £40,000 falling

Coast, and Sierra Leone, could make no more than token contributions to civil aviation experiments, and without generous help from the Imperial Exchequer they were thus denied local, inter-colonial or Imperial air services until 1936.<sup>138</sup>

West Africa aside, the focus of Imperial attention was on the air route which traversed Egypt, the Sudan, Uganda, Kenya, Tanganyika, the Rhodesias, and South Africa.<sup>139</sup> The Hoare and British argument was that insofar as these British territories would benefit from an Imperial air service, they should pay according to their means and to the extent to which they would benefit in terms of more rapid communications with Great Britain and each other. "There is not a territory in any part of Africa", Hoare argued,

which would not gain almost inestimable advantages from the starting of this service....The time taken today to travel from Cairo to Khartum [sic] will be halved. Whereas with present communications it takes seven to 14 days to get from Cairo to Sudanese centres as far south as Malakal and Mongalla, the air service will reach both of them in three days or under. Entebbe in Uganda, and centres such as Nairobi, Mombasa, Dar-es-Salam [sic] and Tabora in Kenya and Tanganyika are at present from 12 to 15 days journey by rail and sea from Egypt. The new air service will

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137. (continued) far short of requirements. There was never a question of Egypt making any contribution at all. AVIA 2/1857. Notes of Meetings at the Colonial Office, June 10, 1927 and May 31, 1928.

138. See chapters III and IV for full discussion.

139. Nyasaland and Zanzibar were not considered, nor was British Somaliland. Bechuanaland lay astride the route to Johannesburg, while Basutoland and Swaziland were ignored.

reduce this time by a full two-thirds. North and South Rhodesia will be brought within 10 days of London, whereas now the voyage and subsequent journey take three weeks. To get to Johannesburg or Pretoria will take only 11 days instead of 18 or 19, whilst further South the Union Parliament at Cape Town will be brought within 12 days of Westminster. 140

In terms of the argument as to who should bear the brunt of the financial responsibility for establishing this service, Hoare was at pains to point out the advantages to British Africa, and British Africa should thus be prepared to pay for this advantage. He said less about the significance this air route brought to the British aim of developing closer ties with the Empire and establishing a more cohesive and mobile Imperial defence system. The latter argument, used with good effect in persuading Parliament and the Treasury to support fully the Indian air route, saw less service in the verbal embellishment surrounding discussion on the projected Cairo-Cape Town route. 141

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140. Hansard, CCXXVI, March 7, 1929, col. 607.

141. In his proposals to the Cabinet Committee on the Future of British Commercial Air Transport, Hoare spoke of the great economic and strategic advantages of developing an Indian route, pointing out that there was "almost every argument to be used for starting a weekly service...". AVIA 2/1846. Hoare proposals, pp. 3-4. In the House, Hoare saw the African route as a "thrilling project", ...a project to combine no less than seven Colonial and Dominion Governments in Africa in a common endeavour to destroy the great enemy of the Empire --- distance. What a chance for these Imperial Governments to form in the air a co-operative commonwealth of transport....

Hansard, CCXXVI, March 7, 1929, cols. 608-09.

While the appeal for financial support for the route was directed to all the British African administrations, the key was South Africa. The Union was first of all the ultimate goal to be reached, its Dominion status and large white population a greater interest and most important part of the Imperial design in Africa. Secondly, South Africa had the financial capabilities to contribute a large subsidy to the projected air service, and as Hoare argued, this contribution was essential "to supplement the small sums already offered by the Colonial administrations en route".<sup>142</sup> For the problem of financing the Cairo-Cape Town route to be resolved, South Africa had to be wooed and won to the Imperial Cause. In March 1929, a happy Hoare was able to announce that the negotiations which had taken place between Great Britain and South Africa during the winter of 1928-29 had been successful, and the Union had agreed to make "a substantial contribution".<sup>143</sup> From this point on the Air Ministry, Imperial Airways, and the British Africa Governments in co-operation with the Colonial Office were able to move to establish the second Imperial air route.<sup>144</sup>

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142. AVIA 2/1857. Hoare to Beharrel, January 28, 1929.

143. Hansard, CCXXVI, March 14, 1929, col. 1278. Hoare had reported the agreement to the Cabinet the day before. South Africa had agreed to contribute £80,000 per annum for five years. CAB 23/60, C.F. 11(29)12, Cabinet Meeting of March 13, 1929.

144. See chapter IV.

Discussion has thus far elaborated two of the hurdles to be cleared before the dream of a Cairo-Cape Town air route could become reality; Egypt and the sources of financial support. The third and final question to be answered concerned Imperial Airways; more specifically, was the 'chosen instrument' in a position to tackle a proposition which promised a great many problems of every kind. By 1927, it was becoming increasingly evident that the high hopes held for the company were more sanguine than realistic. Despite its monopoly position, increasing traffic on its European routes, an annual subsidy of £137,000 in 1925 and 1926, increased to £152,600 in 1927 to support the beginnings of the Cairo-Basra sector on the Indian route, and a 'profit' declared from 1926 onwards, Imperial Airways' future was surrounded with doubt. <sup>145</sup>

In 1924, Imperial Airways had commenced operations with 15 aircraft inherited from the pioneer British air transport companies, <sup>146</sup> and 260 employees of whom 19 were pilots. <sup>147</sup>

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145. A useful summary of Imperial Airways traffic statistics and financial situation can be noted in Higham, Britain's Imperial Air Routes, pp. 347-53. See too Quin-Harkin, "Imperial Airways, 1924-40", p. 206, for profit and loss figures during the period. These figures are drawn from Imperial Airways, Annual Reports of the Directors and Statements of Accounts.

146. Only 13 of these aircraft were registered, 11 landplanes (seven De Havilland DH34s, three Handley Page W8bs, and one Vickers Vimy Commercial) and the two Supermarine Sea Eagle seaplanes inherited from the British Marine Air Navigation Company for Channel operations. Higham notes that 12 or 15 aircraft were registered on formation of Imperial Airways, neither figure squaring with his own listing of Imperial Airways' first fleet. The pioneer

By early 1926, the fleet had increased to 16 aeroplanes with five more on order for the projected Egypt-India service.<sup>148</sup> The air line was growing in size, if slowly, but it was obviously falling behind its competitors, and certainly showing less capability of reaching financial self-sufficiency, one of the prime reasons for the company's formation in the first place. Geddes had noted at the 1925 Annual General Meeting of the company that the company had begun with two objects in view, "namely, to do justice to national aims and also to provide a satisfactory investment for the public".<sup>149</sup> It had become clear rather quickly that 'justice' was not being done as long as Imperial Airways confined their air activities to European operations; there was also no public rush to invest in a company which at best

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146. (continued) companies were compensated for the transfer of these aeroplanes in the settlement with Imperial Airways. In cash and shares in Imperial Airways, Handley Page received a value of £51,000, Instone's £46,000, Daimler £30,000, and British Marine Air Navigation £21,500. See Higham, Britain's Imperial Air Routes, pp. 75, 327-28.
147. Quin-Harkin, "Imperial Airways, 1924-40", p. 198, Pudney, The Seven Skies, p. 91, states there were 250 employees at the beginning. The 19 pilots included some of the most famous names in pioneer British aviation and Imperial Airways history: Brackley, Youell, Jones, Olley, Barnard, Wolley Dodd. See Kenneth Munson, Pictorial History of BOAC and Imperial Airways (Shepperton, Middlesex, 1970), for a complete listing.
148. Imperial Airways, Report of the Directors and Statement of Accounts for the Year ended 31st March, 1926. Report dated September 10, 1926.
149. Imperial Airways, Report of the Annual General Meeting, 1925. December 29, 1925.

could show only a modest profit after three years of operation, and then only because the company's revenue included a Government subsidy. <sup>150</sup>

The question as to whether Imperial Airways would survive, indeed, whether it would be able to realize any of the ambitions forecast in its formation turned on the familiar question of government financial support. The decision to fly all regular routes with multi-engined aeroplanes was a necessary but "costly decision". <sup>151</sup> Slow deliveries of new aeroplanes meant delays in offering improved and more attractive air services with resulting losses in traffic revenue to European carriers. <sup>152</sup> The

150. For 1924 the company reported a loss of £15,217, for 1925, a loss of £20,415, and for the year ended March 31, 1927, a 'profit' of £11,461. Imperial Airways, Reports of the Directors, 1925-27. No dividends were paid out during the period. While actual revenues are difficult to determine (see Higham, Britain's Imperial Air Routes, p. 349), Government subsidies for the first three years were in excess of £426,000. Hoare pointed out that the financial situation was such that Imperial Airways could "go into liquidation or drift into stagnation. In either case the private investor would not for many years to come provide money for civil aviation,..." AVIA 2/1846. Hoare Proposals to the Cabinet Committee, December 14, 1927, p. 2.
151. Imperial Airways, Report of the Directors, 1926. The aeroplanes on order included the DH66 Hercules and the Armstrong Whitworth Argosy, both three-engined aeroplanes costing about £25,000 and £28,000 each respectively. These prices can be compared to the £10,000 for the DH34. While an amount was set aside yearly to develop an obsolescence reserve (in 1926, £27,000), it was grossly inadequate.
152. Ibid. By 1927, Imperial Airways was using 20 aeroplanes flying about 21,000 miles a week along routes totalling 2,300 miles. In contrast, the comparable French figures

obvious contradiction between Imperial Airways ends and means lay in a policy of expansion and re-equipment on the one hand, and a Government/Imperial Airways agreement which called for a scaled reduction in government financial support over the period of the agreement. Increased services and traffic, and the consequent increase in revenue, were unable to keep apace with the expensive and expansive aims of the air line. 153

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152. (continued) were 300, 75,000, and 8,300, and the Germans, 167, 180,000, and 14,000 respectively. AVIA 2/1846, Hoare Memorandum, October 6, 1927, "The Future of British Commercial Air Transport", p. 2. The Report of the Directors for 1926 complained that "owing to delay in delivery of new aeroplanes, the Company was unable to earn the increased revenue which the Board had anticipated and considerable traffic passed to the benefit of foreign competitors". Nonetheless, the number of passengers carried by Imperial Airways rose from 10,321 in 1924 to 16,621 in 1926, and the total ton-miles flown increased from 350,000 to 493,500. A.M., Civil Aviation Statistical and Technical Review (London, 1939), p. 11. And of 26,531 airline passengers carried in and out of Croydon in 1926, over 16,000 were carried by Imperial Airways. See Higham, Britain's Imperial Air Routes, p. 102. This was a promising improvement over 1925, when the air line carried just 51% of passengers to and from Great Britain. Hansard, CXCI, February 24, 1926, col. 523.
153. In 1927 increased revenues from operations enabled the company to declare a net profit of £72,567 after providing for a dividend of 5%. But despite this apparent upturn in company fortunes, the fact that this only came about because company receipts included £152,600 in Government subsidy underlined the precariousness of the company's financial future. With plans afoot for air services to India and South Africa, and the need to maintain a presence in Europe against heavily-subsidized foreign air lines, expected commercial revenue and subsidy remained inadequate to meet the anticipated new expenditures. AVIA 2/1846. Hoare Proposals, December 14, 1927, p. 2.

Hoare and the Air Ministry, and Geddes and Imperial Airways were in general agreement as to the nature of the problems facing Imperial Airways and the possible ways of resolving these problems. In blunt terms, Imperial Airways required more money from the Government, more and better aircraft, support for a partial withdrawal of European services and an emphasis upon development of Imperial air routes, and a stronger guarantee of tenure and support on the Imperial routes so as to enable Imperial Airways to plan and operate without fear of competition and diminishing Government financial assistance. The question remained whether Hoare and Geddes could persuade the Government of the validity of these claims. Upon the answer rested the future of Imperial Airways in Africa. 154

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154. One can only speculate as to what might have been the case if the British Government had elected not to support an expanded Imperial role for Imperial Airways. There is nothing to suggest that Imperial Airways, the Cobham/Blackburn interests, or the companies being formed in Southern Africa could have developed the Cairo-Cape Town route without substantial help from the Imperial Exchequer. The most likely candidate to provide an alternative 'British' service through Africa was South African Airways after its formation in 1934. A more likely eventuality would have been the expansion of French, Belgian, and possibly German air transport activities. As Brancker pointed out, and in so doing spoke the view of the British Government and Imperial Airways, if the question was only one of promoting more rapid air communication in Africa, foreign interests would be valuable allies, but "it is unthinkable that we can let other nations become responsible for our Imperial communications". Quoted in MacMillan, Sir Sefton Brancker, p. 314.

In his October 1927 Memorandum to the Cabinet, Hoare argued for a review of the state of civil aviation in Great Britain and the Empire. He contrasted "the dynamic state of commercial air transport abroad" with the British situation which required some modification of policy "if we are not to be left hopelessly behind in one of the most striking departments of twentieth century progress, ..." <sup>155</sup> He noted that in comparison with developments in Europe, progress in Great Britain had been held back "despite technical and commercial management of the first order, by a stringency of finance which is intensified by our present diminishing subsidy scheme". <sup>156</sup>

On October 26, the Cabinet agreed with Hoare that a review of British air policy was necessary, and a Cabinet Committee was formed

To review the present position of civil aviation in the British Empire, with particular reference to recent developments abroad and to consider and report what modifications of our present policy are desirable and practicable. <sup>157</sup>

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155. AVIA 2/1846. Hoare Memorandum, "The Future of British Commercial Air Transport", p. 1.

156. Ibid.

157. CAB 23/55, 52(27)8. Cabinet Meeting of October 26, 1927. The Committee was made up of Sir P. Cunliffe-Lister, chairman, the Chancellor of the Exchequer, Churchill (replaced by the Secretary to the Treasury, A.M. Samuel), Hoare, the First Lord of the Admiralty, W.C. Bridgeman, and the First Commissioner of Works, Lord Peel. Wing Commander Sir Norman Leslie and F.G.L. Bertram from the Department of Civil Aviation acted as joint secretaries.

The Committee's report, which remained unpublished, endorsed Hoare's concern, and after reviewing Imperial Airways' need for a continuing up-dating of equipment, a revision of existing agreements between the Government and Imperial Airways to provide an extended period of substantial subsidy and thus give the company reasonable security of tenure, and a re-confirmation of the company's monopoly position in British aviation, the Committee came out in complete support of the Air Ministry and Imperial Airways claims for change. <sup>158</sup> In summary, the Committee recommended to the Cabinet:

- (a) That the policy of concentrating air transport in the hands of a single company - Imperial Airways Ltd. - be continued.
- (b) That the Air Ministry be authorised in consultation with the Treasury to enter on negotiations with Imperial Airways to modify existing agreements so as to provide:-
  - (1) For giving the company security of tenure over a reasonable period of years.
  - (2) For the development, in lieu of the less remunerative continental services, of long-distance Imperial routes, commencing with a London-Calcutta mail service.
  - (3) For the renewal of the company's fleet at frequent intervals with the most up-to-date aircraft.
  - (4) For the Government to secure more favourable participation at an earlier stage in the company's profits.

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158. AVIA 2/1846. Cabinet Committee Report, December 23, 1927.

- (c) That the Post Office should take special steps to promote the success of the London-Calcutta Mail service.
- (d) That over a ten year period a sufficient amount should be provided on the Civil Aviation Vote of Air Estimates to permit of the policy outlined at (1), (2), (3) and (4) of (b) above being carried into effect - the figure to be settled annually between the Air Ministry and Treasury, to whom each year's programme will be communicated for prior scrutiny and concurrence in the ordinary course.
- (e) That machinery should be set up to secure the closest possible liaison between the Air Ministry, Imperial Airways and the aircraft manufacturing industry. 159

Despite early Treasury reservations about increased assistance to civil aviation considering the "extremely difficult financial outlook", <sup>160</sup> the Government accepted the Committee's recommendations in full, only underlining the rider that arrangements must be worked out between the Treasury and the Air Ministry. <sup>161</sup> This decision wrote the preface for the subsequent story of Imperial Airways in Africa. Both the Hoare Memorandum <sup>162</sup> and Geddes' gloomy forecast for the future of Imperial Airways <sup>163</sup> had awakened

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159. Ibid., pp. 9-10. Also CAB 24/190, C.P. 327(27).

160. CAB 23/55. Cabinet meeting comment by Churchill.

161. CAB 23/57, 3(28)5. Cabinet Meeting of June 25, 1928.

162. AVIA 2/1846. "The Future of British Commercial Air Transport".

163. AVIA 2/1846. Draft review of British Air Services since the inauguration of Imperial Airways, Ltd.

the British Government to the reality of a situation that found Great Britain not leading but losing its prominence in world civil aviation. <sup>164</sup> After the struggles of almost a decade in matters of civil air transport development, Great Britain was convinced that the proper province of civil or commercial aviation activity lay in the appealing expanse of Empire. <sup>165</sup>

163. (continued) Enclosure by Geddes. Hoare noted that "Sir Eric Geddes no doubt paints the picture in black colours. Discounting, however, any undue pessimism, it seems clear to me that his main contention is right, that there is no real progress to be expected under the terms of the present agreement". Hoare Proposals, December 14, 1927, p. 3.
164. With the exception of steps being taken to develop the Cairo to India air service, Great Britain was running well behind the progress and plans of its European rivals. French plans for an air mail service to South America via Dakar were near completion in 1927, the Belgians had completed their 1,400 mile route to Katanga in the Congo, and the Germans, already active in Bulgaria, Persia, and South America, were planning a service to Madrid to link with a proposed Spanish-German airship service to South America, and they were studying the idea of a seaplane service down the west coast of Africa. A.M., Report on the Progress of Civil Aviation 1927 (London, 1928). Much of this can be attributed to the generous state support provided. In 1927-28, Great Britain's civil aviation expenditure as a whole amounted to £481,000, France's £1,571,157, and Germany's £2,136,756. "Why are we behind?", asked Brancker.
- First of all, we are very conservative, we do not take to new things. The second reason is our insular position. Although we have this great Empire, there are really very few people who think Imperially.
- Brancker was often wrong but in this case he was unusually perceptive. Brancker, "Aviation and the Empire", United Empire, XVIII (July, 1927), p. 394.
165. It appeared too that Hoare was seeing realized two of his three professed objectives, "a more air-minded country", and "a better system of Imperial air routes".

The new British air policy in 1928 gave Imperial Airways its mandate to establish the Cairo-Cape Town route as the second great Imperial highway of the air. As well, it gave its 'chosen instrument' the support which assured its capabilities of developing British African air transport, capabilities which had remained very much a question mark until 1928. The new policy did not mean that the problems were over for Imperial Airways in Africa or elsewhere,<sup>166</sup> but security and commitment provided a will if not a way to fulfilling its Imperial mission in Africa. The mood of despair in 1927 was now, in 1928, but a memory. The Times proclaimed, "Imperial Airways. Year of Marked Progress. Financial Position Considerably Improved", as it reported the company's Fourth Ordinary General Meeting.<sup>167</sup> Geddes noted the company's improved

165. (continued) The third, "a self-supporting civil aviation", was an objective becoming a more remote possibility with every year. Hansard, CCXX, July 30, 1928, col. 1924.
166. In Africa the claims of the Cobham/Blackburn interests had to be met, the routing to the Cape determined, the facilities readied, and much experience was going to be needed before African air operations could settle into a pattern of routine. The politics and ambitions of South Africa remained a problem, and with a look to the future, the question of how to serve British West Africa had to be answered. See below, especially chapters III-IV, VII and VIII. Elsewhere, the route to the East was halted at Basra until Persian perfidy could be overcome. See AIR 2/1474-1478, Air Services between Egypt and Karachi, Correspondence with the Foreign Office regarding Persia, 25.4.27-.
167. The Times, September 8, 1928, p. 17.

position and spoke of resigning as Chairman because "I feel your ship is set upon a straight course and that fair weather is ahead".<sup>168</sup> Increased Government support, the continuing delivery of new aeroplanes, and experience being gained in the operation of the Cairo-Basra route were all indications that Imperial Airways was at long last prepared to move into Africa.<sup>169</sup>

By 1929, the questions of Egypt, African route financing, and Imperial Airways were not permanently resolved, but they were settled sufficiently to enable the Air Ministry, Imperial Airways, and the British African Governments to commence work on the 5,600 mile route to the Cape. The first steps were being taken none too soon. "At last", wrote C. G. Grey, "the long argument about the London-Cape Town Air Service

168. Ibid. At this stage, Geddes felt that the major hurdles which Imperial Airways had to clear were now past. He had won his every point: continued monopoly, security of tenure, increased support for new aeroplanes and route development, and an Imperial emphasis. Now the job was one of developing what had been established in policy and agreement. Geddes argued that "the ship must have a captain who can take the bridge on short notice at any time. I cannot do that, as my other obligations are heavy;..". Geddes, of course, did not carry out his 'threat', remaining as chairman until his death in 1937.
169. For the fiscal year ending March 31, 1929, British subsidies to Imperial Airways amounted to £230,600; for the year ending March 31, 1930, £364,650. See Higham, Britain's Imperial Air Routes, p. 347. By the end of 1929, the Imperial Airways fleet totalled 34, including aircraft under construction. Imperial Airways, Report of Directors, 1930. Of importance to Africa was the fact that with the establishment of the Indian service, Imperial Airways set up a regional organization with headquarters in Cairo, an ideal location from which to organize the Cape route.

has been settled and we are to have in due course a properly organized air line between Cairo and the Cape". Grey added, "we might have had it 8 or 9 years ago".<sup>170</sup> Grey was referring to the great efforts and study of the route in 1918-1919, and the high hopes entertained in 1920 when Van Ryneveld and Brand had made their historic flight.<sup>171</sup> Once again, a thorough study of the whole route was called for to supplement information gathered over a decade from the R.A.F., Cobham, and others.<sup>172</sup> In response to a request from the East African Governments, in 1927, the Air Ministry had 'loaned' Frederick Tymms to the Colonial Office to report on air transport prospects in East Africa.<sup>173</sup>

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170. Aeroplane, March 20, 1929, pp. 425-26. However, the impatient Grey added that it was probably just as well the development did not take place then as neither aircraft nor facilities were up to the task.
171. See chapter I.
172. For reports on the annual R.A.F. flights to the Cape see AIR 5/820, Royal Air Force Operations, Flights and Surveys, chapter 14, Cairo-Cape Flights 1926; AIR 5/821, ibid., chapter 22, Cairo-Cape Flight 1927; AIR 5/823, ibid., chapter 31, Cairo-Cape Flight 1928, and chapter 35, Cairo-Cape Flight 1929. For Cobham's first African report see AIR 5/820, chapter 12, Imperial Airways Survey Flight, London-Cape Town, A. J. Cobham, 16.11.25 - 17.2.26. There was sufficient information for the Air Ministry to publish a Pilot's Handbook of Air Routes. Cairo-Cape Town Air Route (London, 1928) with detailed maps of the route legs and airfields.
173. AVIA 2/291, Suggestions for Extension of Aviation in Kenya and other Colonies. Suggestions to send expert out. Loan of Captain Tymms to Colonial Office to advise on Civil Aviation Prospects in British East Africa, 1927. The British East African Governments had agreed to bear the costs of Tymms' study. See AVIA 2/1857. Notes of Meeting at Colonial Office, June 10, 1927, p. 4. Tymms' survey and report will be discussed below, chapters III-V.

In 1929, Tymms was joined by C. Welley Dod of Imperial Airways and Tony Gladstone of the newly-registered Imperial Airways (Africa) Ltd., to carry out a full survey of the Cape route. <sup>174</sup>

For the men directing the destinies of Imperial air transport, Samuel Hoare and Sefton Brancker, the expansion into British Africa marked another important stage in their shared dream of an Empire linked by a strong chain of Imperial air communications. They had defined the goal and argued the cause with energy and enthusiasm. Both had given India top priority as a goal of Imperial air transport services, but both were aware that Great Britain must act and act soon in Africa if it was not to turn to foreign air services to satisfy growing demands to be part of the air age. <sup>175</sup> In the House, Hoare was reminded that "Civil

174. Imperial Airways and the Cobham/Blackburn company reached agreement on the Cairo-Mwanza sector of the Cape route in February, 1929. The Cobham interests relinquished their claims on the route for cash, shares and representation in the new company, Imperial Airways (Africa) Ltd., registered in June, 1929 to develop the African operation. See below chapter III.

175. The major concern was that Belgium and/or France would establish a European link with Africa via the Sahara and the Congo, possibly as far as Madagascar. See AIR 2/322, Foreign Co-operation regarding Belgian Civil Aviation in the Congo, 2.6.27-. The Air Ministry wanted Congo traffic to route via a British service up the Nile. Writing to Hoare, Brancker summarized the fears:

It seems certain, therefore, that if we cannot establish a permanent service from the south of the Sudan to Khartoum or Cairo, the Belgians will develop air communications with the French. In any case, they will

aviation in Africa is crying out for development all over",<sup>176</sup> and it was a cry to which many were responding. During the years while Great Britain was slowly coming to grips with the problems of civil air transport, Africa was coming alive with aviation activity. In Egypt and the Sudan, the Savage Aircraft Company commenced crop-spraying and locust control operations in 1927 with aeroplanes loaned by the R.A.F., and the Air Survey Company Limited carried out surveys which by 1929 had photographed over 19,000 square miles and almost 100 towns by air.<sup>177</sup> In East Africa, private flying and the formation of British East African Airways was stirring up considerable local enthusiasm, and in 1929, Wilson Airways was formed to operate air transport services Mombasa-Zanzibar-Tanga-Dar-es-Salaam and Nairobi-Mombasa.<sup>178</sup>

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175. (continued) endeavour to establish air communications with South Africa, and, if we cannot provide facilities through the Sudan and Egypt, may draw the South African traffic away to French air communications as well. Brancker to Hoare, July 2, 1927. The Franco-Belgian agreement in 1928 to commence a Europe-Congo pool service gave special urgency to the need to establish a British line to the Cape. For Franco-Belgian African developments see Reports on the Progress of Civil Aviation, 1928, 1929, 1930.
176. M. F. Sueter, Hansard, CCXXVI, March 7, 1929, col. 638.
177. A.M., Reports on the Progress of Civil Aviation, 1927-1929.
178. Ibid. In Tanganyika, the Government ordered five aeroplanes for its own purposes, and with the first delivery in 1930, became the first Colony, Dependency or Mandated Territory in the Empire to have its own aircraft. Donald Cameron, My Tanganyika Service and Some Nigeria (London, 1939), p. 72. See chapters III-V for East African developments.

In the Rhodesias, the Aircraft Operating Company Ltd. commenced a large survey operation in 1926 and in 1929 began another 63,000 square mile survey in Northern Rhodesia. <sup>179</sup> At Bulawayo, the Rhodesian Aviation Syndicate formed the Rhodesian Aviation Company Ltd. in 1929 to commence air transport and general air services in the Rhodesias. <sup>180</sup> In south Africa, African Airways Ltd. failed for lack of capital, but in 1929, Union Airways began regular air services which at long last established civil aviation in the Union. <sup>181</sup> British West Africa was still far removed from the mainstream of air transport development in Africa, but Cobham had stirred its interest and the four Colonies requested an Air Ministry study of proposals and prospects. <sup>182</sup> With the annual flights of the R.A.F. to the Cape along with their many other survey flights within Africa, S.A.A.F. activities in South Africa, the private flights of airmen and airwomen of every nationality to many points in Africa, and the steady growth and development of French, Belgian and German air transport schemes in Africa, Africa was once again a main

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179. Reports on the Progress of Civil Aviation, 1927-1929.  
See chapter VI.

180. Ibid.

181. Aeroplane, May 30, 1928, p. 790, and July 25, 1928,  
p. 234. See chapter VII for full discussion.

182. See AVIA 2/401, Proposals for Experimental Air Service in British West African Colonies, Alan Cobham Aviation Limited, 1929.

arena for the working out of European ambitions. A second 'Scramble for Africa' was in the making with less important but more exciting consequences for its future. <sup>183</sup>

Neither Hoare, the architect of the British Imperial air presence in Africa, nor Brancker, his boisterous and imaginative Director of Civil Aviation, remained in office to see the fruits of their labours mature. Hoare had to content himself with a seat on the sidelines as Imperial Airways pushed south to Mwanza in 1931 and to Cape Town in 1932. <sup>184</sup> He did, however, make one flight along the Cape route with the R.A.F. as far as Malakal shortly before leaving office. "The moment seemed to me to have arrived", he wrote,

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183. However, unlike its political predecessor of the late nineteenth century, the new 'Scramble' focussed mainly although not exclusively on South Africa and an air link with Europe. In the 1930's both the Dutch and the Portuguese entered the scene.

184. Hoare surrendered his office in the Labour electoral victory of May 30, 1929 to Lord Thomson of Cardington (1875-1930). Thomson was killed in the R.101 disaster in October, 1930, and was succeeded by Lord Amulree. With the formation of the National Government in 1931, Lord Londonderry held office as Secretary of State for Air, 1931-1935, thus presiding over the final establishment of the Cairo-Cape Town route by Imperial Airways. See chapter IV.

at which the flight of the British Minister for Air down two thousand five hundred miles of the route would create a general interest in the project, and bring it in a conspicuous manner before the eyes of the people in Africa who were likely to benefit from it. 185

A more specific purpose of his flight was to assure the financial support of the British African Governments, especially South Africa. 186 By "showing the public that it was as practicable to keep to a time-table in Africa as it had been in India", 187 Hoare returned to Great Britain content that "the framework was ready for the details to be completed". 188 Brancker, so active in the African route

185. AIR 19/135, 'Ten Thousand Miles in a Fortnight - London to Malakal and Back in the Easter Holidays', April, 1929. 15 page report by Hoare. See also "The Beginnings of the African Air Service", in Hoare's Empire of the Air, pp. 301-08. Hoare was proud to claim that he flew on the first Cairo-India Imperial Airways flight as far as Delhi in January, 1927. See Higham, Britain's Imperial Air Routes, pp. 121-22. Lady Hoare accompanied the Air Minister on both occasions.
186. He was pleased to note that he met a flight of the S.A.A.F. at Assouan that brought him a letter from General Hertzog "promising South African support for a future service". Hoare, Empire of the Air, p. 174.
187. Ibid. Hoare is somewhat misleading here as Imperial Airways only commenced scheduled services to India in April, 1929. But in operating the Cairo-Basra sector on a weekly basis, Imperial Airways put up an "almost perfect performance". Of 91 departures in 1927, for example, only one was late. See Higham, Britain's Imperial Air Routes, pp. 124-26.
188. Hoare, "The Beginnings of the African Air Service".

negotiations and ever impressed with the urgency of British action in the face of foreign air activities, departed the scene in the fateful crash of the R. 101 setting out to pioneer another Imperial air service to India in 1930. <sup>189</sup>

With the departure from the scene of these two early giants in British civil aviation history, a chapter ends and another one begins. In Africa, their task had only just begun, but it was a task to be taken on by others. Hoare and Brancker had been instrumental in preparing the stage, providing the cast, and assembling the audience for the drama which was to unfold in Africa for a decade. Yet it would be remiss to ignore at this point the contribution made to British African air transport development of a man whose flights of survey thrilled an Empire. While the Air Ministry and Imperial Airways hammered out plans and policy, and while Hoare and Brancker attacked complacency in the House, in the press, and on countless speakers' platforms, Alan J. Cobham let the aeroplane speak for itself. In a way in which Hoare or Brancker were unable to do, Cobham gave Imperialism its air dimension. Where British officialdom and its 'chosen instrument' focussed attention on India,

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189. Along with Brancker's death, the R.101 disaster marked the end of the era of high hopes for the airship and Imperial air route development. Government could now devote full attention to Imperial Airways who fortunately had demurred at a Government suggestion in 1929 that they participate in the airship programme. For more on the end of the airships, see Higham, The British Rigid Airship, 1908-1931.

Cobham made African air development his first priority. <sup>190</sup>

His work throughout the Empire won him fame and a legion of supporters. "I hope he will have a hundred sons", wrote one, "and each of them a hundred more, so that in the second generation Great Britain will control the commercial air-routes of the world". <sup>191</sup> Cobham, aviation and Africa is the theme of the chapter which follows.

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190. His long-distance flights to Rangoon (1924) and Australia (1926) were important contributions to the development of those routes as they were significant in demonstrating aeroplane capabilities. Both flights added to Cobham's fame and prestige and gave British aviation a much-needed 'shot in the arm'. See Cobham's Skyways (London, 1925) and Australia and Back (London, 1926), for personal accounts of these flights. Nonetheless it is in Africa that Cobham made his mark through his efforts in East Africa, South Africa, and West Africa to develop air transport, his flight to the Cape in 1925, his flight around Africa in 1928, and two later trips to Central Africa in 1929 and 1931. See chapter III for full discussion.
191. Mark Kerr, Land, Sea and Air (London, 1927), p. 337. Another admirer, A. P. Herbert, lauded Cobham and Churchill together as men who "combine with an apparently inexhaustible vitality a habit of perpetual achievement." Punch, March 23, 1927, p. 318.

## CHAPTER III

ALAN COBHAM: FLYING IMPERIALIST AND  
THE CHALLENGE OF AFRICA, 1925-1933

Who are these pilots

Wagering history

On the turn of one idea.

Harold Rosenberg. <sup>1</sup>

Of the many pioneer airmen who contributed to the early development of British Imperial civil aviation, none surpassed and few equalled Great Britain's 'Aerial Ambassador', Alan J. Cobham. <sup>2</sup> For a decade he was the most famous and celebrated aviator that British air history has ever known. A man of ideas, imagination, dedication

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1. "Voyage to the end of Night" in H. G. Bryden, Wings, (London, 1942), p. 238.
  2. Cobham (1884-1973) needs little introduction to aviation historians. During the 1920's, Cobham won fame and acclaim for his air exploits in the United Kingdom and along the projected air routes of the Empire. In 1924, he won the King's Cup Race (Handicap); in 1923, 1925 and 1926 he was awarded the Britannia Challenge Trophy for "the most meritorious performance in the air during the year". He was awarded the Air Force Cross and Knighted for his 'trail-blazing' of Imperial routes. His biographers have been loud with praise. See H. Harper, Twenty-five Years of Flying (London, 1929), pp. 208-09, W. Courtenay, Airman Friday (London, 1937), pp. 72-4, and W. MacMillan, Great Airmen (London, 1955), pp. 157-75 for sample tributes. Cobham's autobiography, Skyways (London, 1925), unfortunately only takes his story up to 1924. Until his death in 1973 (The Times, October 22, 1973, p. 17), he remained active with his successful Flight Refuelling Limited, and in the preparation of his memoirs. Interview with writer, Wimborne, Dorset, January 2, 1970.

and ability, Cobham was unquestionably the pilot par excellence; cautious but courageous, confident of skills and purpose, and passionate in pursuit of progress in the air. He loved flying, he believed in its future and the role he could play in determining that future. "Once a man is really bitten with the fascination of flying", he wrote, "he is never able to shake off that irresistible lure".<sup>3</sup> Others found the "lure" irresistible as well, but none gave his heart and soul to flying as did Cobham. He put his passion to work and the results of his labours did more than anything else to promote the aims of civil aviation and to develop in Great Britain and the Empire that sense of 'air consciousness' so necessary to bring flying to maturity. Samuel Hoare gave British air policy direction from 1923 onwards, Sefton Brancker contributed incredible energy and enthusiasm to the task of civil aviation promotion, but Cobham flew the Imperial highways of the future and demonstrated to an Empire that the aeroplane could claim a place in the development of Imperial transport and communications.<sup>4</sup>

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3. Cobham, Skyways, p. 75.

4. The best general accounts of Cobham's Imperial Flights remain his own My Flight to the Cape and Back (London, 1926) and Twenty Thousand Miles in a Flying Boat. My Flight around Africa (London, 1930).

Cobham believed in Empire, in its destiny as a political form designed to promote the British message and mission of peace and civilization in the world, and he was committed to the idea that the aeroplane was to make an important contribution to Imperial aims of providing swifter and more continuous communication between the constituent parts of the Empire. <sup>5</sup> Before the Air Ministry and Imperial Airways had faced realities and turned their ambitions from Europe to the Empire, Cobham had already flown the routes to Burma, South Africa and Australia. <sup>6</sup> Proudly watching the Cobham displays, The Times agreed that "it is outside the mists and cloud-swept area of North-West Europe that the real possibilities of British aviation are to be found". <sup>7</sup> Great Britain did awake to

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5. Cobham's enthusiasm for Empire and aviation can be noted in all his public statements. See, for example, "L'Organisation des Transports Aériens dans l'Empire Britannique", Congrès International et Inter-Colonial des Transports (Paris, 1931), pp. 271-99, "Britain's Opportunity in Africa", Air, I (July, 1928), pp. 25-6, and "Africa All-Red Flying Route", British Empire Review, XXIV (September, 1928), pp. 236-41.
  6. In 1924, 1925-26 and 1926-27 respectively. See chapter II for discussion of the shift in British civil aviation policy emphasis from Europe to Empire in 1928.
  7. The Times, Empire supplement, May 24, 1926, p. xiv. The Times was a strong supporter of Cobham's Imperial exploits. His every flight was followed faithfully in almost daily reports from correspondents. For samples of The Times regard for Cobham, see editions of November 13, 1925, p. 14, February 19, 1926, p. 13, March 10, 1926, p. 15, November 2, 1927, p. 9, and June 1, 1928, p. 15.

the promise of civil aviation development in the Empire largely but not solely because Cobham and his growing legion of supporters were able to argue that dreams had become reality.

While the Cobham vision of Imperial air communications embraced the whole Empire, it was Africa that commanded the greater part of his attention. As early as 1921 Cobham had flown from England to North Africa, and an 11,000 mile air tour in 1923 had included a trip up the Nile as far as Wadi Halfa in an itinerary which covered half of Europe as well.<sup>8</sup> These trips had only touched upon a small part of the great African continent but they were sufficient to convince Cobham that Africa was ripe for air transport development. His first major African flight in 1925 to the Cape was an expression of that conviction, as were later flights in 1927-28, 1929, and 1931.<sup>9</sup> Out of these important survey

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8. See Cobham's Skyways, pp. 75ff. for accounts of his pre-Imperial air route flights in Europe, Morocco, Palestine and elsewhere. These were all 'hire-flights' (e.g., charter flights) for De Havilland.
9. There is no published material on the last two of these four major African flights. See unpublished reports by Cobham in the Board of Trade Civil Aviation Library (London), (1) Extracts from Report on Journey made by Sir Alan Cobham from London through Africa by Aeroplane to Rhodesia, December, 1929 to January, 1930 prepared by the Air Ministry, and (2) Cobham's own Report on Test and Survey Flight from Rochester to Lake Kivu and Return with the Short 'Valetta' Twin Float Monoplane fitted with three Bristol Jupiter Engines, 22nd July, 1931 to 1st September, 1931. See also material in BOAC archives (hereinafter BOAC). Unnumbered file, Imperial Airways, (hereinafter I.A. File with Numbers where applicable) African Survey - Alan Cobham, 1929-30.

flights, Cobham gained the knowledge and experience required to develop his own ideas on African air transport needs. He put forward sophisticated proposals for the promotion of air services along the Cairo-Cape Town route, in South Africa, and in British West Africa.<sup>10</sup> He struggled with as much as he worked along side the Air Ministry, Imperial Airways, and the British Governments in Africa in order to accelerate African aviation development. He flew through Africa on their behalf, but behind the cheers and general praise for his efforts, there was a reluctance to provide the financial support his proposals demanded. As a private promoter he was unable to marshal the capital which would have established Cobham as the leading air line operator in British Africa. Like others in Africa, he became aware too late of Great Britain's total commitment to Imperial Airways, and Cobham was thus denied an opportunity to build a Cobham-led 'empire of the air' in Africa.<sup>11</sup> By 1932 when the first Imperial Airways service reached Cape Town, Cobham's

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10. Initially, Cobham concentrated on the Cairo-Kenya sector of the Cape route. See BOAC. Imperial Airways file, Report by Alan Cobham on London to Cape Town and Return Survey Flight, November 16th, 1925 to March 13th, 1926. Also AIR 5/820, chapter 12, Imperial Airways Survey Flight, London-Capetown, A. J. Cobham, 16.11.25. - 17.2.26. See below for discussion of air transport proposals on Cape route, in South and West Africa.
11. See chapter II for the development of Imperial Airways' 'chosen instrument' status. In 1930, Cobham and the Blackburn interests (Gladstone and the North Sea Aerial Transport Company) were persuaded to sell all their interests for cash and shares in Imperial Airways, undoubtedly a major disappointment for Cobham.

plans for an 'all-red route' through Africa were realized, but Cobham himself was but an interested bystander. Nonetheless, he had played an important part in establishing the British air presence in Africa at a time when this was of pressing concern.<sup>12</sup> The Cobham story is a key chapter in the history of civil aviation in British Africa. As flyer, as promoter, and as publicist for the cause of air transport development, Cobham brought aviation to Africa as none before or since had done.

Cobham was one of the many pilots who emerged from the Great War determined to pursue a career in the new field of civil aviation. His first pilot job was as a partner with

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12. AIR 2/322. The Air Ministry from 1927 onwards was especially concerned with Belgian plans to link their successful air services operation in the Congo with Europe. Belgium was "casting about for help", either from Great Britain or France. See R. Smyth-Pigott (British Air Attaché, Paris) to Air Ministry, March 30, 1927. The Air Ministry considered Congo traffic an important factor in determining the feasibility of establishing a Cairo-Mwanza air service, but this meant (1) acting quickly to set up the service, or (2) co-operation with the Belgians along the Nile route. (2) was out of the question for "we do not want a foreign civil aviation service to use even a terminal aerodrome in Egypt". D.D.O.I. to C.A.S., May 18, 1927. This view rejected a Belgian proposal for a co-operative Cairo-Rejaf-trans-Congo-Broken Hill-Cape Town route at the same time as it feared the Belgians would turn to the French and, via the Congo, "draw the South African traffic away to French air communications as well". Brancker to Hoare, July 2, 1927. In short, the Air Ministry pressed for (1), and with Imperial Airways not yet in the field, were prepared to "assist Sir Alan Cobham in any way...". Brancker to Sir Philip Sassoon, under-Secretary of State for Air, August 12, 1927. Cobham and the Blackburn interests were, in effect, the 'chosen instruments' in Africa until 1929. For further discussion of French and Belgian activities see below and chapters IV-VII.

Jack and Fred Holmes in the Berkshire Aviation Company.<sup>13</sup>  
 Flying an AVRO 504K about the United Kingdom, Cobham carried 10,000 people on 'joy-rides' at £1 per head. As C. G. Grey later observed, many ex-R.A.F. pilots were in the 'joy-ride' business after the war, but it was Cobham who made an 'industry' out of it.<sup>14</sup> Cobham flew with Airco as well before going into the employ of De Havilland. From this point on Cobham was moving along the road which led to his close association with Africa. In 1923, flying a DH9C he made his three month trip with an American passenger through North Africa, the Middle East and Europe.<sup>15</sup> In 1924, he flew a DH50 from London to Tangier in one day, and two months later, set out on his first 'Imperial' flight to Rangoon with Brancker on board as passenger.<sup>16</sup> By

13. Cobham was a Royal Air Force flying instructor at the end of the war. Jobs were few while pilots were in plentiful supply but Cobham persisted where others gave up flying to return to the 'normalcy' of more conventional occupations. See his Skyways for recollections of the immediate post-war years.
14. Grey, History of the Air Ministry, p. 166.
15. The passenger was a wealthy financier, one Mr. Sharp who apparently enjoyed the adventure of flying. Cobham recalls this trip in Skyways.
16. Departing London November 24, 1924, returning March 18, 1925, having covered some 17,000 miles in 220 flying hours in a DH50. See brief summary of these flights in Sharp, D.H. An Outline of de Havilland History, p. 364. The DH50 was a four passenger biplane based on the earlier DH9. Equipped with the 230 h.p. Siddeley Puma engine it could attain a speed of 115 m.p.h.

September 1925, the man whom Grey already referred to as "our leading commercial pilot",<sup>17</sup> was in the final stages of preparation for a survey flight along the Cairo-Cape Town route, the first such attempt since 1920.<sup>18</sup>

Some 21 British firms supported the flight including Gaumont Films, BP, Wakefield Oil, and De Havilland, who supplied a modified DH50 for the survey.<sup>19</sup> The Air Ministry was interested as well and participated in the arrangements to provide cleared landing strips and facilities enroute. Imperial Airways were something less than generous. Writing to Cobham, Woods Humphrey said "we agree to contribute £500 towards the cost of your projected flight,...and in consideration you agree that...:"

1. The flight will be officially called 'Empire League's Imperial Airway Survey'.
2. The aeroplane will be painted with our colours and with our name on the fuselage.
3. You will be accompanied by a high Air Ministry official or other Government official of standing to be approved by us.

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17. Aeroplane, March 25, 1925, p. 276.

18. See chapter I for brief account of Cape flight attempts in 1920.

19. The Times, November 13, 1925, p. 14. The Times regarded the flight as having been organized "primarily as another demonstration of the hard service capabilities of British aircraft...". The most important modifications to the DH50 were the provision of floats for water operation and the substitution of a 385 h.p. Armstrong-Siddeley Jaguar engine to provide extra power performance in the heat and high aerodrome elevations in Central and South Africa. The seaplane was designated DH50J, the only one ever built.

4. In every communication to the press, in every speech during or in connection with the flight you will refer at least once to Imperial Airways, and generally in lectures, interviews and communications you will obtain publicity for us which will be greater than the publicity obtained for us by your London-India flight.
5. Should you write a book on the flight you will also refer to our company therein.
6. You will present to us on your return a confidential report of the commercial and technical aspects and possibilities of the route with details of aerodromes and flying conditions. 20

For very little support Imperial Airways asked a great deal in return, but Cobham was agreeable.<sup>21</sup> In any case he was confident of the ultimate success of the venture; Africa needed air transport and this flight would impress a still doubting public in Africa and at home. Before leaving England he noted:

There are many parts of Africa where at present great commercial centres are only a few hundred miles apart, yet it takes weeks to communicate one with the other by the existing means, whereas by air it would be only a matter of a few hours' flying. In many cases it would be faster than the present means of telegraphing. Our chief object is to impress and bring home to the public, by the successful completion of the flight, the fact that aviation is progressing as a means of world transport. 22

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20. BOAC. Imperial Airways file, U.K.-Cape Town Survey, by Cobham, 1925. Woods Humphrey to Cobham, September 26, 1925.
  21. Ibid. Enclosed correspondence. Both parties agreed to substitute a "kinema operator" for the high Government official mentioned in Woods Humphrey's statement of conditions of Imperial Airways support.
  22. Quoted in Benjamin Bennett, Down Africa's Skyways, (London, 1932), p. 45.

Cobham was saying nothing very new; Africa had vast distances to be covered and generally poor transport facilities of any kind, in marked contrast to the United Kingdom and parts of Europe which were served by a reasonably efficient network of road and rail services covering relatively short distances. In 1925, Cobham was but one who realized that the aeroplane's one great advantage over other forms of transport, speed, continued to operate at a serious disadvantage in Great Britain. While the aeroplane could average a speed at least double that of most ground services, the minutes gained on short distances were more than lost in ground travel time required to go from urban center to airfield location. This situation would continue until such times as aeroplanes could fly a great deal faster than their ground competitors, and even then they would only be a serious form of transport when they could carry larger loads, operate in poor weather at night as well as day, and the air line operators could offer greater frequency of service. For Cobham, what made Africa so singularly attractive was that the situation offered almost every advantage to the aeroplane. With great distances to be covered, time-saving becomes significant, and at one hundred miles per hour, the aeroplane far out-spied any African ground transport service. Moreover, again in contrast with the British situation, an aeroplane in Africa could operate in some

of the best flying weather in the world. <sup>23</sup>

On November 16, 1925, Cobham and his crew took off from Stag Lane aerodrome, Edgeware, on a flight of survey which was to last almost four months and cover some 16,000 miles. <sup>24</sup> After a five year lull, Cobham was ready to bring Africa into the mainstream of air progress. On December 7, he arrived at Heliopolis (Cairo) and on the 16th set out along the 5,520 mile 'all-red route' to Cape Town. By January 13 Cobham reached Kisumu, which for the moment

23. Between 1922 and 1932, more than 50 major flights were made into Africa including those made by British and French military aircraft. (See W. E. Johns, Some Milestones of Aviation [London, 1935], p. 18). Cobham was undoubtedly the leading figure in this activity, and he contributed more than anyone else to destroy the myths concerning African weather, especially in the tropics. For the most part, Africa is fog-free and enjoys generally light winds at low levels. The 'rainy seasons' cause more problems on the ground than they do in the air, and in any case only apply with any significance to the central portions of the continent. By 1930, Cobham was convinced that the Cape route service would be the "crack air line of the world" unhindered by weather except for "half a day occasionally". Cobham quoted in East Africa, February 13, 1930, p. 711. It was Cobham's efforts which brought to British attention the genuine possibilities of commercial aviation development in Africa by his demonstrations of aeroplane performance in hitherto thought to be difficult weather. Good weather, traffic potential, time-saving over existent or absent transport facilities, and the factor of Imperial prestige and purpose combined to promote the British air presence in Africa.
24. See Cobham, My Flight to the Cape and Back for details. For accounts and comments on Cobham's departure, see The Times, November 17, 1925, p. 14, and Flight, November 19, 1925, p. 768. Cobham's crew included A. B. Elliott, his mechanic, and B. Emmott, the ciné operator for the Gaumont Company.

Cobham saw as the southern terminus of "the great air line of the future that will run from Cairo to the Victoria Nyanza...".<sup>25</sup> "Daily I became more impressed", he wrote,

with the enormous opportunities of a great commercial airway that would link up Central Africa with the Mediteranean. Here was a country where it would be possible to maintain a 100% efficiency regularity,...<sup>26</sup>

From Kisumu, Cobham headed south through the high country of Central Africa by way of Tabora, Abercorn and N'dola to Broken Hill, a route that Cobham found to be "simply hopeless for a commercial air route, owing to the impossibility of landing anywhere other than on thick bush, swamp or forest for 97 per cent of the journey...."<sup>27</sup> Still, he could express general satisfaction about the way the flight had progressed thus far. "We are now in Northern Rhodesia", he wrote,

in the middle of the wet season, but curiously the 'dromes so far are not boggy,... Both aeroplane and engine have behaved perfectly and the original supply organisation worked without a hitch, for at every landing ground we found ample supplies of perfect B.P. spirit and Wakefield's Castrol R.<sup>28</sup>

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25. Cobham, My Flight to the Cape and Back, p. 30

26. Ibid., p. 20

27. Cobham to C. G. Grey, January 26, 1926, from Broken Hill, published in the Aeroplane, February 24, 1926, p. 206.

28. Ibid., p. 205.

By February 2nd, Cobham reached Pretoria, and on the 17th, the long-sought goal of Cape Town.<sup>29</sup> It had been a long but exciting flight. From Cairo to Cape Town, Cobham had shown the aeroplane to British Africa, and sparked an interest and enthusiasm all along the route. At Malakal, "the native population came from afar to see an aeroplane for the first time".<sup>30</sup> At Jinja, "thousands of natives had assembled from all parts of Uganda...".<sup>31</sup> An "enthusiastic reception" greeted his arrival at Bulawayo, and at Pretoria, he was cheered by "thousands of people".<sup>32</sup> Johannesburg gave Cobham "the greatest reception ever extended to an airman in South Africa", including a flying escort of six South African Air Force DH9's over the Reef towns along the 35 mile route between Zwartkops (Pretoria) and Johannesburg.<sup>33</sup> At Cape Town, Parliament suspended

29. Clearly, having taken three months to reach the Cape indicated that Cobham was uninterested in setting any air records. He averaged 36 miles per hour including stops.
30. Johns, Some Milestones of Aviation, p. 152. Johns may have meant Mongalla or Jinja, for Cobham recalls that the recently-prepared airfield at Malakal bordered on a village of Shulluks [sic] who took no interest in the aeroplane, and "I was told they looked upon it as 'one of the mad things white men do'". My Flight to the Cape and Back, p. 21. Nonetheless, the occasion was of sufficient interest to promote a 'war dance'. See pictures in ibid., pp. 25-6.
31. Ibid., p. 29.
32. The Times, February 1 and 3, 1926, pp. 12 and 16.
33. L. A. Wyndham, The Airposts of South Africa (Cape Town, 1936), p. 77.

its sitting at 5:30 pm so that all members could be on hand to greet Cobham's evening arrival.<sup>34</sup> Coincidentally, on the very day of his arrival, the Government estimates had disclosed an £8,000 subsidy scheme to support a plan for air mail services in the Union with an as yet unnamed company. However, it was no secret that the Junkers firm were actively exploring commercial air opportunities in South Africa.<sup>35</sup> The Times expressed the British dismay:

It is a melancholy coincidence that, on the eve of Mr. Cobham's arrival in Cape Town in an all-British machine that has accomplished so great a feat of endurance and reliability, the Union Government should be contemplating the establishment of a civil air service in which German machines would be given exclusive monopoly. 36

34. The Times, February 18, 1926, p. 14.
35. Ibid. See AIR 2/290, Proposals by Messrs. Junkers for a South Africa Air Service. Vickers and the Aircraft Operating Company, as well as De Havilland, all British firms, had submitted tenders to the South African Government, but the Government was "happy with Junkers". Earl of Athlone (Governor General of South Africa) to Amery, November 7, 1925. See too the Cape Times, February 18, 1926 and March 13, 1926. See chapter VII for full discussion of South African situation.
36. The Times, February 19, 1926, p. 13. C. G. Grey, often sympathetic to German ambitions (see the Aeroplane, May 20, 1925, pp. 477-80), was nonetheless pro-British through and through. Noting the South African-Junkers negotiations, he wrote,  
     The patriotism of General Hertzog's Government may be judged by this contract [sic]. But as Hertzog was a Boer leader in the South African war, his attitude is comprehensible.  
 He added, "doubtless the work will be done by British vehicles ultimately. Things generally end that way where efficient transport services are necessary".  
Aeroplane, February 24, 1926, p. 206.

The spectre of a German monopoly in South Africa did not deter Cobham from fulfilling his mission of propaganda and prestige for British aviation in the Dominion. After the Cairo-Victoria Nyanza route, he looked to South Africa as the most promising part of Africa for commercial aviation development. At Kimberley, Bloemfontein, Johannesburg, Cape Town and elsewhere in the Union, Cobham spoke to air enthusiasts as well as doubters and argued the case for the aeroplane there as no one had before. At Bloemfontein, he pointed out that an aeroplane service from South to West Africa would be perfectly feasible as the service could connect with the mail steamers at Lagos and cut the South Africa-London mail service by 10 days.<sup>37</sup> At Cape Town he argued, with British aircraft manufacturing interests in mind, for greater use to be made of the light aeroplane. "In South Africa you have vast distances", he pointed out, "and tremendous isolation - disastrous isolation, as far as the farmers are concerned - and salvation in this matter is the light aeroplane".<sup>38</sup> Curiously, the most exciting possibility, that of developing an aeroplane route from London to Cape Town, Cobham ignored, "because that was an airship scheme. If people wished to go to Cape Town, they would go by boat until the airship came along".<sup>39</sup>

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37. The Times, February 17, 1926, p. 13.

38. The Times, February 19, 1926, p. 13.

39. The Times, March 15, 1926, p. 11. Within two years, Cobham had changed his mind on a through aeroplane

With an eye to commercial aviation possibilities in East Africa and South Africa, Cobham was first concerned with practical possibilities rather than Imperial chains of communications, and for this reason he saw African air transport development to grow out of what Samuel Hoare would call "a mosaic plan" later in the year. <sup>40</sup>

On February 26th, after close to a month spent in the Union, Cobham set out on the return journey to London, adding interest to the trip by racing the Union Castle mail ship, Windsor Castle. <sup>41</sup> Reaching Cairo on March 7th, Cobham felt that he had achieved his primary goals; "to popularize aviation in the countries traversed, to ascertain whether civil aviation is practically and commercially possible in Africa, and to test the behaviour of an air-cooled engine in the tropics". <sup>42</sup> On March 13th, Cobham

39. (continued) route. When he and the Blackburn interests formed Cobham-Blackburn Air Lines in 1928, it was with "the definite object in view of negotiating and organizing a company that would bring about a through air route from the Mediterranean to South Africa". Cobham, Twenty Thousand Miles in a Flying Boat, p. 91.
40. Hoare's speech to the Imperial Conference quoted in The Times, October 29, 1926, p. 9.
41. Wyndham, Airposts of South Africa, p. 78. Cobham won the 'race' by two days despite some delays enroute. Captain Strong's Windsor Castle could steam day and night for the 5,300 mile sea journey, while Cobham could fly about eight hours a day and make 26 landings along the 8,000 mile air route home.
42. Quoted in The Times, March 8, 1926, p. 13. Later he argued a somewhat different view of the achievement. As a survey of the possibilities of great intermediate air routes throughout Africa,

landed at Croydon, the first British pilot and aeroplane to have flown to the Cape and back. He was received by the King, and a grateful Air Ministry awarded him the Air Force Cross for his flight and other services to British aviation. <sup>43</sup>

While the flight was an 'air spectacular' in almost every way, Cobham was more concerned with its commercial application. As he noted for the Royal Aeronautical Society, "it is not merely a question of flying, say, from London to Australia; that is not the real object of aircraft. The real object is to transport something, such as passengers, goods or mails, quickly". <sup>44</sup> The question

42. (continued) in its commercial significance, and as a contribution to our national and imperial prestige the flight was of great importance.  
Cobham, My Flight to the Cape and Back, frontspiece.

43. Air Ministry, Report on the Progress of Civil Aviation, 1925-26, Cmd. 2707 (1926), p. 14. Cobham found King George V "keen" on the subject of civil aviation (My Flight to the Cape and Back, p. 69), whereas Hoare, although not sure of the King's views on civil aviation, claimed the King was always pro-navy and "lukewarm" to aviation proposals for the Air Force. See his Empire of the Air, passim.

44. Cobham, "Long-distance Flying", Journal of the Royal Aeronautical Society, XXX (August, 1926), p. 488. But Cobham was rapidly awakening to the economic problems of establishing air transport services and argued for considerations other than traffic transport. General development of the country must be a more important object. "There is too much talk in these days", he wrote,  
about air transport as a commercial proposition. I maintain that it does not matter whether an air line pays or not as a transport proposition, so long

then remained as to how best to attain this object. Here Cobham rested his case on the need for "organisation", a methodological approach to civil aviation development which governed his every plan to promote air transport in Africa.<sup>45</sup>

Cobham's report to Imperial Airways gave the company its first detailed assessment of the potential and practical possibilities of air transport along the 'all-red route' through Africa to the Cape.<sup>46</sup> Dividing the route into four sections, Cairo-Khartoum, Khartoum-Kisumu, Tanganyika-Northern Rhodesia, and South Africa, Cobham argued that good possibilities for air development existed in all but the

44. (continued) as it opens up and helps to develop the country over which it flies.  
Letter of support for the commencement of the North Sea Aerial and General Transport experimental Khartoum-Kisumu air service, in East Africa, special Khartoum-Kisumu Airway Supplement, December 9, 1926, p. 351.
45. "We need organisation to make commercial flying a success", noted Cobham. Quoted in F. Yeats-Brown, "Mr. Cobham on his recent Flight from the Cape to Cairo", Spectator, CXXXVI (March 27, 1926), p. 577. It was Cobham's penchant for organisation, his 'staff work' which won him so much admiration from his colleagues and supporters, and coupled to a thoroughness in preparation for every flight of survey, organisation contributed greatly to his success. "He is like a commander before a battle. Not a detail escapes that agile mind", wrote one of his admirers. Harry Harper, Twenty-five Years of Flying (London, 1929), p. 208.
46. BOAC. I.A. file. Enclosure. Report by Alan Cobham on London to Cape Town and Return Survey Flight, November 16th, 1925 to March 13, 1926, 29 pages.

third sector, and he made a separate comprehensive proposal for the development of the Khartoum-Kisumu route.<sup>47</sup> The Cairo-Khartoum sector was, in Cobham's view, "the safest air route in the world for an air transport line to work over".<sup>48</sup> Except for the occasional haboob to interfere with visibility, the generally clear skies allowed an air line to operate 365 days a year. Moreover, even night flying was possible (and desirable as the route's one drawback was the intense heat of the summer months which not only affected aeroplane engine performance but made for extremely turbulent flight especially in the lower levels), for the Nile acted as a clear highway to follow most of the way.<sup>49</sup> For this route development, Cobham had the support of the Khartoum Chamber of Commerce. They agreed that a Khartoum-Kenya service would be of value to the Sudan, but it would be of more value to Uganda and Kenya, and "they were more interested in an Air Line between Khartoum and Cairo, especially as a mail service for letters and parcels,..".<sup>50</sup>

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47. Ibid., enclosure. 'Flying Boat Service: Khartoum and Lake Victoria Nyanza (Kisumu)', 11 pages.

48. BOAC. I.A. file. Report by Alan Cobham on London to Cape Town, p. 6.

49. Ibid., p. 10. Cobham was considering a seaplane service for the 1,200 mile route, and the Nile thus provided an almost continuous landing area in the event of emergencies, even at night. The exception was the 160 mile cross-country leg away from the Nile between Wadi Halfa and Abu Hamed made necessary to avoid following a particularly long westward curve in the river's flow.

50. Ibid., p. 11.

Additional support came from the General Manager of Egyptian Railways, Abdel Hamed Soluman Pasha, who suggested that Aswan be omitted on the itinerary (originally, Cairo-Luxor-Aswan-Wadi Halfa-Khartoum), and this would save up to two days flying on the route. In any case Aswan was only five hours by train from Luxor where Cobham was prepared to initiate the service rather than compete with the good overnight rail service from Cairo.<sup>51</sup> However, Cobham did urge a complete service along the whole 1,200 mile route between Cairo and Khartoum, seaplanes to follow the Nile as far as Wadi Halfa, and an aeroplane service from there to Khartoum.<sup>52</sup>

Cobham's proposals for the Khartoum-Kisumu sector of the route were his first serious expression of interest in personally establishing an air service in Africa, although no doubt he was aware that Gladstone was similarly interested and had already entered into negotiations with the three British African Governments concerned.<sup>53</sup> Cobham's scheme

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51. Ibid., p. 7.

52. Ibid., p. 17. Cobham pointed out that an aeroplane service from Cairo to East Africa was practical provided that a three-engine aircraft was used. While this would enable larger loads to be carried, it would increase costs tremendously. Cobham chose to come down on the side of safety with seaplanes and aeroplanes where appropriate.

53. T. A. (Tony) Gladstone had entered into discussions with the Governments of the Sudan, Kenya and Uganda in late 1924. See below for developments.

was an ambitious one, calling for an initial capital expenditure of £82,412 to provide for a fleet of three 'machines'.<sup>54</sup> His chief argument was that the 1,400 mile route could be flown in about 17.5 hours, or two days' travel, a saving of 10 days over ground and Nile steamer service.<sup>55</sup> The major stumbling block to the scheme's establishment was the high annual charge demanded of the governments concerned. Even with full loads on every flight, a most unlikely proposition, expenditures would exceed revenues by £29,959, a sum which would have to be made up in subsidy.<sup>56</sup>

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54. BOAC. I.A. file. 'Flying Boat Service proposal', p.6. Cobham had in mind a twin-engined amphibious machine or a wheeled machine to which floats could be added on particular sectors of the route. The machine would be equipped with a 700 HP engine, have an endurance of 5.4 hours, cruise at 80 m.p.h., with two crew, 8 passengers and mails.
55. Ibid., p. 1. Comparing times and fares, the proposal noted that travelling first class from London to Mombasa by rail and steamer cost £90 and took 23 days. London to Khartoum required 9 days travel for £55, and Khartoum to Rejaf, 14 days and £45. Khartoum to Rejaf by air would cost £50 but take only 1.5 days; Khartoum to Kisumu, £60 and two days. Thus, great time-savings were argued against a very small rise in costs.
56. Ibid., p. 7. A more realistic anticipated revenue in the first years was based on half-loads (four passengers per trip and 250 lbs. of mail surcharged at 4d/oz.). In this case, expenditures would exceed revenue by £61,254, therefore requiring a subsidy in that amount. Cobham had obviously changed his mind on subsidy support at this point. Earlier, he had disagreed with Gladstone's proposal calling for government subsidies, suggesting that a surcharge on mail would suffice to balance the books. The Times, January 15, 1926, p. 11.

The whole proposal was strikingly similar to that being put forward by Gladstone, even to the point of suggesting that an experimental service be run over the route with one aeroplane at a cost to the Governments concerned of about £8,000. <sup>57</sup>

Turning to the Mwanza-Bulawayo sector, or even as far south as Palapye Road, Cobham held out little hope for the early establishment of an air service. <sup>58</sup> If the aim was ultimately to link East and South Africa, Cobham forecast the development of a coastal route running Mombasa-Dar-es-Salaam-Mozambique-Beira-Delagoa Bay-Durban-Port Elizabeth-Cape Town, with an aeroplane service to Mombasa and a seaplane service south from there. <sup>59</sup>

57. Flying Boat Service proposal, p. 10. See below for Gladstone scheme. The suggestion can be made that Cobham was influenced by the Gladstone proposals, but Cobham could draw upon actual experience which Gladstone could not. Cobham had flown the route, Gladstone had not.
58. "Generally speaking", he wrote, "I do not consider that Tanganyika and Northern Rhodesia are practical countries for commercial flying in the present stage of aviation". BOAC. I.A. file. Report by Alan Cobham on London to Cape Town, p. 20. Cobham argued that there was no traffic to speak of, and, more importantly, forced landings would be almost impossible in the huge forest and bush areas to be traversed. This was a rather pessimistic view even given the unreliability of single-engined aeroplanes at the time. It is interesting to note that in Cobham's proposals for the Khartoum-Kisumu service, he planned for 10 forced landings a year with an annual expenditure for aeroplane recovery of £3,000. The most common causes of forced landings were ignition trouble, breaking valve springs, broken fuel lines, and fuel shortage. Ibid., pp. 3-4.
59. Ibid., p. 21. This was essentially the route to South Africa flown by Imperial Airways with the introduction of the Empire Flying Boat Service to Durban in 1936. See chapter IX.

To Cobham, South Africa was particularly attractive, and while there he had looked closely at the prospects of diamond and gold transport by air, widely considered to be a lucrative source of potential traffic revenue.<sup>60</sup> With generally good flying weather, good terrain, and a strong economy to support air transport, Cobham was convinced that any air service could provide a highly competitive transport system. As to diamonds and gold, his investigation was both disappointing and encouraging. At Kimberley, he studied the diamond situation:

A lot has been talked about transporting diamonds by air, thus saving interest on the money involved. On talking the matter over with a De Beer's manager, this does not appear to be the case, for the diamonds are grouped into separate month's outputs, and it takes a month to sort each batch. Further to this, the output and release of diamonds is restricted so that there is no hurry whatsoever to get them on the market and no necessity to try and save a few days by transporting by aeroplane. 61

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60. Hoare, addressing the annual meeting of the Victoria League, noted that Mr. Samuel Evans, chairman of Crown Mines Limited in South Africa, had drawn attention to the great savings in transport costs which would emerge with a regular air service. "Some 44½ million pounds' worth of gold and 12½ millions of diamonds were involved". The Times, July 2, 1927, p. 14. Brancker argued that one ton of gold a day was assured traffic if a regular air service was provided. The Times, November 3, 1927, p.11.
61. BOAC. I.A. file. Report by Alan Cobham on London to Cape Town, p. 26.

Thus, unless an air transport service could offer rates considerably lower than existing surface transport, the diamond interests were not to be persuaded to use the service.

Gold shipments, however, were a promising load revenue for air transport. Cobham explained;

I went into this question [time-saving] very deeply with the Chamber of Mines regarding the transport of Gold by this route, with a view to shortening the time of transit of the gold and thus save the interest on the money involved.

The Mines told me that they thought aviation would be a good thing for the country, and as long as it cost them no more to transport their Bullion by air than it did by rail at present, they would willingly use the Air Service, so that the money that was saved by the saving of interest on the bullion could all go to the extra cost of transporting by air. In other words, as the interest on a few days' output was about £100, the saving of a day in every week's delivery (the gold goes by the weekly boat) would be about £5,000 per annum. This they said, could be spent in the extra cost of flying the gold, therefore 4 or 5 days a week saved would mean that there would be a little subsidy of at least £30,000 per annum for an air service. 62

In conclusion, Cobham argued that the Government in the Union should offer a mail contract, and to assure the success of the air service, send all letter mails by air with a compulsory surcharge to guarantee revenue for the air line. 63

There is no doubt that the report provided Imperial Airways with the first set of important data concerning

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62. Ibid., p. 28.

63. Ibid., p. 29.

African air transport possibilities. Although Cobham had left a great deal unsaid,<sup>64</sup> and his personal interest promoted a tendency to over-simplification of some of the problems to be faced, it was nonetheless a superb report upon which Imperial Airways and the Air Ministry could build plans for future African expansion. For Cobham, the report not only signalled his interest in Africa, but it established his expertise to which Imperial Airways, the Air Ministry, and the Blackburn interests were to turn time and time again over the next few years.

Although Cobham's next flight of survey was to Australia, he was not ignoring Africa.<sup>65</sup> In November, 1926, he registered

64. Cobham provided Imperial Airways, the Air Ministry, and the aeroplane manufacturing industry (his reports were made available to the Society of British Aircraft Constructors by the Air Ministry only after persuasion that this was in the best interests of the industry; see AVIA 2/346, Re Circulation of Reports on Civil and Survey Flights to the S.B.A.C., 1928) with first class reports on aeroplane performance and technical data, and operational conditions. But Cobham had yet to learn the air line business and his reports lacked much necessary commercial information. See AIR 2/290. Woods Humphrey to Smit, July 12, 1926. Cobham did "useful work" but no commercial information "which we consider is so essential...."
65. He departed Rochester in the DH50J June 26, 1926, and after 14 days in Australia, arrived back in London August 1, a 28,000 mile trip he had been planning even as he was on his way north from Cape Town a few months before. Interview with writer, January 2, 1970, at Wimborne. See Cobham's Australia and Back for personal story. There was, however, no intention of establishing an air line along the route; his air line ambitions remained in Africa.

Alan Cobham Aviation Limited as a private company with a nominal capital of £1,000 whose objects were to "carry on the business of manufacturers of and dealers in aeroplanes, airships, aerobuses, and all other machines or devices for aerial navigation, or for the carrying in the air of passengers or goods, proprietors of aviation, teaching and training schools and aerodromes, etc.". <sup>66</sup> In short, Cobham had gone into the 'flying business' and from this point on, his activities in Africa and elsewhere expanded. Early in 1927, The Times reported that a company 'financed' by Alan Cobham Aviation was establishing a Johannesburg-Durban air transport service with hopes of commencing operations in September or October. <sup>67</sup> Cobham withdrew his support a few months later, finding the South African

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66. Aeroplane, December 1, 1926, p. 674. The Company was incorporated November 22. Of 1,000 £1 shares, only three were issued to the directors, Cobham, E. M. Merchel, and Lt.-Col. Warwick Wright. See details in AIR 2/340, Round the World Flight by Sir Alan Cobham, 1927-1930. (Cobham was knighted following his Australian flight).

67. The Times, February 15, 1927, p. 11. Major Alistair Miller, the South African aviation promoter, had been in London to discuss matters with Cobham and also to drum up support for opposition to German advances in South Africa. The proposed company was to have a guaranteed capital of £30,000 to run a passenger and freight service with De.Havilland aeroplanes.

Government terms unacceptable, <sup>68</sup> but he kept alive his South African interests and in early 1928 was negotiating to transport Rhodesian gold by air to Germiston, and to provide other air transport services in the Union with African Airways Limited. <sup>69</sup>

In the summer and early fall of 1927, Cobham was busy arranging what was to be his greatest flight, a flight of survey around the entire African continent. <sup>70</sup> This flight

68. AIR 2/322. Brancker to Sassoon, August 12, 1927. Miller had accepted the South African Government terms (an annual subsidy of £8,000), but Cobham had backed down claiming that the service would then have to operate at a loss.
69. The Times, March 17, 1928, p. 11. A number of interests were busy in trying to develop the gold transport service; Cobham, Miller, and the Rhodesian Aviation Syndicate at Bulawayo were acting together in the matter. In the meantime, Miller was acting as technical adviser to a newly-formed air line, African Airways Limited, which was promoting a Johannesburg-Durban air service along with the Rhodesian gold transport service, and it was proposing to open the Johannesburg-Cape Town route by November. Cobham joined the Board of Directors, but the company failed in July "owing to lack of public support". See The Times, March 19 and July 20, 1928, pp. 9 and 13; also Aeroplane, May 30 and July 25, 1928, pp. 790 and 234. For more detailed discussion, see chapter VII.
70. AIR 2/340. Originally Cobham had proposed a 'round the world flight' to advertise British aviation, but he was unable to raise the necessary financing nor obtain Air Ministry support. Cobham was already in debt to the Air Ministry for expenses and costs incurred on his previous flights. In 1931, Cobham again put forward a proposal for a 'round the world' cruise, but the Air Ministry could not spare a Singapore II flying boat and Cobham never did make his world trip. See AVIA 2/1882, Proposed Round the World Cruise and Request for Loan of Singapore II - Sir Alan Cobham, 12.1.31-, correspondence.

was to have "the definite purpose of fostering Empire air lines in the African continent".<sup>71</sup> In Cobham's view, the flight "marked a vital point in the history of African air transport".<sup>72</sup> For one thing, its success argued that all of British Africa was open for air transport exploitation, including the hitherto forgotten colonies in West Africa. The fact that Lady Cobham and her two canaries made the trip in modest comfort suggested that African conditions were amenable to commercial air transport development. As well, the flight marked a turning away from the concentration on the internal air line promotions of Hoare, Cobham, Gladstone and others to the serious study of a through route from Cairo to Cape Town. Finally, as Cobham pointed out, by successfully completing the trip, "we were encouraged to go ahead with our plans, and the support of the various Governments concerned in air-route development in Africa was a direct result".<sup>73</sup>

On November 17, 1927, Cobham and crew lifted off the water at Rochester to set course on the Sir Charles Wakefield Flight of Survey, a flight which would take almost seven

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71. The Times, November 2, 1927, p. 9. As well it was intended to demonstrate the utility of a flying boat (a Short Rolls Royce Singapore I) along the African routes.

72. Cobham, Twenty Thousand Miles in a Flying Boat, p. 5.

73. Ibid. See this work for a general personal account of the 'adventure'; also an abbreviated story in "Round Africa with Cobham", a publicity pamphlet published by The Gaumont Company to advertise the eight reel film made of the flight.

months and cover about 22,000 miles. <sup>74</sup> In February, 1928, Cobham was in Kenya where he joined hands with Tony Gladstone to promote the Khartoum-Kisumu line and to plan the extensions of this route north and south to Cairo and the Cape. <sup>75</sup>

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74. The Sir Charles Wakefield Flight of Survey was so named because, in Cobham's view, Wakefield made the trip possible. "There was a time before the start of the flight", he wrote,

when I thought the trip would not be possible, owing to the huge financial responsibility involved, but, as in the past, Sir Charles Wakefield..., came to the rescue,... Lord Wakefield is an ardent Imperialist. He believes that air transport is one of the most effective means of bringing the people of the world in closer touch,...

Twenty Thousand Miles in a Flying Boat, p. 5. The Short Bros. flying boat 'Singapore' was an all-metal machine loaned by the Air Council. It was powered by two Rolls-Royce 'Condor' engines which developed 700 HP each, and with a full load, the aircraft could cruise at 120 m.p.h. with a range of 1000-1100 miles. Besides Cobham and his wife, the crew included Captain H. V. Worrall of North Sea Aerial, S. R. Bonnett of Gaumont, and two engineers, C. E. Conway and F. Green. The flight ended back in Rochester, June 11, 1928.

75. The Times, February 15, 1928, p. 13. Cobham was not yet prepared to put forward a proposal for a service south from Kisumu or Mwanza, but a merged Cobham-Blackburn proposal for an Alexandria-Kenya service was set before the Governors of Uganda and Kenya, and Sir George Schuster representing the Sudan, at a meeting in Nairobi, February 17. See AVIA 2/351, Kenya. Civil Aviation, 24.9.28-. Encl., Report on the Progress of Civil Aviation in Kenya Colony and Protectorate during the period 1 Jan 28 - 30 Jun 28. Cobham believed this service could be in operation 12 months after negotiations were completed, and a full Cape route running within three years of that. The Times, February 20, 1928, p. 11.

As noted earlier, Gladstone was the first airman to take an interest in establishing an air service between Khartoum and Kisumu in 1924. On his own initiative, he had approached the Governments in East Africa and the Sudan on the possibilities of establishing an air mail service which would ultimately develop into a London-East Africa service. All the British Governments expressed an interest and promised modest financial support.<sup>76</sup> Gladstone joined forces with the North Sea Aerial and General Transport Company, and serious negotiations began with the British African Governments concerned.<sup>77</sup> By April, 1925, there

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76. Bennett, Down Africa's Skyways, pp. 48ff. The Sudan was prepared to contribute £2,000, and Kenya and Uganda, £2,500 each. As Gladstone was proposing initially to operate between Khartoum and Kisumu, Tanganyika was not willing to contribute to the service unless extended to Mwanza at the southern end of Lake Victoria. At this point Gladstone was hoping to establish a permanent service, not an experimental one.
77. The North Sea Aerial Navigation Company had been formed in April, 1919 as a subsidiary of the Blackburn Aeroplane and Motor Company. In October, 1919, the company was re-registered as the North Sea Aerial and General Transport, Limited to operate air services between England and the continent. See Stroud, Annals, pp. 26, 29, 33, 39. In 1924, R. B. Blackburn (1885-1955) took an interest in an African route, probably with the hope of linking such a service ultimately to his proposals for a Greece-Egypt service. From 1924-1938, Blackburn worked with the Greek Government in establishing Greek air services and the Greek National Aircraft factory at Phaleron, near Athens. See Blackburn Aircraft Limited, The Blackburn Story, 1909-1959 (Brough, Yorkshire, 1960), pp. 22-3 and passim.

was agreement in principle that an experimental service should first be run over the route.<sup>78</sup> A DH50 seaplane was ordered as negotiations dragged on between the Colonial Office, the British African Governments, and Gladstone and the Blackburn interests. Not until November 15, 1926 was the DH50 delivered with hopes that the experimental service would begin in January, 1927,<sup>79</sup> and not until November 30 was formal agreement reached among the interested parties.<sup>80</sup>

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78. The Times, April 13, 1925, p. 9. The experimental service was estimated to cost £11,000; with the Sudan, Kenya and Uganda contributions of £7,000, Blackburn was willing to put up the rest. See too Aeroplane, April 15, 1925, p. 366.
79. During this period, Gladstone sought support for his scheme. In December, 1925, he addressed a joint meeting of the East and South Africa sections of the London Chamber of Commerce. He pointed out that he hoped to expand the current proposal into a permanent scheme linking up with an Imperial airship service at Cairo, thus bringing East Africa within six days of London. He anticipated a subsidy of £60,000 per year would be required based on the service carrying half-loads on the average. The meeting endorsed his proposals and sent a supporting resolution to the Colonial Office to pass on to the forthcoming meeting of the East African Governors in Nairobi. The Times, December 19, 1925. An early 1927 start to the experimental service was anticipated by the Air Ministry. Air Ministry, Report on the Progress of Civil Aviation, Cmd. 2844 (1927), p.45.
80. Air Ministry, Report, Cmd. 2844 (1927), p. 45. The agreement called for (1) 12 flights to be made in each direction, (2) a seaplane to be used, (3) the Nile to be followed to Lake Victoria, thence eastward to Kisumu, and (4) the 1,400 mile route was to be flown in two days. It was hoped that initially the service would run at about 12 day intervals until May, with a break in March and April for overhaul. See too, Kenya, Uganda and the Sudan, North Sea Aerial and General Transport Limited. Agreement as to Air Survey between Khartoum and Kisumu. (London, November 30, 1926). In addition, the company was to have a monopoly on the route for five years after the experimental service had terminated.

The 'launching' of the seaplane and its subsequent christening as 'Pelican', generated considerable enthusiasm in many quarters. East Africa published a special Khartoum-Kisumu Airway supplement to mark the occasion and to make public the many messages of support received for the project. <sup>81</sup> Amery wrote;

The launching of the seaplane designed to survey the Khartoum-Kisumu route marks nothing less than a new epoch in the history of communications in tropical Africa... 82.

Sir John Maffey, Governor-General of the Sudan, noted;

The financial contribution made by the Sudan Government to the Khartoum-Kisumu air service is practical evidence of our deep interest in this great experiment.... We turn the first page of a new chapter of the romance of the Nile.... 83

Sir William Gowers, Governor of Uganda and the keenest of Great Britain's 'men on the spot' for air transport development, added;

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81. East Africa. Supplement, December 9, 1926, pp. 350-53. The proposed time-table was published, the first Khartoum to Kisumu flight to commence on January 3, 1927, the first return flight on January 11. Night-stops were planned at Mongalla southbound and Shambe northbound. Among the supporters of the project were Cobham, C. G. Grey, Handley Page, Van Ryneveld, Wakefield, Brancker, and Earl Buxton. For reports on the launching of the 'Pelican', see The Times, November 16, 1926, p. 11, and Flight, November 18, 1926, pp. 749-50.
82. East Africa. Supplement, December 9, 1926, p. 351.
83. Ibid.

I have never assisted in the birth of an infant enterprise in transport in Tropical Africa of the future health and long life of which I felt more confidence than I do in that of the air service between Khartoum and Lake Victoria.... 84

Others were more precise in spelling out their hopes.

Sir Harold Mackinder, Chairman of the Imperial Economic Committee, had made a prophecy, according to East Africa, that "the East African Territories are the natural link airway from Egypt to Australia", and the hope was that this new service would prove this to be the case.<sup>85</sup> Lord Buxton "expressed the hope that, with the rapid development of air transport, he would soon be able to pay a Saturday to Monday visit to Entebbe...." <sup>86</sup>

Neither panegyric prose nor high hopes were sufficient to salvage the service from the disasters which struck it down from the start. On the very first survey flight, Gladstone wrecked the aircraft after striking a submerged object in the Nile.<sup>87</sup> A R.A.F.-loaned machine was likewise

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84. Ibid. William Frederick Gowers (1883-1948) was Governor of Uganda from 1925 to 1932 and thus a major participant in the decisions to establish the British service to the Cape. A fellow East African official enthusiast was Sir Edward Grigg (1879-1955), Governor of Kenya. Gowers, in attendance at the christening of the 'Pelican', was "convinced that civil aviation must come". Quoted in The Times, November 16, 1926, p. 11.

85. East Africa. Supplement, December 9, 1926, pp. 354-55.

86. The Times, December 9, 1926, p. 11.

87. Bennett, Down Africa's Skyways, p. 61. Bennett writes that the first survey flight took place November 26, 1926. This is most unlikely; the 'Pelican' had to be shipped out to Khartoum from England, re-assembled and tested, and there was hardly enough time to do all this after the launching on November 9th. Stroud (Annals, p.70) gives the date of the first crash as January 2, 1927.

lost on Lake Victoria after completing a few flights and the service was suspended until October, 1927.<sup>88</sup> In October two passengers were carried on the resumed service until the once-repaired 'Pelican' crashed for the last time during a test flight at Kisumu.<sup>89</sup> In less than a week, The Times could report that negotiations were under way between Cobham and the Blackburn interests.<sup>90</sup>

88. The R.A.F. machine was a Fairey IIID. Mail was carried from Kisumu to Khartoum and return on several flights. See Foreign Office, Sudan No. 1 (1929), Report on the Finances, Administration and Condition of the Sudan in 1927. Cmd. 3284 (1928-29), p. 60. The G.P.O. had announced that mails for the air service from Cairo to East Africa (the R.A.F. handled the Cairo-Khartoum sector) would be accepted as of March 24, 1927, for a surcharge of 6d. per ounce. The Times, March 4, 1927, p. 16. This second crash on the service, piloted by Oxley Boyle who had come out to Khartoum with Gladstone, did not dismay East African air service supporters. The lead editorial in the East African Standard (March 19, 1927, p. 9) saw the two disasters as "a test of faith", and reminded its readers that this was only an experimental service. The Nairobi Chamber of Commerce re-affirmed its support. Ibid., March 26, 1927, p. 10. Hugo Dunkerley, editor of the East African Farm and Home Journal, wrote to Grey that he remained confident of the ultimate success of Gladstone's efforts, but admitted that the bad luck which they have had has rather shaken the faith of some of the people who do not know the difference between a tail-skid and a prop!
- Quoted in the Aeroplane, April 27, 1927, pp. 458, 460.
89. The 'Pelican' had been repaired at the Blackburn plant in Greece. The two passengers on the flight were Viscount Gage, Permanent Secretary at the India Office, and M. Allard, aeronautical advisor to the Belgian Government enroute to the Congo to advise an extension of Congo air services to Rejaf (Sudan). The third crash brought about an official cancellation of the air mail service. See The Times, October 10 and 18, 1927, pp. 13 and 16.
90. The Times, October 22, 1927, p. 11.

Without question, Cobham had followed the misfortunes of Gladstone with interest if not sympathy. Before setting out on his 'round Africa' tour, he had been interested to develop a Mwanza-Bulawayo line to connect with the Khartoum-Kisumu service, but circumstances now appeared to favour a grander design to link Cairo to Bulawayo, and possibly South Africa, a design of which Cobham could be a major part. Clearly, Gladstone and the Blackburn interests were in major difficulties; costs for the experimental Khartoum-Kisumu service had already exceeded estimates, only five of the 24 flights called for in the agreement had been completed, and there seemed little chance that operations could proceed without some outside assistance.<sup>91</sup> As well, there was a general reluctance on the part of the British African Governments to entertain any further proposals by Gladstone and company until a more thorough study of East African air

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91. AVIA 2/1857, Note of a Meeting held at the Colonial Office on Friday the 10th June to discuss the working of the Khartoum-Kisumu Air Route. This meeting, some four months before the last crash of the 'Pelican', brought out the bad news that already close to £13,000 had been spent. Kenya, Uganda and Tanganyika all agreed to provide up to £1,000 each for completion of the survey, although under no obligation to do so, Sir Edward Grigg pointing out that "having already spent considerable sums" the project should be completed, as this would at any rate, "keep the matter alive pending consideration of the grant ultimately of a subsidy for the permanent service". The October crash decided the fate of the Blackburn efforts in Africa; further financial support from the African Governments was out of the question, so Blackburn turned to Cobham in the hope that his influence might keep East African interest alive.

Sir Alan Cobham's Route: 22,000 Miles on 'Round Africa' Flight in an All-Metal Short Singapore Rolls Royce Flying Boat, November 17, 1927 - June 11, 1928. Flight included a 2,000 mile air circuit of Great Britain.



Source: Souvenir Programme Menu of Dinner to Sir Alan & Lady Cobham and the Members of the Flight of Survey Round Africa. Savoy Hotel, London, June 19, 1928.

transport requirements and possibilities had been made. By late 1927, the Air Ministry, the Colonial Office, and the British East African Governments were beginning to think beyond Gladstone's ideas for a Cairo to Kisumu, or possibly Mwanza, service, and were looking at the idea of a through service to the Cape.<sup>92</sup> At the same time, aviation enthusiasm and an expansion in local air activity, combined with Gladstone's efforts, had promoted great interest in air transport, particularly in Kenya. The moment was never more opportune for Cobham to arrive on his 'Round Africa' flight.<sup>93</sup>

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92. Ibid. The 1927 Colonial Office Conference and the above-noted June meeting at the Colonial Office had already discussed the question of sending out an Air Ministry 'expert', possibly Colonel Edwards, to report on aviation matters in East Africa. On December 1, F. Tymms, Air Ministry Superintendent was instructed "to proceed as soon as possible by the Nile route so as to make yourself acquainted with the local conditions". Air Ministry Order 769468/27/J.D.C.A., 1 Dec. 1927 cited in AIR 5/1424, 'Civil Aviation in East Africa. Report on Investigation, 1928' [Tymms Report], p. 3. At the same time, all parties concerned "looked for an early extension to the south to link up with Rhodesia and the Union of South Africa". Grigg quoted in ibid., p. 325.
93. Tymms and Cobham arrived in East Africa about the same time. The Tymms Report noted that in early 1928 there were six aeroplanes and five licensed pilots in Kenya (p. 312). The growth of air enthusiasm was noted in the Air Ministry, Report on the Progress of Civil Aviation, 1927, p. 54. See too AVIA 2/296, Kenya - Commercial Aviation. Suggestion to establish Air Routes and for Light Aeroplane Club, 15.3.27-, and chapter V for discussion.

In early February, Cobham and Gladstone co-operated to develop a joint proposal for an Alexandria-Mwanza air service, Cobham first flying three return flights over the Khartoum-Kisumu section to complete the original North Sea Aerial undertaking.<sup>94</sup> In Nairobi, Cobham presented the air transport proposal to the East African Governors' Conference then sitting, and to the Hilton Young Commission.<sup>95</sup> The scheme called for a weekly Alexandria-Mwanza service requiring an annual subsidy of £130,000 employing multi-engined landplanes throughout.<sup>96</sup> The proposal did not pass without some serious criticism, but Kenya agreed to

94. The Times, February 15, 1928, p. 13. On one of these flights, Cobham carried two American women passengers between Khartoum and Mongalla, the "first persons to take part in a non-stop commercial passenger flight across that part of Africa". Reported in the New York Times, April 10, 1928, p. 31. Cobham-Blackburn Air Lines Limited grew out of this co-operative venture. It was incorporated April 24, 1928 with a nominal capital of £1,000, divided into 1,000 £1 shares of which only two were issued. The Directors were Cobham, Gladstone, Blackburn, and C. E. Ward. See AIR 2/340, enclosure, for details.
95. AIR 5/1424. Tymms Report, pp. 4, 39. The Times, February 20, 1928, p. 11.
96. AVIA 2/351, Kenya. Civil Aviation, 1928, enclosure. Cobham had not given up the idea that seaplanes would be better on the Cairo-Khartoum sector, but the proposal was attempting to reduce capital and servicing costs by employing one type of aircraft for the whole route. See Tymms Report, pp. 47-8. Blackburn must have agreed with Cobham in presentation of the joint proposal, but it laid to rest development plans for the Blackburn Nile Flying Boat, a commercial version of the Blackburn 'Sydney'.

contribute £15,000 per year for five years, Uganda, £10,000 per year for the same term, and Tanganyika, £10,000 per year if assurance could be made that the air line would extend to Mwanza or Dodoma, or some other point on the rail line. <sup>97</sup>

The Sudan, on the other hand, had to be persuaded that it would benefit from the establishment of civil aviation, before Sir George Schuster promised a £6,000 per year contribution. <sup>98</sup> The Sudanese objections were several. The history of the experimental service had been most disappointing, and the Sudan Government wanted to satisfy itself as to the standing and capacity of the operating

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97. The main general criticism was that the proposal was very vague as to details of capital and other expenditures, and Cobham was urged to submit a revised proposal. AIR 5/1424. Tymms Report, p. 39. A meeting in Nairobi, February 17, brought about agreement in principle on the Kenyan and Ugandan contributions, and Sir Donald Cameron in Tanganyika agreed to conditional support on March 8. AVIA 2/351, enclosure, Report of Nairobi meeting. See Norman Macmillan, Great Airmen (London, 1955), p. 166, in which he incorrectly details the financial support promised to the Cobham-Blackburn company; he states that Kenya offered £2,000 per year, Tanganyika £15,000, and Egypt £16,000 per year for five years. These figures appear in an otherwise good profile of Cobham, "Trailblazer for Airlines", pp. 157-75.

98. Schuster (1881- ) was acting as financial advisor to the Sudan. His major office was as Economic and Financial Advisor to the Secretary of State for the Colonies (1927-1928), and in that capacity he was active in all African air negotiations during this period. He was also a member of the important Hilton Young Commission on closer union in East Africa, 1928. The 'promise' of £6,000 from the Sudan was later reduced to a statement that "the Sudan Government might possibly consent to provide £5,000 a year,..". AVIA 2/1857, East African Air Service, Note of a Meeting held at the Colonial Office, May 31, 1928, p. 5.

company. It questioned the wisdom of the idea that the company should be allowed a 10% profit. And it noted that the Sudan would benefit least from the service as the time-saving would be less and there was but a limited amount of traffic in mails or passengers which could bear the extra transport costs involved in using an air service.<sup>99</sup> In addition, the Cobham proposals required a major investment in ground facilities and organization, of which the Sudan share alone was estimated by Tymms to be £21,000.<sup>100</sup>

It was evident that the East African and Sudanese subsidy contributions fell far short of Cobham's requested £130,000, a figure which the Air Ministry agreed was "not capable of substantial reduction".<sup>101</sup> Even an Air Ministry contribution of £30,000 per year left the proposal disastrously short of the required support.<sup>102</sup> At this point, there was little possibility of the Cobham-Blackburn company continuing with the project as it stood, although Cobham could still expand the proposal to include the route from Mwanza to the Cape and perhaps with the additional subsidies and traffic from the south produce a scheme that would be economically viable.<sup>103</sup>

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99. Tymms Report, p. 41. Tymms pointed out that a 'profit' was necessary in order to attract capital, and ultimately persuaded the Sudan that it would benefit from civil aviation. In terms of expenditure on development, the Sudan was reluctant to commit itself further "until the full results of the Gezira scheme can be more clearly seen".

100. Ibid., p. 40. Estimates elsewhere were Egypt, £12,000, Uganda, £5,500, Kenya, £12,800, and Tanganyika, £2,700.

101. AVIA 2/1857. Note of meeting, May 31, pp. 2-3.

102. Ibid., p. 2.

103. Ibid., p. 3.

In late February, Cobham continued southward on the 'Round Africa' flight, searching, as he had in 1926, for an acceptable routing through the difficult country of Central Africa. From Kisumu, Cobham flew the 'Singapore' to Mwanza, then over land to Lake Tanganyika (Ujiji), down the lake to Mpulunga, and then eastward to Vua and Fort Johnson on Nyasa Lake, a route quite different from the one he had followed in 1926.<sup>104</sup> From Zomba, he wrote at length to Gladstone, happily reporting that "Governor Sir Charles Bowring has taken deep interest in our scheme", but while there is general support throughout Nyasaland Colony, there is little money available.<sup>105</sup> Regarding the route from Kisumu, Cobham wrote,

It is pretty evident now from all the interviews that I have had with various folk that the best line for our route will be via Nairobi through Tanganyika to Rungwe, and from there to an aerodrome which will be found more or less on the shores of the Nyasa Lake, in the region of Nkata Bay. This is a good harbour where fuel could be landed, and I understand that the main road is going to run through to this place. From thence to Fort Johnson and from there to an aerodrome which will be found on the west of the road between Blantyre and Matope. It is too great a distance to fly from Rungwe to Fort Johnson non-stop, and it is anticipated that there will be great business between Southern Nyasaland and Salisbury and Rhodesia. 106

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104. See map, p. 193.

105. AVIA 2/314, Civil Aviation in East Africa, Reports by Mr. F. Tymms on his African Tour, 26.1.28-. Enclosure Cobham to Gladstone, March 2, 1928. Governor Bowring (1872-1945) promised to cable to England "their willingness to support the scheme in every way", and requested that Tymms extend his study to Nyasaland.

106. Ibid.

Cobham expected big development in the region of Fort Jameson, so argued for the route to leave Nyasa Lake, head to Fort Jameson, thence to Matope, Salisbury (and perhaps the railway head at Shamva), and Bulawayo.<sup>107</sup> Although following a flying boat route himself, Cobham was not clear as to whether a seaplane or landplane service was being considered, but it would appear that he was holding to the multi-engined landplane service he had proposed for the Alexandria-Kisumu sector.<sup>108</sup>

From Nyasaland, Cobham proceeded overland to Beira, then southward via Lourenco Marques to Durban. Here the 'Singapore' had its first major overhaul of the flight, and from here Cobham flew to Johannesburg, Bulawayo, Salisbury and Livingstone to survey the various routes

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107. Ibid. On this routing, the important Broken Hill area would have to be served by a 'feeder' air service.
108. From the evidence, Cobham appears to have changed his mind several times as to whether landplanes or flying boats could best serve the African route needs. On the Nile route he had argued for seaplanes at first, then landplanes in his formal proposal for a service, and back in England after the 'Round Africa' flight, it was reported that he was submitting costs estimates to the Air Ministry, and British aircraft manufacturers were being asked for estimates for a three engine flying boat, capable of 120 m.p.h. at 14,000 feet with a 4½ hour endurance. The Times, July 26, 1928, p. 9. As Imperial Airways discovered, as aircraft increased in size, weight, and therefore required larger and stronger runways on land, capital costs and maintenance could be reduced by using flying boats and natural water runways. The landplane-seaplane controversy lasted almost a decade. See chapters IV and IX for Imperial Airways African operations.

and to discuss air matters with officials and supporters. <sup>109</sup>  
 As well, Cobham was staking a claim for the Cobham-Blackburn company with which Imperial Airways would have to deal when the time came to establish the Cairo-Cape Town route. <sup>110</sup>

From Durban, Cobham proceeded to Cape Town, the terminal point of the projected African Airways Johannesburg route and the larger Cobham dream of a through route from Cairo or Alexandria. <sup>111</sup> From Cape Town, Cobham turned

109. "Round Africa with Cobham", p. 6. Neither the Northern nor Southern Rhodesian governments made any firm commitments at this time, although the latter was prepared to follow Kenya's lead. Cobham was visiting at an opportune time as a growing interest in civil aviation was developing in the Rhodesias, especially at Bulawayo. See J. McAdam, "Birth of an Airline", typescript in possession of writer, pp. 2-6.
110. By early 1929, a letter in the Bulawayo Chronicle (January 24) noted that the Rhodesian Aviation Syndicate would be absorbed by a new company, the Rhodesian Aviation Company, to be affiliated with Cobham-Blackburn Air Lines who have a "large interest" in the new concern. See chapter VI for discussion. As in East Africa, Imperial Airways were then compelled to negotiate air rights with Cobham-Blackburn in developing the Cairo-Cape Town route. Agreement was reached in February, 1929, with the Cobham-Blackburn company surrendering the bulk of its claim. See BOAC, I.A. file No. 88, Cobham-Blackburn Air Lines Limited - Company Matters, 1928-33, Memorandum Woods Humphrey to Geddes, April 14, 1930, for details.
111. Cobham still had hopes of developing the 'all-red route' as a Cobham-Blackburn enterprise. In addition to seeking financial support from the African governments en route, he hoped to persuade Union Castle Steamship Line to participate in the scheme. The latter could have provided Cobham's airline with a firm base in Cape Town, an established network of booking facilities, traffic experience and reputation. Union Castle rejected the opportunity. Cobham interview with writer, January 2, 1970. See also MacMillan, Great Airmen, pp. 166ff.

north to follow the coast to Nigeria. He described the route for Gaumont;

For hundreds of miles, this dried-up coastline is uninhabited, waterless and treeless, a desert of sand dunes wherein lie hidden untold quantities of diamonds - the big diamond field, the discovery of which has been recently reported in the Press. The endless surf offered no refuge on this cruel coastline. We made a temporary landing at Luderitz - an artificial township where fresh water is 6d. a gallon, plant life is unknown, and the only products are fish and diamonds - and then we came, after 1,700 miles of desolation, to the first sign of vegetation at Porto Alexander,... 112

Continuing northward, Cobham arrived in Lagos in April, after following what he described as "that perfect paradise for flying boats, the coastline of Nigeria".<sup>113</sup> This was the first of many West African 'surprises' for Cobham as he flew a route which took the 'Singapore' to Takoradi, Bingerville (Abidjan), Freetown, Bathurst and northward to home, carefully studying the route and the prospects for air transport development in order to formulate proposals for air services in the British West African Colonies. "We had speculated much", he later wrote,

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111. (continued) thus not following precedents of interest shown by steamship companies in Australia, for example, nor anticipating later civil aviation interest by Elder Dempster and the French line, Chargeur Réunis, in West Africa. See chapter X for Elder's West African air line operation. British shipping lines become more interested in air line activity in the mid-thirties, especially on the projected trans-Atlantic routes. See AVIA 2/1965, Shipping Companies in Relation to Imperial Airways, Limited, 1936.

112. "Round Africa with Cobham", p. 9.

113. The Times, April 12, 1928, p. 11. Cobham was impressed by the many sheltered lagoons which mark the Nigerian coastline, perfectly suited for flying boat operation.

as to the conditions that we would encounter along the West Coast. We had heard terrible tales about an awful climate, and hardships that we should have to encounter. We were told that our engines would boil and that our machine would never fly owing to the trying atmospheric conditions. We were given to understand that there was little or no shelter from the permanent rollers, and that to fly along the West Coast during a tornado, or worse still during the rainy season, was simply asking for trouble. 114

Here, as elsewhere in Africa, Cobham was able to destroy at least some of the fearful myths about a continent still 'dark' to many. <sup>115</sup> Despite an unexpected mechanical delay in the Ivory Coast and metal corrosion problems, flight along the West Coast of Africa proved no more trying for Cobham and the flying boat than conditions elsewhere.

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114. Alan Cobham, "My Flight around Africa", Elder Dempster Magazine, VII (October, 1928), 84.

115. Many of these 'myths' concerned the weather and general climate of West Africa, long-thought to be unhealthy for Europeans and a decided deterrent to settlement. As late as 1932, a pilot who had visited the British West African colonies noted seriously;

Topees must be worn after 8 a.m. until 1600 hours....The sun must be respected all the time. It is the greatest enemy of mankind on the west coast and three minutes in the sun without a topee is the equivalent to a hit on the head with a 20 lb. hammer.

W. G. Pudney, "Flying Conditions on the West Coast of Africa". Advance proof of lecture to the Royal Aeronautical Society (London), October 20, 1932, in Ghana National Archives (hereinafter GNA), Gold Coast file, C.S.O. 1758/30, - Visits of Aircraft (other than R.A.F.) to the Gold Coast, 30.9.30 - 18.7.39, encl. 3. Extracts in Flight, October 27, 1932, pp. 1001-03. In 1920, another pilot had noted that flying could be attempted only in the early morning and evening because the mid-day sun

Cobham left West Africa in a mood of enthusiasm, and on return to England, even envisaged an air line route which would circumnavigate the African continent.<sup>116</sup> But his main focus of concern was for aviation development in the four British West African Colonies, which, with the exception of the biennial R.A.F. flights to Nigeria, had thus far been ignored in Imperial air policy thinking.<sup>117</sup> Cobham believed that both the traffic and the need were there and must be exploited, hopefully by Alan Cobham Aviation Limited.<sup>118</sup>

Cobham's proposals for air transport development in West Africa were prepared during the summer and autumn of 1928, and in December and January, 1929, they were submitted

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115. (continued) causes air disturbances so great that flying not only becomes most arduous and dangerous, but the strain put on the machine is so great that she has to be re-rigged after every flight,...
- In addition, he pointed out that no flying could take place for two months of the rainy season nor for the three months of the Harmattan. GNA, Accession No. 2548/58, S/L Wood's Report on Possibilities of Aviation in the Gold Coast Colony, Ashanti and Northern Territories, M.P. 17215/20, September, 1920.
116. The Times, June 30, 1928, p. 11. Cobham was addressing the Forum Club, and he argued that there was plenty of traffic available and the air line could be in operation in three years.
117. Neither the 1925 nor the 1927 R.A.F. West African flights had flown beyond Nigeria, although one later flight flew as far west as Bathurst. See chapter VIII for more detailed discussion on R.A.F. flights in West Africa.
118. It should be noted that in West Africa, Cobham was acting on behalf of Alan Cobham Aviation Limited, not Cobham/Blackburn, a partnership only active in East and Central Africa.

to the four Colonies and the Colonial Office.<sup>119</sup> In the case of Nigeria and the Gold Coast, these were the first serious proposals since the Woods Report in 1920; for Sierra Leone and the Gambia, they were for the first time included in an aviation development scheme.<sup>120</sup> In all four cases, Cobham was proposing the development of internal air services with potential expansion of operations into an inter-Colonial air service, and therein lay a problem for Cobham's plans as the Colonies were primarily interested at this stage in an Imperial connection with Great Britain.<sup>121</sup>

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119. AVIA 2/401, Proposals for Experimental Air Service in British West African Colonies. Alan Cobham Aviation Ltd., 1929. C. E. Ward (Cobham Aviation) to Colonial Secretaries, Gambia, December 21, 1928, Sierra Leone, January 1, 1929, Gold Coast, January 3, 1929, and Nigeria, January 3, 1929.
120. In 1923-24, the Aircraft Operating Company submitted proposals to the Nigerian Government only for an air survey costing about £250,000. No action was taken on the proposal. At the same time as the Cobham proposals were being submitted, the Aircraft Operating Company had put forward another proposal for a Nigerian operation, and L.H.G. Walford of Walford Lines Limited had approached the Air Ministry with a proposal to develop a West Coast service from Dakar to Johannesburg or Cape Town for an annual subsidy of £273,000. AVIA 2/401. 'Aviation in West Africa'. Notes for Meeting at Air Ministry, September 18, 1929, pp. 1-2. The Cobham and Walford proposals both included Sierra Leone and the Gambia.
121. AVIA 2/401. Enclosure, Sir Edward Denham (Governor of the Gambia) to Lord Passfield (Secretary of State for the Colonies), July 31, 1929. "This Colony is anxious to come into any Imperial scheme for developing the use of aircraft and to combine with the other West African Colonies in the matter". S. B. Gosling, (Postmaster-General of the Gold Coast) wrote that air development might be worth while if all of British West Africa used a service connecting with the French Dakar-Toulouse air mail service, but otherwise there was

What Cobham was proposing was unquestionably more practical given the slim financial resources of the Colonies and the priorities which the British Government had established in the laying down of Imperial air routes. Basically, Cobham argued that the Colonies should support not only an air transport network of services, but a complete air organization which would do air survey, air taxi, Government charter, training and air transport work. Alan Cobham Aviation would require a monopoly status with certain guarantees from the Governments that air work from all potential sources of revenue would be directed to the company.<sup>122</sup> Cobham did not request subsidy support, but asked each West African Government to post a bond, in effect a guarantee that the company would receive payment for a predetermined number

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121. (continued) little traffic to warrant the costs for "local or inter-Colonial mails". Ibid., Gosling to Colonial Secretary, Gold Coast, February 26, 1929. A more widely held view in Government circles was that aviation was interesting, even exciting, but too costly for the Colonies to entertain proposals at the time, even for local services. As the Governor of Sierra Leone pointed out, "Our immediate paramount need is not super-rapid communication by aeroplane but motor road communication...We require all our resources to push on with this important work...". Ibid., Sir Joseph Byrne to Amery, February 9, 1929.
122. AVIA 2/401. The Cobham proposals are detailed in the Ward-Colonial Secretaries' correspondence of December-January, and summarized in Tymms to F.G.L. Bertram (Deputy Director of Civil Aviation, Air Ministry), minute 3A, 'Proposals by Alan Cobham Aviation Ltd. and Aircraft Operating Co. Ltd. for Air Surveys in West Africa', May 7, 1929.

of flying hours per year. <sup>123</sup> Initially, two Hawk Moth seaplanes would be employed in Nigeria, two Moth aeroplanes in the Gold Coast, one Moth aeroplane in Sierra Leone, and one Moth seaplane in the Gambia, a total of seven aircraft which would fly 1,933 hours per year, supported by a total annual bond of £27,000. <sup>124</sup>

The West African response to the Cobham proposals was disappointing. Nigeria, while setting aside £3,000 in the Annual Estimates for civil aviation, preferred to defer any decision until the Air Ministry studied the situation; the Gold Coast was prepared to co-operate with "any agreed scheme for a West African air mail service" but would not agree to contribute £8,000 "in the absence of weighty military or Imperial reasons"; Sierra Leone would only

123. Ibid. Cobham wanted a five year agreement in each Colony, and argued that the scheme could be self-supporting. In his proposal letter to Nigeria, Ward noted that "this company could operate 45,000 miles (500 flying hours) per annum at a cost of £9,000, and provided the Government could guarantee that the company would receive work from all sources to earn this total, the enterprise would pay its way". Almost identical language was used in the correspondence with the Gold Coast, Sierra Leone and the Gambia.
124. In addition to Nigeria, the bonds requested were £8,000 for 500 hours flying in the Gold Coast, £6,000 and 600 hours in Sierra Leone, and £4,000 and 333 hours in the Gambia. Ibid., Tymms' Minute, May 7, 1929. See also The Times, British West Africa Number, October 30, 1928, p. xvii, article by Cobham, "Aviation and the Future". The Air Ministry agreed to the estimate figures, but pointed out that no provision had been made for ground organization and facilities, nor the cost of acquiring and clearing land for aerodromes. AVIA 2/401. Tymms to Bertram, May 7, 1929.

contribute £1,000 "and this mainly for military purposes"; and the Governor of the Gambia felt nothing could be done in the Gambia alone but was "anxious however to participate in any Imperial scheme and finds it regrettable that all the West African Colonies do not combine to organise an air service". <sup>125</sup>

With the general rejection of his proposals, Cobham's work in West Africa was at an end. As with his labours in East Africa, Cobham's proposals appeared to act as a catalyst to activate Air Ministry and Colonial Office response. Their submission was indeed opportune for the proposals came at a time of growing British Government concern with French air activities in West Africa. Cobham's demonstration that flying was a feasible proposition in West Africa was partly responsible for the Air Ministry decision to extend the 1929 West African flight to the Gold Coast and to despatch an officer to survey possible landing sites at Accra, Tamale and Kumasi. <sup>126</sup> Flight Lieutenant Gayford's report underlined local concern with British inactivity to date;

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125. Ibid., 'Aviation in West Africa'. Notes, pp. 3-4.

126. GNA, Accession No. 3197/58, Royal Air Force - Visit to the Gold Coast, 1929. Enclosure. See also Accession No. 3182/58, Air Service in the Gold Coast: Proposals (Alan Cobham Aviation Ltd.), CO despatch to Governor, June 25, 1929, noting preparations for Gayford's visit and 1929 R.A.F. flight.

In all Colonies I was conscious of great confusion which existed in the minds of residents, official and unofficial, as to the difference between Service and Civil Aviation, and most people imagined that I was there to inaugurate a Civil Air Line to England. Great resentment was expressed on the subject of the almost total non-appearance of British aircraft and adverse comment was made on the fact that in most places the only aircraft seen had been French, Spanish or Portuguese. 127

Cobham had argued that all the Colonies occupied a strategic position with regard to Imperial military policy, in fact this was one of the strongest arguments put forward for establishing air organizations in the several Colonies.<sup>128</sup> At a meeting of Air Ministry and Colonial Office officials in September, 1929, held to discuss the Cobham proposals, the meeting was agreed

as to the necessity for air communications being established by British interests as early as possible within and to [my italics] our West African Colonies particularly in view of French activities in that region. 129

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127. AVIA 2/401. Extract from A.M. file S.24487, 'Tour of West African Colonies' by F/L Gayford, n.d.
128. Ibid. For example, Ward to Colonial Secretary, Nigeria, January 3, 1929. "Nigeria occupies an important strategic position on the West Coast, and for the purpose of defence alone it would appear desirable to have the use of aircraft in an emergency,..."
129. Ibid. Enclosure 19A. Notes of a Meeting held 18th September, 1929.

In the light of the new interest in aviation in British West Africa, the meeting decided to act upon a Nigerian request to send out an Air Ministry representative to study West African conditions and report on air requirements.<sup>130</sup> As a second step in developing West African aviation, in 1930 the Air Ministry then called for tenders of the estimated costs of running an inter-Colonial service to link with the French air mail line at Dakar. In all, five British companies were asked for estimates, including Alan Cobham Aviation, but in the absence of Imperial financial support, the story for the moment ends at that point.<sup>131</sup>

It is quite clear that Cobham never pursued his interest in West Africa to the extent he did along the Cape route, possibly because he was more interested in developing large-scale air line operations than local air organizations, and he had concluded that a Bathurst-Nigeria line "had little

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130. Ibid. The Air Ministry representative was W. A. Campbell, whose report will be discussed in chapter VIII.

131. Ibid. Minute 50A, W. A. Campbell (C.A.4, AM) to Bertram, January 11, 1930. Enclosure 53A, AM letter to Alan Cobham Aviation, January 17, 1930. Tenders were also asked of National Flying Services, Imperial Airways Ltd., Aircraft Operating Company, Ltd., and Air Survey Co. Ltd. Estimates were asked for a weekly return service Dakar-Bathurst-Bolama-Freetown-Port Robert-Cestos River-Grand Bassam-Takoradi-Adda-Lagos-Forcados by seaplane with a 600 lb. payload, and an aeroplane feeder service, Lokoja-Kaduna-Kano. See chapter VIII for subsequent developments in West Africa.

chance of success at the present time from a commercial point of view".<sup>132</sup> He never staked any strong claims in West Africa, and, indeed, upon his return to Great Britain from the 'Round Africa' flight, East and Central Africa once more received the larger part of his interest and enthusiasm. The urgency of establishing the Cairo-Cape Town route was the main thrust of a speech in July, 1928, to the British Empire League, a speech which won enthusiastic response and recommendations of support for Cobham addressed to the British Government.<sup>133</sup> Writing in Air, Cobham pleaded for Great Britain to act in Africa before others did, and he called for a subsidy of £1,000,000 spread over five years, "¼ the price of a battleship".<sup>134</sup> However,

132. GNA. Acc. No. 3182/58. Enclosure CSO 13294, December 12, 1928, Cobham to Colonial Secretary, Gold Coast, August 1, 1928.
133. Cobham, "Africa 'All-Red' Flying Route", British Empire Review, XXIV (September, 1928), pp. 236-41. Among the several aviation recommendations made by the League was that "all assistance should be given to Sir Alan Cobham in materializing his scheme for an 'all-red' flying route round and through Africa, and that for this purpose His Majesty's Government might well be urged to subsidise this Air Line". See too editorial support in The Times, July 26, 1928, p. 9.
134. Cobham, "Britain's Opportunity in Africa", Air, I (July, 1928), pp. 25-6. The editor of Air was Brigadier General P.R.C. Groves, a constant critic of the state of British and Imperial aviation, both military and civil. See, for example, his "The Air Situation", Air, I (December, 1927), pp. 7-10, and "The Influence of Aviation on International Relations", Journal of the Royal Institute of International Affairs, VI (May, 1927), pp. 133-52.

even as Cobham was arguing for British action in Africa, the Air Ministry and Imperial Airways had received the British Government go-ahead to proceed with the Cairo-Cape Town route development, and negotiations with Cobham-Blackburn Air Lines and the African administrations began.<sup>135</sup>

With the British Government decision to stand by its commitment to Imperial Airways, the Cobham-Blackburn hopes of developing the Alexandria-Kisumu-Bulawayo route were at an end, but they were not prepared to retreat from the scene quietly. Imperial Airways and the Air Ministry both were pressed into hard and lengthy negotiations as to the terms of the 'take-over'. Hoare appointed Sir Herbert Hambling to chair the settlement proceedings, while Sir Harold Howett, a London chartered accountant represented the Cobham-Blackburn interests. The two negotiators were old friends, a factor which suggested the settlement might be reached amicably. Hambling's opening statement to the first meeting of the interested parties likewise suggested that the Cobham interests would receive a fair deal for their surrender of exclusive rights along the route. "Gentlemen", he remarked, "there is only one way to settle this. That is for those who take over to behave generously".<sup>136</sup>

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135. See above, chapter II, and below, chapter IV, for discussion of negotiations with the African Governments concerned. See too AVIA 2/422, African Air Route Negotiations with Dominion and Colonial Authorities, 21.6.29-.

136. Quoted in MacMillan, Great Airmen, p. 166. Sir Samuel Instone acted on behalf of Imperial Airways.

The Air Ministry, in support of Imperial Airways, was less convinced of the need to be generous. In a note to the Dominions Office, the Permanent Secretary, C. L. Bullock, pointed out that,

We are anxious that Cobham shall get a square deal, but I am bound to say that in my personal view he and those associated with him are inclined to assess their pioneer work and the value of the good will they have acquired on the African route somewhat on the high side. For example, the Khartoum-Kisumu service was as you know a complete failure.... Again, there is no patent (so to say) in this African project, but the Cape to Cairo service has been envisaged by everybody who has ever attempted to think out Imperial air routes from the very earliest days of civil aviation. 137

Bullock made no attempt to disguise his marked partiality for Imperial Airways <sup>138</sup> and he was especially antagonistic to the Cobham group. Early in 1929, in a 10 page brief to the Secretary of State, Bullock complained that,

Imperial Airways have been the victims from time to time of a campaign of misrepresentation by would-be competitors. For example, Cobham and others associated with him in Blackburn Cobham Air Lines [sic] assiduously spread prejudiced reports amongst Members of Parliament on all sides of the House at the time when his company was in competition with Imperial Airways for the contract for the African services. 139

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137. AVIA 2/1857, Christopher Lloyd Bullock to J.A.P. Edgcumbe (Dominions Office), November 5, 1928. This AM file contains a great deal of the AM-Cobham-Blackburn correspondence dealing with the African route.
138. See his general review of air policy and relations of the AM to Imperial Airways in AIR 19/137, British Civil Aviation Policy and Imperial Airways. Some Facts, 1929.
139. Ibid. He noted that Handley Page had been attacking Imperial Airways as well.

No doubt Cobham had been at work to rally support for the Cobham-Blackburn claims in Africa even in the face of Government determination to see Imperial Airways monopolize the Cape route. But, there is equally no doubt that Imperial Airways had done the same thing only its efforts were rewarded with success. Bullock's views, if they can be taken as being fairly representative of the Air Ministry attitude towards the Cobham-Blackburn group, were hardly 'fair' considering that but a year before, and in the absence of Imperial Airways interest in Africa, Cobham's work was followed with keen appreciation, and Brancker was advocating British support to ward off French and Belgian ambitions on the route to Cape Town. <sup>140</sup>

By December, 1928, Imperial Airways was able to report to the Air Ministry that negotiations with Cobham-Blackburn Air Lines were successful, and in February, 1929, a formal agreement was reached. <sup>141</sup> The principle features of the 'Hambling Settlement' were (1) that a new company be formed called Imperial Airways (Africa) Limited, with £100,000 capital; (2) the new Company was to have 50,847 preferred ordinary shares subscribed in cash by Imperial Airways, 28,853 preferred ordinary shares subscribed in cash by Cobham-Blackburn, and 20,000 preferred ordinary shares

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140. AIR 2/322, Enclosure. Brancker to Sassoon, August 12, 1927.

141. See comment in The Times, December 6, 1928, p. 21. Also AVIA 2/422. Enclosure. Cobham-Blackburn/Imperial Airways Agreement, February, 1929.

given to Cobham-Blackburn in consideration, with all these shares limited to a maximum dividend of 10%; (3) 300 deferred shares were issued equally to Cobham-Blackburn and Imperial Airways to take company profits after the 10% paid out on the preferred ordinary shares, but there was as well a provision for the Air Ministry to share in the profits after the 10% was paid out; (4) additional capital required was to be provided by Imperial Airways taking out 8% debentures; (5) the new Company was to have six directors, three from each party, and as Cobham-Blackburn Air Lines had four, two nominated by Cobham and two by Blackburn and Gladstone, Cobham agreed to drop one nomination in return for £2,000 compensation to be paid by Blackburn. Directors were to be paid £500 per year; and (6) in addition, Imperial Airways was to pay Cobham-Blackburn £10,000 in cash, £4,000 to Cobham and £6,000 to Blackburn and Gladstone. <sup>142</sup>

In all, it was a reasonable settlement for all parties concerned, although from the Cobham point of view it must have represented a poor, albeit financially rewarding,

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142. BOAC. I.A. file No. 88, memorandum Woods Humphrey to Geddes, April 14, 1930. In negotiations of the Directors' contracts, Cobham, as a new Director, reluctantly gave up his right to give lectures as Imperial Airways argued that this would mean taking away time from his primary job. In retrospect, this would appear to be an attempt to prevent Cobham from any further promotion of his own ambitions in Africa. In summary, Cobham-Blackburn Air Lines received the equivalent of £30,000 for their 'rights' on the Cape Town route.

compromise between his ambitions and the need for capital support. The result was his surrender of any control or management of the proposed air route development.<sup>143</sup> The terms were sufficiently weighted to the advantage of Imperial Airways that by 1930, Cobham, Blackburn and Gladstone readily agreed to sell their interests in Imperial Airways (Africa) Limited to the parent company in return for £24,750 cash and £25,000 in £1 shares in Imperial Airways.<sup>144</sup>

The proceedings of the negotiations from beginning to end were carried out in a straightforward businesslike manner, but they did not dissuade some detractors of Imperial Airways, especially in East Africa where there had been considerable support for Gladstone and Cobham, from voicing concern over its undisguised monopolistic ambitions. Bullock noted that in Kenya particularly, "there is a disposition to grumble at what is styled an 'Imperial Monopolistic concern'",<sup>145</sup> grumbling which expressed the fears of some local interests as much as it saw the Cobham-

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143. As Woods Humphrey pointed out, "it is set out in several places, and in unmistakable terms, that Imperial Airways are to have the complete control and management of the line". AVIA 2/422. Enclosure. Woods Humphrey to Sir Sigmund Dannreuther (A.M.), May 30, 1930.
144. BOAC. I.A. file No. 88, Woods Humphrey memorandum, April 14, 1930, and brief to Geddes, August 6, 1930.
145. AVIA 2/422. Enclosure. Bullock to Geddes, June 6, 1930.

Blackburn 'take-over' as a ruthless display of air imperialism.<sup>146</sup> In a letter to the Air Ministry, Woods Humphrey shrugged off the matter while disclaiming any monopoly intentions other than those necessary to assure the success of the Cairo-Cape Town air route. "I believe that in some quarters", he admitted,

it is thought that, by some mystic power of monopoly (which probably the same misguided people imagine we have), Imperial Airways has shamelessly squeezed those interests out of their just dues for the pioneer work which they carried out. 147

Woods Humphrey went on to stress the Imperial Airways position;

I have had many discussions with you on the subject of unified control [my italics] ...it will be clear to you that that is the reason for our making it beyond any shadow of a doubt in our Agreement with Cobham-Blackburn that Imperial Airways have the complete control and management of the line. 148

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146. At least some of this 'anti-Imperial Airways' expression in Kenya came from promoters of internal air transport schemes like Guest and his National Flying Services and L. Mansfield Robinson and British East African Airways. The Kenya Government wanted a seat on the Board of the new company to assure Kenyan interests were being taken into account. See AVIA 2/422. Dannreuther to Under-Secretary of State for the Colonies, July 28, 1930. A fuller discussion of Kenyan attitudes to air transport development will be found in chapter V.
147. AVIA 2/422. Woods Humphrey to Dannreuther, May 30, 1930.
148. Ibid.

From the outset of the Imperial Airways/Cobham-Blackburn negotiations, the Air Ministry certainly supported the 'chosen instrument', but how the two companies arranged matters was of less concern than the urgency of some action being taken on the route. Bullock complained that both of the air transport interests had been "so dilatory" and that until such time as a definite proposal came from Imperial Airways "and/or the Blackburn-Cobham interests", the whole question of inaugurating a Cape service was being held in abeyance. <sup>149</sup> Hoare regarded the delay in the receipt of Imperial Airways proposals as "most unfortunate" and queried the lengthy negotiations with Cobham-Blackburn. <sup>150</sup> And when the first proposal for Imperial Airways (Africa) at last reached the Air Ministry in late January, 1929, Hoare had to reject it on the grounds of it being "impracticable politically", and he requested an immediate revision with no more delays. <sup>151</sup>

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149. AIR 2/322. Bullock to D.C.A.S., October 10, 1928.

150. AVIA 2/1857. Hoare to Beharrell (Imperial Airways), January 28, 1929.

151. Ibid. The proposal called for a service which would terminate in Johannesburg, but that for the first two years a service would operate only as far as Kenya. Hoare was sure that South Africa would not be prepared to support such a scheme financially, and without that support, the whole Cairo-Cape project was in difficulty. As well, Hoare did not want South Africa to develop the Cape Town-Johannesburg sector. See chapter IV for further discussion.

Whatever were the feelings of Cobham for Imperial Airways, he was still prepared to continue to play a part in developing the Cape route. There remained a great many questions unanswered, and probably the most important one of all was whether the route should be flown with aeroplanes or flying boats. In December, 1929, Cobham set out on a one-way air trip to Salisbury for Imperial Airways in a DH 61, 'Youth of Britain', to determine the aeroplane capabilities of the route.<sup>152</sup> Once again, Cobham provided the detailed aircraft and route information so vital to the planners back in London. He called for a flying boat operation as far south as Kisumu, then an aeroplane service south from there. As he had done previously, he stressed the utility of the Nile while pointing out the inadequacy of existing aerodromes at Luxor, Wadi Halfa, Khartoum, Malakal and Mongalla, and the general absence of intermediate emergency landing grounds, especially in Uganda. The route south of Kisumu, he noted, was going to provide the most difficulties, especially the still largely uncharted M'beya-M'pika sector. Cobham advocated two main workshops to handle repairs and overhauls of

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<sup>152</sup>. BOAC. I.A. file. African Survey - Alan Cobham, 1929-30. Report on Journey made by Sir Alan Cobham from London through Africa by Aeroplane to Rhodesia, continuing to the Cape and homeward by ship, December 10, 1929 to February 10, 1930, 62 pages. Cobham flew 8,404 miles in 97 hours 22 minutes in the air. A Mr. Hartman and a Mr. Chalker flew as crew. In Salisbury, Cobham handed over the aeroplane on January 7th to Wooley Dodd of Imperial Airways. The aeroplane crashed just a few days later.

aircraft, one at Alexandria, the other at Johannesburg, with possibly a minor depot at Kisumu or Nairobi. In all, it was a first-class report of the route by a man who now knew it better than anyone else. <sup>153</sup>

However Cobham had much more to say about the Cape route than his formal reports to Imperial Airways and the Air Ministry indicated. In two short briefs sent to the Secretary of State for Air, he voiced his optimism for the future of the route and at the same time expressed his concern for the slowness with which the route was being developed, especially at the South African end. <sup>154</sup> Here he was particularly critical of Imperial Airways, for their apparent naivety in dealing with South Africa, and their first proposals to commence operations only as far as Mwanza or Kisumu. <sup>155</sup> He pointed out that

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153. Board of Trade, Civil Aviation Library (London), unpublished extracts from Air Ministry Report on Journey made by Sir Alan Cobham from London through Africa by Aeroplane to Rhodesia, December, 1929 - January, 1930, pp. 1-25.
154. AVIA 2/422. Cobham to Thomson, February 26, 1930. Enclosures (1) 'Notes on Policy suggested for Imperial Airways (Africa) Ltd.; In the Operation of the Route from the Political Angle; Dealing Primarily with South Africa and also with British East Africa', seven pages; (2) 'Notes and Suggestions in relation to Tactics to be Adopted in South Africa Regarding the Operation of the Air Route', (strictly confidential), nine pages.
155. Ibid. Enclosure (2), pp. 1-2. Cobham was concerned that the reports going back to England from the Imperial Airways-Air Ministry survey party in South Africa would be misleading. They (Wooley Dodd, Tymms and Gladstone) "appeared to be most jubilant over the solidity of the South African arrangements". Cobham shared Hoare's worry about the Imperial Airways plan to operate initially to East Africa. See above, footnotes 150-51.

...statesmen, business people and the public have been educated to think of a transport route from the Cape to Cairo and any line that did not strictly come under the category of Cape to Cairo would fall short of the public ideal and would suffer greatly in consequence. 156

Thus, Imperial Airways plans to operate only the northern section of the route at first did not square with this 'ideal', and the most important consequence of this was that South Africa might renege on its promised £80,000 a year subsidy support and initiate its own services on the southern section of the route. Cobham was convinced that there was growing discontent with Imperial Airways and the British connection in South Africa, and considerable opposition from the newly-formed Union Airways, "which has the sympathetic backing of the Nationalist Party and the public".<sup>157</sup> To meet this challenge, he urged that Imperial Airways commence operations in South Africa, and

if the line could be established between Capetown and Broken Hill before the end of the year, much ground would be captured and our position consolidated against attacks from the opposition. Although the opposition is dormant at the moment, it is already strongly established and I feel that it is up to us to peg our prior claims in the public mind by starting the route from the South and Imperial Airways should hoist their flag in South Africa as quickly as possible.

I know that I am absolutely correct in saying that if today we wanted to get subsidy for a through air route scheme from the Union Government, we should not stand the remotest chance.... 158

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156. AVIA 2/422. Cobham to Thomson. Enclosure (1), p. 1.

157. Ibid. Enclosure (2), p. 4.

158. Ibid., p. 2.

Cobham noted that the subsidy had been used as a "recent election platform issue", and warned that the signed agreement was not sufficient security, nor would it be until Imperial Airways actually brought the route into operation. <sup>159</sup> In his view, the key to the difficulties in South Africa was winning the support of the general public for the Imperial presence, and he proposed two more plans which would consolidate Imperial Airways place in the Union. One was to offer Sir Pierre van Ryneveld the post of Manager, Imperial Airways (Africa), in South Africa, <sup>160</sup> and the other was to organize a flying propaganda scheme involving a tour of the country by large aeroplane with Cobham in command, similar to tours he had already made in the British Isles. <sup>161</sup> Such a tour could be of great

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159. Ibid., pp. 3-4. The Government was compelled to meet the argument that a large sum of money was being allocated in support of a British air line serving Imperial purposes, when South African enterprise had been struggling to develop air services in the Union with only miserly Government support. There was the question as well as to whether Imperial Airways should be allowed to operate within the Union (e.g., Johannesburg-Cape Town) in preference to a local carrier. See chapters IV and VII for further discussion.
160. Ibid., pp. 4-5. Cobham came out with this idea after discussions with the Imperial Secretary, Captain Clifford, and while sure that van Ryneveld would not accept, "it would be a most diplomatic move" which should be "discreetly broadcast". As well, it might have taken something away from South Africa's demands for a seat on the Board of Imperial Airways (Africa). With permission of the South African Government, van Ryneveld did join Imperial Airways in South Africa "temporarily" in 1930. See The Times, August 30, 1930, p. 9.
161. Ibid., p. 6. Cobham made a successful 'tour' of Great Britain in the summer of 1929, one of several promotions in which Cobham played a major role in trying to develop British air consciousness. See Courtenay, Airman Friday, passim.

benefit to British aviation generally, <sup>162</sup> but would have the more important task of rallying support from all over the Union.

The mere fact of the air route would not be sufficient, as only a fraction of the population would see the aircraft and a smaller proportion would have the opportunity of using it, but the idea of a tour from town to town, giving the populace a chance of a short passenger flight in an up-to-date air liner, with the example being set by the municipal authorities, would, in six months, do as much to make the country airminded as six years of one single air route by itself. <sup>163</sup>

This last idea was most appealing to Cobham for it involved him in the role he loved best, flying and spreading the air gospel to the uninitiated. Unfortunately, neither Imperial Airways nor the Air Ministry, nor the British aircraft industry for that matter, were quick to seize upon the idea, and when at last Cobham did arrange the tour in late 1932, the most propitious moment had passed, and the tour was less than successful. <sup>164</sup>

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162. As Cobham saw it, at least part of his task was to sell British aircraft and to swing South African interest away from the Fokker and Junker competitors. Junkers had been promoting their interests since 1924, while concern was expressed at a recent General Motors purchase of a substantial interest in the American Atlantic Aircraft Company, concessionaires for Fokker aircraft in America. See AVIA 2/422. Telegram, British Representative in South Africa to Under-Secretary of State for Dominion Affairs, October 26, 1929, in which he quotes Union Airways' Major Miller regretting no plans for British aircraft but "British manufacturers have shown themselves so slow to seize opportunities they invariably missed market".
163. AVIA 2/422. Cobham to Thomson. Enclosure (2), p. 7.
164. BOAC. I.A. file No. 88. In October, 1932, Cobham purchased a DH 66 Hercules and spares from Imperial Airways for £5,000 with arrangements for a re-purchase

For all his concern about the situation in South Africa and the general impatience with the apparent delay in starting the route he noted in the Union and East Africa, Cobham was still able to paint the future of the African route in the rosiest of hues. Speed meant success in Africa, where almost everywhere travel from point to point meant days or even weeks. It was not just a question of being able to travel or send mail to and from London in a matter of days that mattered, but the benefits to be enjoyed within Africa itself. "It is the internal lines of Communication", he wrote,

that is going to be of the greatest value to the public and the operating company alike; that direct link from Colony to Colony and town to town which scarcely exists at the present time....A man in Johannesburg can be in Broken Hill in 30 hours; Salisbury is but two days from Nairobi and only four days from Khartoum. The Southern Highlands of Tanganyika will be but one day from Nairobi.... 165

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164. (continued) for £5,000 less 17/6 per engine hour. Cobham organized a propaganda scheme to visit 70 towns in the Union with a 'flying circus'. Things did not go very well. "Poor Cobham", wrote one observer,

I felt so sorry for Lady Cobham, whom I saw at the Cape. She was having a very trying time. They have lost a tremendous amount of money over their circus.

H. G. Brackley (Air Superintendent, Imperial Airways) to wife Frida, February 22, 1933, quoted in F. Brackley, Brackles: Memoirs of a Pioneer of Civil Aviation (Blakeney, Norfolk, 1952), p. 392.

165. AVIA 2/422. Cobham to Thomson. Enclosure (1), p. 2.

Cobham saw great promise in a number of sectors of the route; Johannesburg to Broken Hill, Nairobi to Uganda, Cairo to Khartoum, and Belgian Congo traffic from Juba northwards. <sup>166</sup> He argued as well for the development of several 'feeder' lines, especially Bulawayo-Victoria Falls, Blantyre-Salisbury, and Johannesburg-Durban, all routes which were later developed. <sup>167</sup> In short, Cobham had in mind a fully-developed network of British air transport services along the great Cape Town to Cairo highway of the air, a dream of Imperial air expansion which he had held since his early days of flying in Africa. The impatient Cobham had to wait a few years before seeing this dream realized, and by that time he was no longer party or partner to the scheme.

Cobham made one last survey flight through Africa in 1931, flying a Short S.11 Valetta three-engined twin float

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166. Ibid., pp. 2-3. He saw businessmen and officials making the most use of the routes, but added that From Cairo to Khartoum in two days will speedily become a tourist route for visiting the Sudan and to Luxor in four hours at five thousand feet over the Nile will be the tourist method of reaching Thebes.
167. Ibid., pp. 4-7. Rhodesian and Nyasaland Airways developed the Bulawayo-Victoria Falls route, and took over the Salisbury-Blantyre service from Christowitz Air Services. Union Airways developed the Johannesburg-Durban sector, a service continued by South African Airways from 1934 onwards.

aircraft to explore a possible alternative route via the African Lakes for the Air Ministry.<sup>168</sup> Despite mooring problems everywhere, he reported that both the aircraft and the route had good possibilities, perhaps as a 'feeder' route to the main trunk service. If he harboured any ill-feeling towards Imperial Airways now that his status had been reduced to a mere shareholder in the company, he returned happy and impressed with the newly-established Imperial Airways organization in Africa, whose staff, he noted, "were full out to make the air route a success, even under the most trying circumstances".<sup>169</sup> Cobham was, after all, an Imperialist as well as an airman, and he must have glowed with quiet pride to see the fruits of his earlier labours developing along lines which were building into an Empire of the Air in Africa. Except for the one tour of South Africa in 1932-1933, Cobham's fertile mind was already

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168. Board of Trade, Civil Aviation Library, unpublished Air Ministry Report on test and Survey Flight from Rochester to Lake Kivu and Return, July 22, 1931 - September 1, 1931. The flight followed a 'water' route via Lakes Albert, George, Edward, Kivu and Tanganyika. Cobham commanded a crew of five: W. Bell of Shorts and F. H. Spencer of Bristols to report on the aircraft and engine performance, P. Parish of Marconi to handle the radio equipment, and two photographers, S. Bonnett of Gaumont Films and A. O. Russell, sponsored by Lord Wakefield to take 'still' photos. Gaumont made a film of the flight, "With Cobham to Kivu", which reportedly received a good reception in London. See African World, August 13, 1932, p. 115.

169. Report on Test and Survey Flight, pp. 29-30.

casting about for new worlds to conquer at home and in the Empire. <sup>170</sup> After 1933, Cobham was no longer on the British African scene, but neither his exploits nor his ideas were forgotten in the years leading up to World War II. Focusing his attention on the Empire with a special interest in British Africa, Cobham was able in a few short years to awaken and stir up an air-mindedness in the United Kingdom and Africa as no one before had been able to do, and by his demonstrations and reports, he inspired confidence and won a legion of supporters for his efforts and ideas. <sup>171</sup>

In the expanding world of air transport, Cobham made history with his Imperial flights, but at the same time he was a man thrust into prominence by the circumstances of the moment. Commercial aviation was slowly but steadily emerging from its pioneer period to command attention as a new form of transport, a commercial proposition, and an arm of Empire.

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170. He saw the problem of crossing the North Atlantic as another great Imperial air communications problem and turned much of his attention to the idea of in-flight refuelling. In 1931 he was appointed as consultant to the Irish Trans-Atlantic Corporation, a company which studied the problems of Atlantic crossing with Air Ministry co-operation until 1935. See Higham, Britain's Imperial Air Routes, pp. 188-89. From this point on, Cobham's main interest was in-flight refuelling. See Alan Cobham and Marcus Langley, "The History and Progress of Refuelling in Flight", Journal of the Royal Aeronautical Society, XLIV (July, 1940), pp. 557-603. At home, Cobham organized the short-lived Cobham Air Routes Limited, with a capital of £30,000, to operate a Croydon-Portsmouth-Bournemouth-Guernsey Island service. The company was sold to Olley Air Service after two months' operation. Stroud, Annals, p. 122.

171. See Courtenay, Airman Friday, p. 72. Brancker, after Cobham's Australian flight, remarked that "no man in the world has done so much to demonstrate to the human race what can be done by aviation". Quoted in Wyndham, Airposts of South Africa, p. 79.

Cobham was caught up in as much as he generated the excitement of the times; he was a 'man on the spot' for the Empire but especially for Africa during a period when Great Britain was at last awakened to its opportunity and challenge in African air transport development. When The Times lamented;

It is a little startling, and even a little humiliating, to reflect that after twenty-three years of flight no two parts of the Empire are connected by a civil air service, 172

Cobham was at work trying to promote such a project in East Africa. While General Groves was pointing out that of 55,000 miles of air routes in the world, Great Britain's share was a pitiful 1,090 miles, <sup>173</sup> Cobham was in British Africa, proposing Imperial route development from Cape to Cairo and local air services in British West Africa. While other fliers flew into Africa and complained about the lack of a British air presence, Cobham was doing something about it. <sup>174</sup> Even at home in the United Kingdom, Cobham did more

172. The Times, November 1, 1926, p. 15.

173. The Times, March 26, 1928, p. 23, quoting a Groves' Liverpool speech on the 24th. Germany led European air route development with 14,662 miles, France had 8,900 including her route to Dakar. Adding the Cairo-Basra route, Great Britain's totals were still only 2,226 miles.

174. Lady Bailey flew through Africa in 1928 and wrote for The Times that

It is at once a proud and disheartening reflection that while the first flight to the Cape was made by Sir Pierre Van Ryneveld in 1920 and other nations are forging ahead fast with their policy of peaceful penetration, the Empire is still without a single air line in Africa.

to bring the age of aviation to the public at large than did the Air Ministry or Imperial Airways, because Cobham brought the aeroplane to their very doorsteps. <sup>175</sup>

From the time of his first major air survey in Africa in 1925-1926, Cobham won praise and support from near <sup>176</sup> and far. <sup>177</sup> Fame did not mean fortune, but more important, it meant recognition and opportunity for Cobham, the aeroplane, and Africa. In part because of Cobham, in part because of a growing Imperial air interest in Great Britain, and in part because of an awakening interest in the aeroplane in Africa, the development of British African air communications was set in motion and Imperial Airways and regional air carriers could begin the monumental task of accommodating civil

174. (continued) Quoted in Bennett, Down Africa's Skyways, p. 115. See also The Times, April 12, 1928, p. 11. Lieutenant Patrick Murdock, who flew England-Cape Town in 1928, remarked on the great time-saving which could be effected in the Sudan by aeroplane, and added, "I cannot understand why England does not turn her eyes more in this direction". Quoted in Bennett, Down Africa's Skyways, p. 140. Commander Glen Kidston, after a 1931 flight to the Cape, argued "We are the laughing stock of the world,...It is up to the Post Office and the Air Ministry to do something about the air mails;..." Ibid., p. 196.
175. Cobham's most successful aviation propaganda campaign took place in the United Kingdom from April 12 to October 16, 1932. He gave flying displays in 170 towns, and it proved to be a "large and successful operation". A.M., Report on the Progress of Civil Aviation, 1932, p. 13.
176. See Aeroplane, March 17, 1926, pp. 273-78; Flight, March 18, 1926, pp. 153-61; and The Times, March 10, 1926, p. 15.
177. In the United States, for example, Cobham's first African flight was described as "one of the greatest air voyages ever made". New York Times, March 14, 1926, p. 6.

aviation into the African network of transport and communications.

Beginning with Cobham, a new Imperialism began its work in British Africa, an air Imperialism whose prime purpose was to build an 'Empire in the air', a British Empire. Following in Cobham's footsteps, Imperial Airways approached the task as the Imperial agent of that purpose. Because of Cobham, Imperial Airways, and the countless others from Great Britain and Europe, who flew across the vastness of the African continent, by 1932, the dawn of a new era could be marked. By that year, as one air historian has expressed it,

Every inch of Africa's vast terrain has been examined from above; old myths have been exploded; Africa is dark no longer. And it was the aeroplane that turned the spotlight on its mighty heart. 178

He might have mentioned that for much of British Africa, it was Cobham who flew the aeroplane that 'opened' Africa from above. Aviator, explorer, pioneer and promoter, these all described Great Britain's most celebrated 'Flying Imperialist'. He was a man of ideas and imagination, a lover of Empire and Africa, for whom he gave of his skills and energies. He lived for flying, and expressed his faith with incurable optimism. But the African challenge was

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178. Johns, Some Milestones of Aviation, p. 15.

179. In air matters, Cobham believed that all things were possible; as often as not, he was right, but progress and development never did proceed apace with Cobham's

probably greater than even he dared imagine, and having done the important pioneer work, the responsibility for African air transport development was passed on to the Empire's 'chosen instrument', Imperial Airways. From 1929 onwards, Imperial Airways set to the task of making the Cape to Cairo dream come true, and by 1932, the vision passed down from the days of the 'scramble for Africa' to Cobham became reality. 180

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179. (continued) confidence. In 1932, for example, he was quite sure that "in a few years, aeroplanes would be travelling at 1,000 m.p.h. - right around the world in one day. Quoted in Master of Semphill, "Commercial and Civil Aviation", United Empire, XXIII (April, 1932), p. 204.
180. The idea that an 'all-red route' from Cairo to Cape Town would bind the British Empire in Africa by rail emerged during the years of the 'scramble' and subsequent partition of Africa by European powers in the late nineteenth and early twentieth centuries. With Tanganyika mandated to Great Britain after World War I, the idea found new expression and support, and with the development of the aeroplane, a new and more promising dimension. See below, chapter IV for brief discussion.

## CHAPTER IV

IMPERIAL MISSION: ESTABLISHMENT OF  
THE ROUTE TO CAPE TOWN, 1928-1934

The thing our mariners began  
These shall pursue, their enterprise  
The last adventure left to man ---  
To build an Empire in the skies.

Leonard Taylor, 1939. <sup>1</sup>

On January 20, 1932, the first scheduled Imperial Airways air service departed Croydon airport for Cape Town. As the leader in The Times noted, it was "an Imperial event of outstanding importance". <sup>2</sup> At long last, Cairo and Cape Town, the twin citadels of Imperial power in Africa, stood at either end of an "all-red route" running the 5,600 mile length of the continent. For the proponents of air progress, the establishment of an Imperial Airways service linking Cape Town to Cairo and ultimately to London was a triumph of modern technology and its still new progeny,

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1. "Wings of Youth" in Night Flight and other Verse (London, 1939), p. 1.
  2. The Times, January 20, 1932, p. 13. The leader also took issue with the "critics who shrugged their shoulders and prophesied failure" after a trial Christmas mail flight a month before had arrived a day later than scheduled time.

the aeroplane. Air transport had succeeded while its rivals below on road and rail thus far had failed. Moreover, the aeroplane was able to accomplish what the established maritime link between Cape Town and London could not do.

Not only was South Africa to be brought into swift communication with the Imperial metropolis, but so too were the important British settlements scattered along the route in the African interior. This latter consideration had been central to Cecil Rhodes' "Cape to Cairo" dream of more than three decades before, when he had supported the idea of a great trans-Africa railway running along the backbone of the continent. As Rhodes and many others had seen, communications meant Imperial strength and unity and their improvement was especially crucial to the maintenance of British power in remote centres of interior Africa. "That being the case", wrote Burchall in 1933, "an air line can do all that Cecil Rhodes wanted, and do it faster".<sup>3</sup>

The idea of linking Cape Town to Cairo in a chain of communications was an old one, as old as the British presence in Africa itself. It was the by-product of the grander dream of seeing all of Africa from the Mediterranean to Table Bay a part of the British Empire, a possibility first forecast

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3. H. Burchall, "Air Services in Africa", Journal of the African Society, XXXII (January, 1933), p. 57. Burchall was General Manager (Commercial) and later Deputy Director-General (East) of Imperial Airways.

and feared by one Dr. José Maria de Lacerda e Almeida, a Portuguese explorer on the Zambezi in 1796.<sup>4</sup>

Despite Lacerda's fears, the idea of a British Empire in Africa won little support in Great Britain until the latter part of the nineteenth century, although the thrust of British exploration and missionary work in the interior was unwittingly preparing the grounds for the idea to take root.<sup>5</sup> By the 1870's, however, even before the "scramble for Africa" was fully under way and a future British presence throughout Africa assured, interest in the Cape to Cairo scheme became more noticeable. A monograph by Sir Richard Burton in 1873 dealing with early Portuguese

4. Dr. Lacerda advanced the idea to the Portuguese Government on hearing that the British had taken the Cape Colony. See Sir Harry Johnston, "My Story of the Cape to Cairo Scheme", in Leo Weinthal, ed., The Story of the Cape to Cairo Railway and River Route, from 1887-1922, vol. I (London, 1923), p. 65. Also Lois Raphael, The Cape-to-Cairo Dream (New York, 1936), p. 26. Lacerda died attempting to secure Portuguese communications east-west across southern Africa in an effort to thwart what he saw to be the ultimate British aim. His work is set out in The Lands of Cazembe, Lacerda's Journey to Cazembe in 1798 (London, 1873).
5. Johnston, "My Story of the Cape to Cairo Scheme", pp. 67ff. He traces the history of the idea from Lacerda to Lord Salisbury's acceptance, noting how the case for the scheme was strengthened by Ibrahim Pasha's opening of the Nile route, the journeys of Burton, Speke and Grant in east equatorial Africa, the explorations of Petherick and Baker in the Upper Nile, Disraeli's purchase of the Suez Canal, the work of Livingstone in Nyasaland and Kirk in Zanzibar, and the military expedition to Abyssinia.

activities in Africa brought attention to Lacerda's forecast for the first time.<sup>6</sup> In 1876, Sir Edwin Arnold coined the phrase "Cape to Cairo" in a pamphlet inspired, it seems, by the explorer Stanley's letters to the Daily Telegraph from Uganda.<sup>7</sup> Colonel J. A. Grant, the veteran explorer supported the idea as well, and by the 1880's, the ubiquitous Harry Johnston had popularized both the idea and the "Cape to Cairo" slogan.<sup>8</sup> As the nineteenth century drew to a close, there was no longer any question of whether or not Great Britain would have an African empire. The question was how best to bring the scattered holdings together so as to develop a sense of Imperial community and security, and thus further the cause of advancing British civilisation to the most remote corners of its now sprawling empire. To some, the answer appeared to lie in the construction of a great trans-continental railroad running northward from Cape Town. This was the visionary scheme of Cecil Rhodes, a scheme, wrote one sceptical observer,

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6. Ibid., p. 67.

7. Arnold was the principal leader writer for the Daily Telegraph. The converse of the "Cape to Cairo" phrase had been introduced the year before in a proposal for a trans-continental telegraph system. See H.B.T. Strangways, "Telegraph from Cairo to Cape Town", English Mechanic and World of Science, XX (November 26, 1875), p. 278. Also Raphael, The Cape-to-Cairo Dream, p. 409.

8. Raphael, The Cape-to-Cairo Dream, p. 409.

so grand and brilliant that it captures the swift imagination, and the laggard judgment cannot catch up....Nothing quite so spectacular has been done in history since the time of Alexander the Great. 9

With less hyperbole, another observer argued that the "railway is intended to make Africa finally and predominantly British".<sup>10</sup> Without question, this was the prime if not the sole motive behind the whole idea. The aim then, as later, was political, not commercial, and clearly at the turn of the century, railways had caught both the imagination and the ambition of the Empire-minded, much as the aeroplane would do two decades later. The "Cape to Cairo" dream was indeed an imaginative proposal. The problem remained how to translate that dream into an African reality.

The beginnings of the Cape-Cairo rail route date back to 1857 when a 54 mile line was built to connect Cape Town to Wellington.<sup>11</sup> By 1900, considerable progress had been made in southern Africa, Egypt and the Sudan. A line ran

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9. H. G. Prout, "The Cape to Cairo Railroad", Munsey's Magazine, XXI (April, 1899), pp. 113-14. Prout was impressed but doubtful if the scheme could ever be carried out.
10. S. P. Verner, "The Cape to Cairo Railway", Liberia Bulletin (No. 16, 1899), p. 33. And Lord Milner, speaking of the railway idea, noted, "in that way alone could the scattered centers of civilisation in the heart of Africa be united into one country, and effectively brought within the influence of the British Empire". Journal of the Society of Arts, LV (December 21, 1906), p. 106.
11. Sir Charles Metcalfe, "My Story of the Scheme", in Weinthal, The Story of the Cape to Cairo Railway and River Route, Vol. I, p. 95.

northward from Cape Town to Bulawayo, another ran south from Cairo to Aswan, and much of the connection between Wadi Halfa and Khartoum had been completed. In all, some 2,575 miles were in operation or in the final stages of construction. Still, a lengthy and difficult 3,035 miles remained to separate the Empire in the Sudan from Rhodesia.<sup>12</sup> By the 1930's, when Imperial Airways opened up the Cape-Cairo route in the air, the railway dream had progressed little since the beginning of the century, despite the flurry of construction activity in the 1920's.<sup>13</sup>

The reasons why the airlines succeeded where the railways failed are several, but basically the question was one of economics. At the beginning of the century, estimates of the cost of continuing rail construction

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12. Prout, "The Cape to Cairo Railroad", p. 114.

13. See map in Raphael, The Cape-to-Cairo Dream, p. 398. A gap still separated Aswan from Wadi Halfa, but a line had been built southward from Khartoum to Kosti and westward to El Obeid. In the south, the line from the Cape ran north beyond Bulawayo to Livingstone and Lusaka, connecting to the Congo line at Elizabethville and on to Bukama. While the 1920's in Africa were characterised by a great amount of rail construction, most progress was made in the building of feeder lines serving the hinterlands by linking them to coastal ports. See J. W. Spiller, Colonial Railways, 1929-1938 (London, 1941), for summary. For brief surveys of regional developments, see H. A. Morrice, "The Development of Sudan Communications", Sudan Notes and Records, XXX (Parts 1 & 2, 1949), and R. E. Robins, "Development of the Transport System and its Part and Position in the History and Development of East Africa", Uganda Journal, XIV (March, 1950), 129-38. See also Hailey, African Survey, passim.

ranged up to £10,000 per mile, a figure sufficiently staggering to deter government and private investor alike.<sup>14</sup> Moreover, there was little promise of return on this investment. There would be few through passengers, bulk goods and produce would follow the lateral rail lines to the coastal ports and shipment by sea, and with high overhead costs to bear, the Cape-Cairo rail line could anticipate an annual deficit well in excess of a million pounds.<sup>15</sup> The sheer physical obstacles to railway building in central Africa were, of course, problems in themselves. Neither climate nor terrain lend themselves easily to road or rail construction and maintenance.<sup>16</sup>

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14. Verner, "The Cape to Cairo Railway", p. 35.

15. Prout, "The Cape to Cairo Railroad", p. 114. Thirty years later, another critic dismissed the whole project as a dream because of so little traffic possibilities. See A. Demangeon, "The Cape to Cairo Dream", Living Age, CCCXXXV (January, 1929), 365-68, 398. Thus, there is a certain continuity to the chief criticism and major deterrent of the Cape-Cairo rail scheme. A reluctance to pay the price and commercial considerations overrode the probable political benefits which would be derived. Whether or not the railway would have advanced African "development" remained questionable, but see Sir Robert Williams, "The Cape to Cairo Railway from the Point of View of African Development", Journal of the Central Asian Society, IX (1922), 147-66.

16. See H. F. Varian, Some African Milestones (Oxford, 1953), for an unsophisticated account of railway building problems in central Africa. Varian was involved with the Benguela railroad project.

Given, then, the priorities of African development dictated by Whitehall, the massive investment required with little hope of return, the limited traffic potential of the route, and the problem of construction itself, it was not surprising to find the railway dream remain just that,<sup>17</sup> even after 1918, when, with the acquisition of Tanganyika, the "all-red" route was again a distinct possibility for the first time since 1890, and the Empire now included the great red swath through Africa the early rail enthusiasts had always dreamed it would be.<sup>18</sup> The departure of the Germans from East Africa signalled a change in British fortunes there, but coincident with this change came the aeroplane to challenge the railways at the very time when the idea of the continental line was again a moot question.<sup>19</sup> Almost

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17. Nonetheless, since the time of Chamberlain at the Colonial Office, Whitehall had pressed for railway construction to satisfy regional needs in East and West Africa, particularly the lines from Uganda to the coast and in Nigeria. For discussion of some pre-war plans in Africa, see Ronald Hyam, Elgin and Churchill at the Colonial Office 1905-1908 (London, 1968), pp. 437, 439-49.
18. The Anglo-German treaty of 1890 had made German East Africa (Tanganyika) coterminus with the Belgian Congo thus blocking a through British connection from Rhodesia to Kenya. In the House, William Burdett-Coutts stormed at the idea that "a few miles of territory far from the coast, at the farthest end of the German possessions could stand in the way of a great work of civilisation". Quoted in Raphael, The Cape-to-Cairo Dream, pp. 23-24. In 1919, Tanganyika was mandated to Great Britain by the League of Nations and the dream of an "all-red" route restored.
19. Illustrative of this point was the publication of Weinthal's multi-volume work, The Story of the Cape to Cairo Railway and River Route, in 1922. The many contributors trace the idea and the progress along the route and air most of the

from the moment when the Wright brothers had made the first successful powered flight, men's imaginations had soared with visions of what air machines of every kind would do in the future, and the possibilities suggested Africa as elsewhere. In the same year that Bleriot made the first flight across the English Channel, the poet of Empire, Rudyard Kipling, saw a future in which large airship-like flying machines would be departing London with mail and passengers for the corners of the Empire, across the Atlantic, to Australia, and to Africa. <sup>20</sup>

The Great War interrupted the expansion of either rail or air ideas for the Cape-Cairo route, but as well as bringing Tanganyika into the Empire, it brought British military aviation onto the scene and the opportunity for airmen to gain firsthand knowledge and perspectives of the challenge of the "all-red" route. Salmond's proposal for an airline from Cairo to the Cape was the first serious suggestion that such an operation was possible, and while it never went much past the doors of the Air Ministry, the notion that aeroplanes, not locomotives, would make the Cape to Cairo dream come true was born, and it was eventually

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19. (continued) proposals and plans rejuvenated in the aftermath of war. In addition to Johnston and Metcalfe previously cited, see especially, Sir Robert Williams, "My Story of the Scheme", Vol. I, pp. 105-20.
  20. Rudyard Kipling, With the Night Mail (New York, 1909).

to grow into the reality of Imperial Airways' success a little more than a decade later.<sup>21</sup> The challenge to railroad hopes became more apparent with the success of the Van Ryneveld-Brand flight to the Cape in 1920.<sup>22</sup> It inspired one writer to comment,

By 1950, passengers in a hurry, and probably mails, will doubtless be conveyed from London to Cape Town by air.... there can no longer be any question as to the practicability of establishing an aerial service over the Cape to Cairo route, or as to its materialisation at a date which will probably be many years earlier than 1950.<sup>23</sup>

Another observer looked ahead one hundred years and found;

Thus in the year of the great era of transport 2022, we stand in the saloon of the splendid electrically-driven (possibly by wireless transmission) airship of the League of Nations, surrounded by supermen of science, accompanied by our attendant airplane, and moving easily along the Nile Valley with Cairo and the Pyramids in the haze behind us.

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21. AVIA 2/1706. "Imperial Air Transport Company" - Draft Charter, February 6, 1919. Also AIR 2/120. Proposal to send Major Court Treatt and Survey Party to Rhodesia re Aerial Route from Cairo to the Cape. For discussion of the Salmond proposal, see above, pp. 31-33, and for the route survey, pp. 55-65.
22. See above, p. 68 and footnotes 141-43, chapter I. Note Van Ryneveld's own account of the flight, "The Story of the London-Cape Town Flight", in Weinthal, The Story of the Cape to Cairo Railway and River Route, vol. I, pp. 297-313.
23. G. H. Lepper, "Anticipations of the Cape to Cairo Route", in Weinthal, The Story of the Cape to Cairo Railway and River Route, vol. III, pp. 449-50. Lepper also confidently predicted more than one all-rail route to the Cape.

Further south, this enthusiastic optimist noted a stop at the "equatorial forest city of Ituri - the junction of the Trans-Continental Airship Line and the Stanleyville-Mombasa connection". And later, at Elizabethville, "we compare notes with airship passengers from Morocco, the Sahara and West Africa, and airmen from the south".<sup>24</sup> These comments in the early 1920's were indicative of the boundless confidence which inspired not a few men and women to keep faith in the future of aviation. Alan Cobham and the others who first flew in Africa and along the Cape-Cairo route were the pioneers of change, not only in ways of transport and communications, but in habits of mind. Without men of imagination who forecast so much and so well what the future would hold, and the men who flew and worked to make that future a fact, the drive to establish the Cape-Cairo route would have had to await a much later date before an air service was put on anything like a regular basis.<sup>25</sup> At the time, the twelve year interval between the Van Ryneveld-Brand flight and the

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24. T. Alexander Barns, "What the Route will be like One Hundred Years Hence", in ibid., pp. 453-54.

25. See above, chapters II and III for background to plans to initiate the Cairo-Cape route by air. A regular air service requires a great deal of planning and organisation. Without Air Ministry and Imperial Airways on the scene, it is doubtful whether private air transport operators could have succeeded in establishing the route for some time to come. A more likely possibility would have been a French-Belgian effort through the Congo.

establishment of the Imperial service seemed to be a frustrating story of inactivity, procrastination, and Treasury parsimony at every turn.<sup>26</sup> In retrospect, however, the story is one of rapid success against great odds. In a remarkably short time, air transport had achieved what rail transport had failed to do, even after a hundred years of effort.<sup>27</sup>

Although Imperial Airways had received their mandate to develop the Cairo-Cape Town air service idea in 1928, a host of questions had to be asked and answered and a great many problems met and resolved before the first

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26. Lord Herbert Scott, in his presidential address to the London Chamber of Commerce in 1929, expressed this frustration. Noting that Great Britain had not a single commercial air service in Africa, he added, "By this time we should have had an Empire service to Cairo, with branches to Cape Town, India, Singapore, Australia, and the Far East". The Times, April 25, 1929, p. 13.
27. At the time of writing, in 1973, there is little evidence to suggest that a Cape-Cairo rail route will ever become a reality, although, even with an Empire gone, such a line would probably be of greater use now than in the 1920's. There is always the possibility of a major highway system being built to replace the existing haphazard system and to compete with as well as complement the role of the airlines. Roads never rivalled rails in the Cape to Cairo dream, although their development throughout Africa has made them a serious competitor. In the 1920's, some daring motorists did drive the route (travelling by water as well). The Court Treatts made a leisurely trip northward from the Cape in 1924-1926. See Stella Court Treatt, Cape to Cairo (London, 1927), and two Americans, Mr. and Mrs. Felix Shay, drove south from Cairo in 1924, taking 135 days to reach the Cape. See Felix Shay, "Cairo to Capetown Overland", National Geographic Magazine, XLVII (February, 1925), pp. 124-260.

flights would depart their terminals in London and Cape Town.<sup>28</sup> Like the railways before them, Imperial Airways had to overcome political and financial difficulties, come to grips with the varied natural obstacles which Africa throws up in the path of the transport pioneer, and try to succeed before French and Belgian rivals pre-empted the British claim to southern African traffic.<sup>29</sup> Unlike their predecessors, Imperial Airways had to do all this while dependent upon the Air Ministry, Colonial Office, Dominions Office and Foreign Office for the necessary preliminary arrangements, the British aircraft industry for the equipment required, and the Post Office for guaranteed

28. See above, pp. 115-151 for background discussion.

29. The persistent rumblings of Franco-Belgian plans to initiate a trans-African route gave a certain impetus to British plans for the Cape route. The Belgians had explored the possibility of a Sudan connection as early as 1928. FO 371/13124, Egypt and Sudan (1928), J3623, "Proposed Belgian Air Service across Africa". MacMichael (Khartoum) to Lloyd (Cairo), November 25, 1928. In October 1929, French plans had developed to the point that an experimental air service delivered the first air mail to Madagascar. The Times, November 1, 1929, p. 15. The Foreign Office kept an especially watchful eye on developments. See, for example, FO 371/14076, Political (Western) France (1929), W1044, Granville (Brussels) to FO, February 4, 1929, FO 371/14917, Political (Western) France (1930), W5538, Granville to FO, May 30, 1930. A general cut-back in aviation funds delayed what would have otherwise been an early start on the Franco-Belgian route across the Sahara and the Congo. See FO 371/17285, Political (Western) Belgium and Luxembourg, (1933), W1385, Annual Report on Belgium and Luxembourg for 1932, section viii, "Aviation".

mail traffic, and at the same time maintain and develop their air services in Europe and on the Indian route. <sup>30</sup>

The main problem facing the "chosen instrument" on the African route was the now familiar one of obtaining adequate subsidy and other financial support. In estimates submitted to the Air Ministry early in 1929, Imperial Airways anticipated the need for a subsidy of over a million pounds spread over the first six years of service to bridge the gap between expected costs and revenue. <sup>31</sup> Beginning with South Africa's agreement to a handsome contribution in March, by late summer, Imperials were assured of at least this amount of support. <sup>32</sup> Yet, at this early date, much of the thinking on the Cape route was still speculative; passenger traffic figures were as much a

30. For a general if brief survey of Imperial Airways' activities in Europe and on the route to the Far East during this period, see Higham, Britain's Imperial Air Routes, chapters VI and VIII.
31. AVIA 2/1857, part I, enclosure. For six years of service (first year Alexandria-Mwanza only), Imperial Airways estimated revenue of £1,240,213, costs of £2,318,144, meaning a subsidy requirement of £1,077,931. Dismore to Air Ministry, February 27, 1929.
32. CAB 23/60, 11(29)12, Cabinet meeting of March 13, 1929. Hoare was able to announce the South African contribution of £80,000 p.a., although apparently, the amount of support was not made public. As late as December, the Aeroplane (December 11, 1929, p. 1356) could only mention "reports from Johannesburg" of a £400,000 subsidy. The colonies and the Sudan had pledged a total of £57,000 p.a. by September. See various enclosures AVIA 2/422, African Air Route Negotiations with Dominion and Colonial Authorities, 1929.

reflection of hopes as probabilities, the post office authorities could only point to the total mail flow between Great Britain and Africa, and guesswork guided the estimates of how much of this would go by the more costly air service.<sup>33</sup> As well, while some study and experience had provided considerable information on the route as far south as Mwanza, neither Cobham nor the R.A.F. had explored fully the 'commercial possibilities' of the route further south, the designated C3, C4 and C5 sections.<sup>34</sup> Finally, while a guaranteed subsidy and the expected revenue would meet Imperial Airways' capital and running costs, operations could only commence when adequate ground facilities were established to assure the route's success. Under the agreements with South Africa and the Colonies, the responsibility for most of the ground services rested

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33. In his report on civil aviation in East Africa, the Air Ministry's Frederick Tymms guessed an air line might attract 10 passengers a week at first out of some 3,500 first class passengers travelling the Cairo-Khartoum route annually and another 15,000 travelling between Europe and East Africa each year. The Post Office estimated that 10% of Kenyan and Ugandan mail would depart by air, 15% of Tanganyika's. Tymms was more hopeful, figuring on 50% of East African outbound mail by air. AIR 5/1424, Civil Aviation in East Africa, Report. Pages 100-114 deal with traffic.
34. Imperial Airways and the Air Ministry designated the Capetown service the 'C' service, divided into five sections: C1 Cairo-Khartoum, C2 Khartoum-Kisumu, C3 Kisumu (or Mwanza)-Ndola, C4 Ndola-Johannesburg, and C5 Johannesburg-Capetown.

with the local governments, and there was no question but that the determination of the airline's needs, along with the preparation of the necessary ground facilities, would be a lengthy as well as costly process. <sup>35</sup>

Imperial Airways approached the task in a spirit of incurable optimism. There was a confidence that the route would be ready, the new aircraft delivered and in place, and staff in the field to commence the great operation on the C1 and C2 sections by early 1930. <sup>36</sup> Events and circumstances of the next few years were to erode but not erase much of this optimism as the airline faced up to African realities. Imperial Airways had to launch and sustain its African operation while dealing with the always difficult Egyptian situation, <sup>37</sup> the mounting criticism in

35. See below for discussion of route survey and requirements. Also AVIA 2/452, London-Cape Town Air Service - Reports from Survey Party.

36. Imperial Airways had hoped to commence operations on the northern section by June 1, 1930, and to open the southern sections to the Cape by December 1, despite Hoare's insistence that all parts of the route be opened "as nearly as may be simultaneously". AVIA 2/1857, Hoare to Beharrell, January 28, 1929. See above, p. 217. New aircraft, the Handley Page 42 and the Atalanta class, were not available for the African route until late 1932 and early 1933 respectively. As Higham has pointed out, another problem was to train 25 station managers. Britain's Imperial Air Routes, p. 154.

37. Although the Egyptian authorities had signed an agreement with Imperial Airways in August, 1931, continued negotiations on cabotage rights delayed formal and final authorization until May, 1932, at which point Imperials had full rights to operate to, from, and through Egypt with all manner of traffic. AVIA 2/1880, part II, Dismore to Bullock, June 8, 1932. Dealings with Egypt

Kenya, Southern Rhodesia and South Africa,<sup>38</sup> and the problems of aeroplane delivery schedules.<sup>39</sup> All these factors made for a major challenge, and it was to the credit of Great Britain's "chosen instrument" that it never lost its sense of mission and purpose in Africa.

In October, 1929, the joint Air Ministry-Imperial Airways-Cobham/Blackburn route survey party, led by the Air Ministry's Frederick Tymms, set out for South Africa, arriving in Cape Town November 11.<sup>40</sup> The appointed task

37. (continued) had become more difficult with the breaking off of Great Britain-Egypt negotiations on political and other matters in May, 1930, but the Air Ministry and the Foreign Office pressed Imperial Airways from the start to obtain an early agreement or run the risk of getting no agreement at all. AVIA 2/1857, part II, J. Murray (FO) to Bullock, October 24, 1929.
38. The criticisms, mainly expressed through the African press, focused on the delays in starting the service, aircraft problems after the service had begun, and, in South Africa, concern that the money used to subsidize Imperial Airways might have been better used to develop South African aviation. See, for example, Cape Times, October 24, 1930, cutting enclosure in AVIA 2/1879, part I. As early as July, 1930, the Air Ministry was worried about the "press rumblings", and called on Imperials to do something, even send out an aircraft to start "some sort of local operations". AVIA 2/1857, part II, Brancker to Woods Humphrey, July 15, 1930.
39. AVIA 2/1879, part I, Air Mail Services in Africa. Woods Humphrey, "Memorandum Regarding the Commencement of the England-Capetown Service", July 1, 1931. It notes the "excessive delay in delivery of new aircraft, and the non-completion of the essential ground services" as the main reasons for slowness in extending the route to Capetown.
40. Noted above, pp. 150-51. For a short description of the survey party's work, see Jones, The Time Shrinkers, pp. 90, 93-95.

that lay ahead of the team was a formidable one. This was to be no mere survey of the route for the team had to handle detailed and often difficult negotiations with the local governments as well. While all the African governments concerned had expressed their willingness to support the British route to the Cape, the details of routing, facilities, and like matters had yet to be finalized. This was the responsibility of Tymms and Wolley Dod in particular, and, as the "men on the spot", they were charged to woo and win the critics of the scheme, especially in South Africa, and convince the various administrations that local as well as Imperial interests would be served by the outlay of money for the often costly ground support services. <sup>41</sup>

In all, it was a job well done, although it took a great deal longer to complete than either the Air Ministry or Imperial Airways had anticipated. <sup>42</sup> In mid-November,

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41. The bulk of Tymms' correspondence dealing with the route organisation may be found in AVIA 2/452 and AVIA 2/422 respectively. For Wolley Dod's reports, see BOAC, I.A. file, Cape Town to Cairo Survey, 1930. As Jones has noted (The Time Shrinkers, pp. 93-94), "there were almost daily conferences and visits of inspection.... military and civic authorities had to be consulted; towns vied with each other to become recognised stopping places.... numerous meetings with the leaders of commerce ...."

42. The Air Ministry had anticipated that the survey could be completed in three to four months, and within three months of that, the northern section of the route as far south as Mwanza could be in operation. The survey took some six months and it was nearly nine months after that that the northern section was opened.

Tymms could report that the Union Government had approved the whole scheme in principal and a change in the routing from Beaufort West to Victoria West agreed upon.<sup>43</sup> On the commercial side, Tymms' investigations finally dashed the long-held hopes of attracting the lucrative South African gold traffic to Europe, pointing out what Cobham and others before had not understood, that as the Reserve Board purchased the entire gold production, gold in transit was counted as reserves with no loss of interest while in transit.<sup>44</sup> And, while still in South Africa, Tymms was able to wire the Air Ministry that Northern Rhodesia had agreed to a route change that would omit a stop at Livingstone and provide an additional service to Southern Rhodesia at Salisbury.<sup>45</sup>

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43. AVIA 2/452, Tymms to Bulloch, November 15, 1929.

44. Early in December, Dr. Samuel Evans, chairman of Crown Mines, Ltd., and a director of Rand Refining, had suggested that air transport would save some £60,000 a year in interest on gold shipped from South Africa to England and India. AVIA 2/452, enclosure 9a, December 6, 1929. Tymms pointed out that Evans was dealing with a hypothesis only, and besides, Union Castle had a monopoly on gold shipments. However, diamonds looked promising providing "absolute regularity and delivery on specified date guaranteed". AVIA 2/452, Tymms to Bulloch, December 18, 1929.

45. AVIA 2/452, Tymms telegram to Bulloch, November 15, 1929. The original planned routing called for three stops in Northern Rhodesia - Ndola, Broken Hill and Livingstone - and only one in Southern Rhodesia, Bulawayo. Southern Rhodesia had complained of the omission of Salisbury. AVIA 2/422, Governor Rodwell to Dominions Office, September 20, 1929. The new agreement called for stops at Mpika and Broken Hill in Northern Rhodesia, and Salisbury and Bulawayo in Southern Rhodesia.

By January, 1930, the survey team had only reached Salisbury, with the most difficult parts of the route to the north yet to be studied.<sup>46</sup> There, Tymms reported faithfully on the reluctance of Salisbury and Bulawayo to pay the costs of their ground establishments, but he noted with satisfaction the publication of Southern Rhodesia's Aviation Act, and the interest of Nyasaland in a Blantyre-Salisbury feeder service to link the small colony to the Imperial chain.<sup>47</sup>

Throughout January, February and March, 1930, Tymms led his team northward into Tanganyika, disappointed, no doubt, but undaunted by the loss of the DH61 sent out by Imperial Airways with Alan Cobham to speed up and facilitate the survey work on the difficult section through Northern

46. The sector from Broken Hill northwards to Mwanza had notoriously poor ground communications. One correspondent suggested that it might take months to travel by land from airport to airport. The Times, November 23, 1929, p. 11.

47. AVIA 2/452, Tymms to Bertram, January 13, 1930. The Rhodesian press reported both Salisbury and Bulawayo demands for Government support in financing the building of ground facilities. See the Rhodesia Herald, January 11, 1930, p. 4. The Rhodesia Weekly Review (January 12, 1930, pp. 1, 2, 16), noted,

In the first place, the Imperial Airways represent a private commercial undertaking. It wants to make a profit out of its venture and to assist it to do so it is suggested that Salisbury spend £15,000....

The Southern Rhodesian Aviation Act can be noted in Colony of Southern Rhodesia Government Gazette, vol. VIII, No. 2, January 10, 1930. Tymms agreed with W. B. Davidson Houston (Chief Secretary, Nyasaland) that a Blantyre feeder service would be advantageous. Air transport could link Salisbury-Blantyre in 3½ hours, as opposed to up to 2½ weeks by ground transport in the rainy season.

Rhodesia and southern Tanganyika. <sup>48</sup> In March, Tymms' party had reached Tanganyika, and on the now familiar ground covered in an earlier survey, the team was able to move more swiftly through East Africa and the Sudan to reach Cairo on May 6. <sup>49</sup>

At this point it was quite clear to both the Air Ministry and Imperial Airways that the air service could not begin in June as had been planned, nor even by September of 1930 as the Air Ministry had hoped a year before. <sup>50</sup> The reports of the survey party had indicated from the start that the work to be done on the ground to assure a safe and regular air service was extensive and would take time and money to complete. Hangars had to be constructed at Alexandria, Khartoum, Kisumu, Broken Hill, Johannesburg and Cape Town,

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48. Cobham flew out the 'Youth of Britain' to Salisbury where he handed it over to Wolley Dod. The Imperial Airways aeroplane crashed at Broken Hill shortly after and no replacement aircraft was available. See above, pp. 218-19 on Cobham's flight. Also The Times, November 23, 1929, p. 11, and January 20, 1930, p. 11.
49. Jones, The Time Shrinkers, pp. 94-95. For Tymms' earlier survey, see below, chapter V. Like Nyasaland, Tanganyika looked forward to feeder services to take "full advantage of opportunity". See descriptive and favourable editorial comment in the Tanganyika Standard (Dar es Salaam), March 12, 1930, pp. 1-2.
50. The Memorandum by the Secretary of State for Air to Accompany the Air Estimates (Cmd. 3509, March 8, 1930), admitted that a start in June was impossible, but six months before, the Air Ministry had advised Imperial Airways that they hoped the northern section of the route could be opened "as soon as possible after 1st September, 1930, ....". AVIA 2/422, Dannreuther (Deputy Secretary, Air Ministry) to Imperial Airways, September 13, 1929.

along with workshops at the three major terminals, Alexandria, Kisumu and Johannesburg. <sup>51</sup> Wireless stations with both long and short wave equipment had to be built at Kampala, Moshi, Dodoma, Mbeya, Mpika, Broken Hill, Salisbury, Bulawayo, Johannesburg, Victoria West and Cape Town. <sup>52</sup> In all, some 26 air stations had to be readied, with Imperial Airways required to erect Rest Houses or "Refreshment Bungalows" as well as staff quarters at eleven of them. <sup>53</sup> In addition, nearly all the major and secondary landing grounds needed repair and improvement, an available supply of water, provisions, fuel, oil and spares had to be assured at strategic points along the route, floodlights for night landings were required at Cape Town, Germiston and Salisbury, <sup>54</sup>

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51. AVIA 2/420, Egypt-South Africa Air Service. Provision of Hangars and Workshops, 1929. Tymms minute, June 17, 1929. See too, for example, detailed correspondence in AVIA 2/496, Cape-Cairo Air Route - Provision of Hangar and Ground Facilities at Broken Hill; and, AVIA 2/497, Cape-Cairo Air Route - Provision of Hangars and Slipway at Kisumu, 1930.
52. AIR 5/1425. A.M., The Progress of Imperial Air Communications, 1930, p. 26. On the Egypt-Sudan sector, the air service could use the existing R.A.F. wireless facilities on the 900 meter band. Long wave transmitters were to be sufficiently powerful to maintain communications with aircraft for 70% of the distance to the next facility. Short wave transmitters were to be of such power to communicate point to point with the next two stations north and south.
53. "The London-Cape Town Air Route", Imperial Airways Gazette, III (September, 1930), p. 3.
54. See correspondence in AVIA 2/454, Cairo-Cape Route Night Lighting Equipment, 1929, and AVIA 2/604, Cairo-Cape Night Lighting Equipment, 1932-. For much of the period, Imperials were handicapped by the lack of floodlights at most airports. It often meant embarrassing delays

marine craft, slipways and other equipment had to be sited along the Khartoum-Kisumu sector of the route to accommodate the flying boat operation,<sup>55</sup> and all this had to be arranged and constructed against a background of sure knowledge as to the manifold difficulties of flying aeroplanes in Africa. In short, even after all the facilities required were in place, the running of the Cairo-Cape Town air service would still have to come to grips with the harsh facts of African weather, the high terrain of the African plateau, and the great Sudd area in the Sudan, all familiar and all major problems to the pioneers.<sup>56</sup>

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54. (continued) if a flight could not plan to reach the next point before dark, or an exciting night landing situation. The airline could not or would not provide the facilities itself, and the local governments were reluctant to spend any more than already provided. The Air Ministry was able to "lend" floodlights for Khartoum and Nairobi, the latter "the best place for a light as the runways have a nasty bump which pilots much dislike". AVIA 2/604, D. A. Allen to Bertram, June 6, 1935.
55. Initially, the company ordered seven river launches from the British Power Boat Company. See Higham, Britain's Imperial Air Routes, p. 155.
56. See Frederick Tymms, "Civil Aviation in Africa", Royal Air Force Quarterly, II (January, 1931), 147-53, and "The Airway across Africa", Airways, VII (January, 1931), 579-81. Note also earlier discussions; H.R.M. Brooke-Popham, "Aeroplanes in Tropical Countries", Aeronautical Journal, XXV (November, 1921), 563-83, and R. M. Drummond, "The Cairo-Capetown Air Route and Problems of Air Operation in Tropical Africa", Aircraft, V (August, 1926), 316-32.

Once the survey had been completed and the needs known, the question of financing the ground facilities remained. With the exceptions of South Africa and Southern Rhodesia, none of the other British territories along the route were prepared to advance more than the agreed subsidy support.<sup>57</sup> Even here, Kenya and Tanganyika were quick off the mark to seek reductions in their subsidy when it appeared that Imperial Airways would have to use the old DH66 initially on the service.<sup>58</sup> The point was that all the colonies were hard pressed for surplus funds to promote aviation, and the determined basic needs were beyond their financial capabilities, regardless of their enthusiasm and interest in the project. On the other hand, neither Imperials nor the British Exchequer were prepared to contribute beyond the terms of the proposed agreement.<sup>59</sup> Fortunately, the

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57. The Sudan had agreed to £5,000 p.a., Uganda £10,000, Kenya £15,000, Tanganyika £10,000, Northern Rhodesia £2,000, Southern Rhodesia £10,000, and South Africa £80,000 for five years. One problem was that these rates were to take effect when the through service to the Cape was in operation. Thus it meant persuading the Sudan and the East African Colonies to provide subsidy support for the interim services terminating at Mwanza.
58. AVIA 2/422, enclosures 164c and 164d; Governor Cameron (Tanganyika) to CO, July 9, 1930, and Governor Grigg (Kenya) to CO, July 14, 1930. Cameron was concerned that the DH66 could not handle a full load at 7,000 feet and the service would therefore be less than promised. The A.M. blandly replied that the DH66 was the best available.
59. As ever, Imperial Airways was hard pressed to find extra funds to support its operations. The setting up of their own organisation in Africa and on the Indian route was a heavy drain on limited resources. Despite their commercial

African Colonies were able to turn to the Colonial Development Fund for the needed support under the terms of the Colonial Development Act (1929).<sup>60</sup>

Although the Colonial Development Fund Committee was at first doubtful that the Colonies' applications for funds met the act's terms of reference,<sup>61</sup> by June, 1930, the first grants were approved for Kenya and Northern Rhodesia. By early 1932, the four Colonies of Uganda, Kenya, Tanganyika and Northern Rhodesia had spent £94,547 on air route

59. (continued) pretensions, their mandate was a political one, and revenues never matched operating costs. In addition, a swiftly changing technology meant constant re-equipment, and Woods Humphrey could bemoan "the heavy burden of obsolescence". The Times, "Flight and the Nations", August 20 & 21, 1930, pp. 11-12, pp. 11-12. Great Britain was already committed to pay 75% of the subsidy for the preliminary East Africa service. Another £3,000 were spent by the Air Ministry in opening the route. Sassoon, Hansard, CCLXII, February 24, 1932, col. 380.
60. AVIA 2/455, Colonial Development Fund - Assistance to Civil Aviation - Development in the Colonies, 1929. Enclosure, the Colonial Development Act 1929 (20 Geo 5. ch 5), "an Act to authorise the making of advances for aiding and developing agriculture and industry in certain colonies and territories....".
61. Ibid. Wakefield (Treasury) to Sir Basil Blackett (Chairman, Colonial Development Fund Committee), December 6, 1929. While the terms of reference provided for "the improvement of internal transport and communications and the provision of equipment therefor...." (part 1b), it was not clear initially that the funds requested could be interpreted as contributions to "development" and not merely civil aviation as such.

requirements, the bulk of which came from the Fund.<sup>62</sup> Such support came at a crucial time; without it the opening of the route would have been considerably delayed. Imperial Airways would not have ventured into Africa unless certain minimum requirements were met, their approach here as elsewhere guided by the canons of caution and conservatism.<sup>63</sup>

With the financial side of the picture more or less settled, by mid-1930, Imperial Airways, the Air Ministry and the cooperating African Governments proceeded with the final negotiations to "ensure an early start to the service".<sup>64</sup> In October, a formal agreement was approved.<sup>65</sup> It called for a January start to the East African Colonies, with the extension to Cape Town by the 1st of April, "or as soon thereafter as possible".<sup>66</sup> The General Post Office agreed to pay Imperials

62. The initial requests were set out in a Colonial Office Advisory Committee Memorandum (CDAC 293), May 23, 1930; for Uganda, £10,450, Kenya, £47,300, Tanganyika, £9,000, and Northern Rhodesia, £15,000. See AVIA 2/487, Cairo to Cape Town Air Service - Application by Colonies interested in Grants from Colonial Development Fund, 1930, enclosure 10a. In the House, Cunliffe-Lister reported colonial expenditures as, Uganda, £12,370, Kenya, £47,300, Tanganyika, £13,337, and Northern Rhodesia, £21,500. Hansard, CCLXII, March 2, 1932, col. 1087.
63. Imperial Airways publicity called the steps in this Imperial programme "Cautiously and conservatively planned". "The London-Cape Town Air Route", p. 2.
64. AVIA 2/422, Dannreuther to CO, July 28, 1930.
65. Published as Note by the Secretary of State for Air on the Principle Provisions to be embodied in a Contract with Imperial Airways, Limited, for a Weekly Air Service between Cairo, Egypt, and Cape Town connecting with the Existing Service between England and Egypt. Cmd. 3696 (1930). See too AVIA 2/422, "Agreement for Air Services Egypt to South Africa", October 22, 1930.
66. Ibid., para. 6.

for air mail services at the rates of 12/6 per pound to the Sudan, 17/6 to East Africa, and 25 shillings to the Rhodesias and South Africa. <sup>67</sup> The subsidy arrangements were set out to provide payment to Imperials at a rate of £160,000 p.a. until the full Cape service was in operation, at which point the contract allowed a maximum subsidy to be earned of £900,000 spread over the five years of the agreement. <sup>68</sup> As well as the usual stipulation that Imperial Airways use British-built aeroplanes, a further clause called upon Imperials to employ South African Nationals "wherever possible" on the C5 section of the route, a sop to critical nationalist sentiment in the Union. <sup>69</sup>

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67. Ibid., para. 7. Imperials were able apparently to increase their charges to the GPO from a lower scale agreed upon earlier, namely, 10 shillings per pound to the Sudan, 16 to East Africa, 20 to the Rhodesias, and 25 to the Union. AVIA 2/422, enclosure 139a, GPO to A.M., June 25, 1930.

68. Ibid., para. 11. The maximum amounts to be earned were £240,000 in the first year, £210,000 in the second, £180,000 the third, £150,000 the fourth, and £120,000 in the fifth and final year. Actual amounts earned were £235,008, £204,494, £174,495, £144,760, and £135,247. Higham, Britain's Imperial Air Routes, p. 347. As in the agreements made for other Imperial services, the scaled reduction in annual subsidy payments reflected the sanguine notion that ultimately the routes would pay for themselves out of revenue, Geddes noting with confidence that the Empire routes would enable civil aviation "to free itself from the golden shackles of subsidies". The Times, July 3, 1930, p. 8.

69. AVIA 2/422, "Agreement for Air Services", paras. 15 and 20(2).

In September, the Air Ministry announced that the East African section of the Cairo-Cape Town route would be open in January, 1931,<sup>70</sup> but in January, the opening was again postponed to February 28, mainly because Imperial Airways was having some difficulty in allocating aircraft for the service while still awaiting delivery on new aircraft ordered in 1930.<sup>71</sup> Despite the problems, the first service departed for Mwanza on February 28 with 10,000 letters for East Africa and some passengers as far as Khartoum only.<sup>72</sup> The 5,114 mile route originated at Croydon, then to Cologne-Nuremberg-Vienna-Budapest-Athens-Crete-Alexandria-Cairo-Assuit-Luxor-Assuan-Wadi Halfa-Kareima-Khartoum-Kosti-

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70. The Times, September 20, 1930, p. 7. It noted that the schedule would be eight days [sic] and aircraft on the route would have a "constant capacity" for 12 passengers. The Aeroplane ("Towards Good Hope", September 24, 1930, pp. 725-26) greeted the announcement as "good news".
71. See The Times, January 1, 1931, p. 10, and January 2, 1931, p. 10. The aircraft (see Notes on Aircraft, Appendix I, for the Handley Page HP42, Armstrong Whitworth Atalanta and Short S. 17 Kent flying boat) should have been in operation in January. Their late delivery forced Imperials to raid their European and Indian fleets. See short discussion in Higham, Britain's Imperial Air Routes, pp. 156-57.
72. The Times, March 2, 1931, p. 12. Initially the service as far as Greece was run as part of the Indian service. Not until October was a separate African service originated at Croydon. With some prescience The Times (February 28, p. 11) warned, "delays along this route there will certainly be....".

Malakal-Shambe-Juba-Port Bell-Kisumu, and finally, Mwanza. <sup>73</sup>

The scheduled time was 10 days, with Argosy aircraft flying the European and Cairo-Khartoum sectors, Short Calcutta flying boats on the Mediterranean and Khartoum-Mwanza portions of the route. <sup>74</sup> The first return service departed Mwanza March 10, following much the same route as the southbound service except for an additional stop at Butiaba, and after Vienna, via Basle and Paris. <sup>75</sup>

At long last it appeared that the old dream was coming true as Imperials established the first important stage on the Cairo-Cape service. While the initial emphasis was placed upon the mails, in April the route was opened to passengers right through to Mwanza, <sup>76</sup> and the deliberate policy of an

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73. Stroud, Annals, p. 85. Since 1929, the trans-European sectors of both the Indian and African routes had been subject to a number of changes involving both air and rail travel. At times mail travelled sectors by air, passengers by rail. See Higham, Britain's Imperial Air Routes, pp. 134-46 for discussion. In October, 1931, the pattern for the African service was established as London-Paris by air, Paris-Brindisi by train, and Brindisi to Athens, Mirabella and Alexandria by air. This routing lasted to January, 1937. Stroud, Annals, p. 90.
74. Stroud, Annals, p. 85. European route changes in May and October shortened the schedule to 7-8 days.
75. Ibid. The flight arrived at Croydon March 19 with 12,000 letters from East Africa and the Sudan. The Times, March 20, 1931, p. 16. In Africa, night stops were made at Cairo, Wadi Halfa, Khartoum, Juba and Kisumu, while the Alexandria-Cairo sector was travelled by train. For a short descriptive account of the service by a former pilot on the run (Captain, now Wing Commander, L. A. Egglefield), see Jones, The Time Shrinkers, pp. 207-11.
76. Some passengers did travel London to Uganda and return in March. See The Times, March 17, 1931, and March 27, 1931, p. 11.

air mail/passenger service was established for Africa as it had been elsewhere by Imperial Airways.<sup>77</sup> However, the beginnings did not go smoothly; aeroplane accidents along the route and the consequent delays in mail deliveries were discouraging, and the ground organisation over which so much fuss had been made was far from ready for the service. In fact, the first few months of the East African service were generally chaotic, and not until May did matters begin to settle down into a routine air transport operation.<sup>78</sup> While some of the early problems with aircraft and ground facilities could well have been dismissed as 'teething problems' which would be cleared up in time, they did not go unnoticed, nor were they completely understood by the critics always at the ready for an assault on Imperial Airways' capabilities and monopoly position. This readiness was most apparent in East Africa where comment from the start had been most critical.<sup>79</sup>

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77. Critics like C. G. Grey of the Aeroplane argued strongly that the air mails should receive priority treatment as was the situation in the United States. An 'air mails only' service could use smaller, faster aeroplanes and eliminate many of the 'frills' required for passenger services. It "should travel at not less than 1,000 miles a day even without night flying....", Aeroplane, April 8, 1931, p. 598. See too January 27, 1932, pp. 138-50. From the beginning, Imperial Airways rejected the notion.
78. With only four aircraft operating the Cairo-Mwanza sector, the loss of any one for a time caused delays. All four were out of service at one time or another with damaged undercarriages, thrown pistons, leaking fuel tanks, or sand-seized engines. Even spares were damaged enroute. In May, the Scipio class flying boats were put into service in the Mediterranean, releasing a Calcutta for the African service. See Higham, Britain's Imperial Air Routes, pp.156-57.
79. See above, pp. 215-16, and below, chapter V. Note The Times' Kenya correspondent's remarks and extracts from the East African Standard, The Times, April 6, 1931, p. 9.

Certainly the East Africans had some cause to be concerned for the frequent mail delays in the first months of service made a mockery of promises to provide them with rapid and regular mail services to and from Great Britain. Until the inauguration of the air service, sea mail service between the United Kingdom and Kenya and Uganda averaged 19.5 days in transit, and as there was no regular service, mails were despatched by any vessel thus providing an irregular and often unconservative service.<sup>80</sup> For at least a short while, it was not clear that Imperial Airways was doing any better.

Even in the Sudan, where there was no sizable European population to bring pressure to bear for improvement of the operations, Imperials came in for sharp censure. The local R.A.F. commander, viewing the scene from Khartoum, accused the air line of "trying to do their ground organisation on the cheap". He pointed out that Khartoum lacked a hangar or a store, Omdurman lacked a proper slipway, while neither Khartoum nor Juba had adequate office facilities and passengers had difficulties contacting air line personnel. It appeared that "a short-sighted parsimony is apparently the order of the day. In the long run it will prove most expensive".<sup>81</sup> While these comments and others suggested

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80. AVIA 2/350 or AIR 5/1424, Tymms Report, p. 102. London-Tanganyikan mails averaged 22 days in transit with an average of 3.7 despatches a month.

81. AVIA 2/420, enclosure 78b, Wing Commander S. Douglas (later Chairman of British European Airways; see his autobiographical Combat and Command, New York, 1963) to F. Shelmerdine (D.C.A. Air Ministry), April 14, 1931.

that Imperials had indeed commenced operations before all was in order, and Woods Humphrey admitted that the incompleteness of ground organisation hampered operations especially as they affected the "comfort of the staff and amenities of passengers",<sup>82</sup> they took little account of the meagreness of the Sudan contribution and the larger political pressure to begin the service, ground facilities notwithstanding.

Not surprisingly, Imperial Airways' East African troubles were being watched unsympathetically in South Africa where in government, aviation and press circles the airline's image was one of bungling incompetence. The Union was becoming impatient; two years had passed since the agreement to contribute generously to a London-Cape service had been made, and the apparent "dismal failure" of the East African service promised further delay.<sup>83</sup> Moreover, air transport competitors were now in the field vying for the rights to routes within and outside the Union, and their success could place the future of Imperials' African service in jeopardy.<sup>84</sup> In addition, Glen Kidston's record dash to the

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82. AVIA 2/1879, part I, enclosure 81e, Woods Humphrey, "Memorandum", July 1, 1931, p. 1.

83. Ibid., enclosure 60b, J. J. Stanley (U.K. High Commissioner, South Africa) to Dominions Office, April 17, 1931. See also Cape Times, April 11, and Die Burger, April 14, 1931, for press criticism.

84. Among them, Union Airways and the Junkers-controlled South West African Airways. For full discussion of South African developments see chapter VII.

Cape in April, <sup>85</sup> and his open challenge to Imperial Airways to emulate his achievement, or work with him and Gladstone in partnership, heaped more coals on the fires of discontent already burning with some heat in the nationalist climate of the Union. <sup>86</sup> Kidston had a ready audience to his charges that when, or even 'if', the service to South Africa would get underway, Imperials would be employing aircraft already considered obsolete by some. With aeroplanes averaging about 100 miles per hour, the projected service to the Cape was going to take twelve days, not a great improvement on existing services by sea from Great Britain. <sup>87</sup>

85. Lieutenant Commander Glen Kidston flew his Lockheed Vega monoplane London-Cape in the then record time of 6 days, 10 hours. See above, f.n. 88, p. 115, and the Aeroplane, April 8, 1931, pp. 598, 621. Kidston and Tony Gladstone were killed in the crash of a Puss Moth near Blakensburg, Natal, in May. The Times, May 6, 1931, p. 14. For the Kidston story, see Bennett, Down Africa's Skyways, pp. 189-212, and Jones, The Time Shrinkers, pp. 156-59.
86. Imperial Airways tended to dismiss the Kidston flight as a "stunt" (The Times, April 8, 1931, p. 11), and saw "no advantage in co-operation with Gladstone and Kidston". AVIA 2/1879, part I, enclosure 55a, Woods Humphrey to Bertram (A.M.), April 24, 1931. Imperials preferred to set up their own South African company with a South African directorate if need be. See chapter VII.
87. The England-South Africa ocean service took 17 days.

For Imperial Airways, there was no attempt to ignore the furore surrounding the African route, but there was also little that could be done immediately to ameliorate the situation. The airline had no means at hand to improve and accelerate the establishment of the ground services organisation, and despite the fact that "the Company has used every conceivable means of putting pressure on the constructors of the aircraft", the aircraft side of the problem had to await the new deliveries.<sup>88</sup> In the meantime, Burchall had been sent out to Kenya in May to calm the troubled waters there, and plans called for a visit to South Africa by a senior Board member to deal with problems there as soon as feasible after the Cape service was opened.<sup>89</sup>

In July, Woods Humphrey could claim that the service as far as Lake Victoria was "now working with regularity", and the situation generally improving.<sup>90</sup> He was confident

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88. AVIA 2/1879, part I, Woods Humphrey "Memorandum", p. 3.

89. Burchall's task was to convince East Africa that the problems concerning aircraft and ground facilities were not of Imperials' making. See statement to East African Standard quoted in The Times, May 9, 1931, p. 11. Sir Vyell Vyvyan, a government director on the board of Imperial Airways, flew out to the Cape on the first service.

90. AVIA 2/1879, part I, Woods Humphrey "Memorandum", p. 1. Passenger impressions of the East African service can be noted in H. C. Druett, "From Cairo to Mwanza by Air", East Africa, March 5, 1931, pp. 12, 19, M.A.U. Heathcote, "By Air Mail to Kenya", Geographical Journal, LXXIX (June, 1932), 502-06, and R. F. Mayer, "From Nairobi to London by Air", Imperial Airways Gazette, IV (February, 1932), 2-3.

that the required five aircraft would be in position on the southern portion of the Cape route by November, and the through service could start by January 1st, 1932.<sup>91</sup> He assumed, of course, that the ground organisation would be ready in time, a still doubtful proposition, for the experience on the northern section had convinced the Company of the obvious --- regularity of service was "almost entirely dependent upon the completeness and satisfactory working of the ground organisation....".<sup>92</sup> Nonetheless, while the airline was prepared to be more careful than perhaps it had been in beginning the Cairo-Mwanza route, this sense of caution was balanced with an awareness that the sooner the through service was initiated the better. There could be no question of asking for more delays. If the Cape route had to be opened under less than ideal conditions, so be it. Such were the pressures for service from Great Britain and South Africa alike, the one in the cause of British Imperialism, the other, South African Nationalism.<sup>93</sup>

Throughout the last months of 1931, the Air Ministry and Imperial Airways worked out the final details of the Cape route. The eight day service from Cairo to Capetown was set up in this way:

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91. AVIA 2/1879, part I, Woods Humphrey "Memorandum", p. 2-3.

92. Ibid., p. 3.

93. This theme will be pursued in chapters VII and XI.

- First day Cairo-Assiut, 205 miles (refuelling stop);  
Assiut-Luxor, 145 miles (lunch);  
Luxor-Assuan, 120 miles;  
Assuan-Wadi Halfa, 160 miles (night stop  
at local hotel).
- Second day Wadi Halfa-Kareima, 245 miles (lunch);  
Kareima-Khartoum, 210 miles (night stop  
at local hotel).
- Third day Khartoum-Kosti, 180 miles (refuelling stop);  
Kosti-Malakal, 270 miles (lunch);  
Malakal-Shambe, 195 miles (refuelling stop);  
Shambe-Juba, 180 miles (night stop at local  
hotel).
- Fourth day Juba-Butiaba, 230 miles (refuelling stop);  
Butiaba-Port Bell, 140 miles (lunch);  
Port Bell-Kisumu, 150 miles (refuelling stop);  
Kisumu-Nairobi, 185 miles (night stop at  
local hotel).
- Fifth day Nairobi-Moshi, 160 miles (refuelling stop);  
Moshi-Dodoma, 230 miles (lunch);  
Dodoma-Mbeya, 250 miles (night stop at  
Company rest house).
- Sixth day Mbeya-Mpika, 255 miles (refuelling stop);  
Mpika-Broken Hill, 270 miles (lunch);  
Broken Hill-Salisbury, 300 miles (night stop).
- Seventh day Salisbury-Bulawayo, 240 miles (refuelling  
stop);  
Bulawayo-Pietersburg, 270 miles (lunch);  
Pietersburg-Johannesburg, 180 miles  
(night stop).
- Eighth day Johannesburg-Kimberley, 270 miles  
(refuelling stop);  
Kimberley-Victoria West, 215 miles (lunch);  
Victoria West-Capetown, 240 miles.

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94. W. E. Wynn, Civil Air Transport (London, 1945), p. 42.  
Wynn's scorn matched C. G. Grey's regarding the leisurely  
pace of the service. "More like a light aeroplane rally  
than a serious attempt to operate an Imperial air route!"  
See map, p. 269.

The Argosy and Calcutta aircraft would continue to operate the Cairo-Kisumu sector, and the DH66 operate south to the Cape, until the new aircraft were delivered. Although Imperial Airways had hoped to commence the service on January 1st, continuing delays in preparing the ground facilities, and a slowness in readying the DH66s for positioning on the route, necessitated a further postponement until January 24th.<sup>95</sup> This presented the airline with another problem. The northern Colonies and the Sudan had already agreed to two extensions of their contribution to the "preliminary" service, the last terminating on January 5th. In the Air Ministry view, it would be "unfortunate to have to approach them again on the subject of a further extension".<sup>96</sup> For Imperial Airways, the situation could mean that they might have to operate the through service at some point with less than the full subsidy.<sup>97</sup> A few days after the meeting with

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95. AVIA 2/549, Egypt-South Africa Air Services. Effect on Total Subsidy payable by Contributing Governments of Delay in Commencing Through Services, 1931. Note of a meeting held on 5th October, 1931, p. 2.

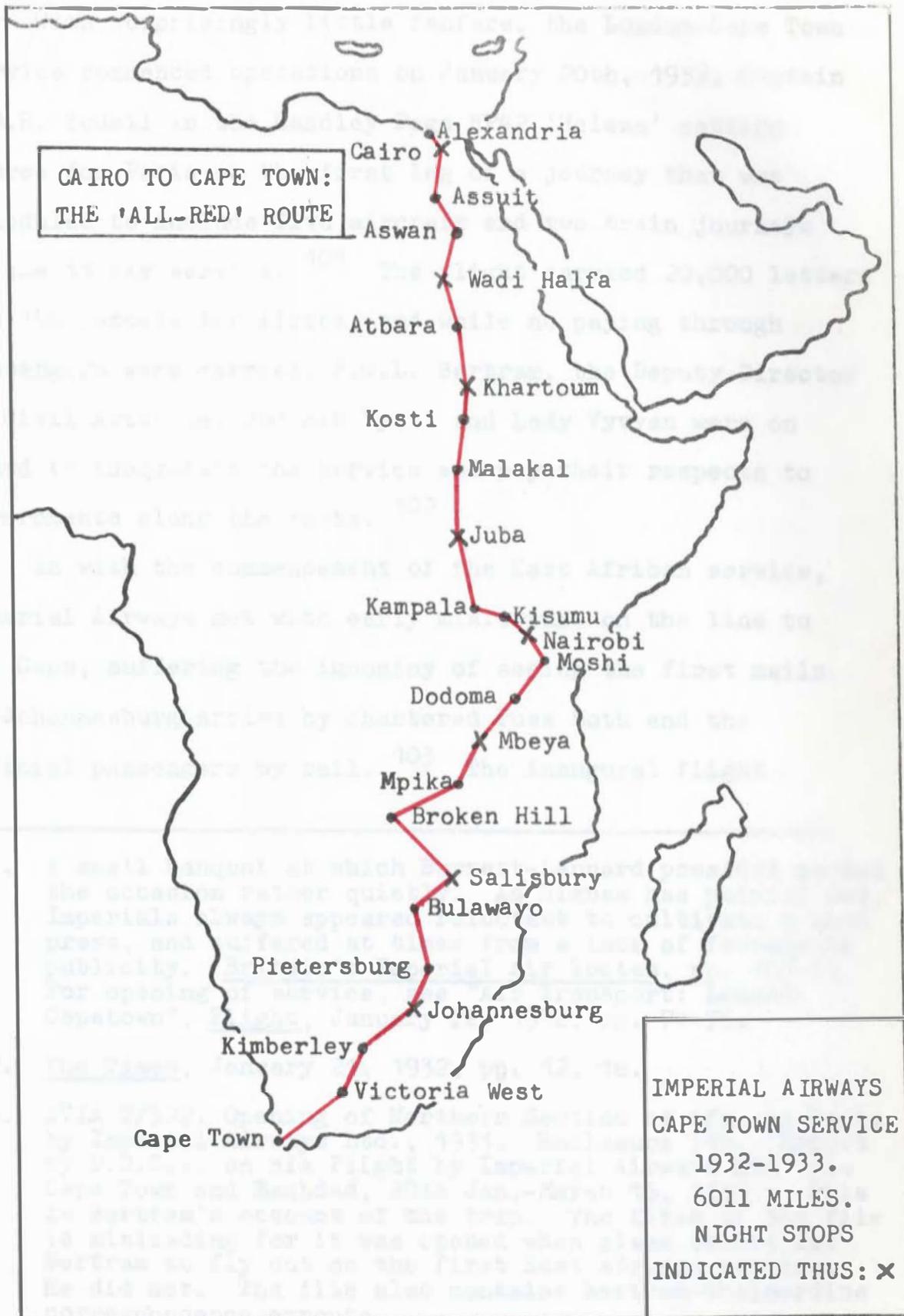
96. Ibid.

97. Ibid. Under the agreements for the "preliminary" service, Imperial Airways could earn a maximum of £120,000; from Great Britain, £90,000, Sudan, £3,750, Uganda, £7,500, Kenya, £11,250, and Tanganyika, £7,500. For the additional three return flights in January, 1932, a further £7,160 subsidy was required. The Air Ministry was concerned that the Colonies would agree to an extension but curtail the full agreement to four years, eleven months, as compensation. Ibid., enclosure 47a, "Payments in Respect of the Preliminary Service".

the Air Ministry, Imperials were able to advance the timetable by four days, but no more, as they set out the schedule of aircraft delivery flights to Cape Town, Germiston, Broken Hill, Nairobi and Kisumu. <sup>98</sup>

In November-December, 1931, a final survey of the whole Cairo-Cape route was made by Major Brackley, Imperial Airways Air Superintendent, Air Commodore A. Fletcher, the Ground Services Superintendent, and Flight Lieutenant R. Durrant of the Air Ministry Signals Department. This flight, making use of one of the aircraft that was to be positioned in South Africa, had the distinction of delivering the first air mails to Cape Town, as both Imperial Airways and the Post Office had agreed to preview the new service with a delivery of Christmas mail. <sup>99</sup> The leisurely trip down the continent even stopped at Zomba, the only time Nyasaland was to enjoy the luxury of an Imperial service before World War II. <sup>100</sup>

98. AVIA 2/549, Burchall to Bullock, October 9, 1931. The original schedule of delivery called for the DH66s 'City of Delhi', 'City of Karachi', 'City of Jodhpur', 'City of Basra', and 'City of Capetown', to depart the United Kingdom November 22, December 13 and 27, January 3 and 10 for the five African centres. Sassoon announced the opening dates for the service in the House in late November. Hansard, CCLX, November 30, 1931, col. 763. See too, "London to Capetown", The Graphic (Special Trans-Africa edition), November 14, 1931.
99. See Higham, Britain's Imperial Air Routes, p. 157, and Jones, The Time Shrinkers, pp. 211-13. The survey flight picked up the mail from the United Kingdom at Germiston (flown out on the delivery flight of the 'City of Basra') and delivered it to Capetown, December 21.
100. The trip took 29 days. Stroud has a picture of the aircraft on the ramp at Zomba in his Annals, p. 90.



CAIRO TO CAPE TOWN:  
THE 'ALL-RED' ROUTE

IMPERIAL AIRWAYS  
CAPE TOWN SERVICE  
1932-1933.  
6011 MILES.  
NIGHT STOPS  
INDICATED THUS: X

With surprisingly little fanfare, the London-Cape Town service commenced operations on January 20th, 1932, Captain A.B.H. Youell in the Handley Page HP42 'Helena' setting course for Paris on the first leg of a journey that was scheduled to include five aircraft and two train journeys on the 11 day service. <sup>101</sup> The flight carried 20,000 letters and 150 parcels for Africa, and while no paying through passengers were carried, F.G.L. Bertram, the Deputy Director of Civil Aviation, and Sir Vyell and Lady Vyvyan were on board to inaugurate the service and pay their respects to Governments along the route. <sup>102</sup>

As with the commencement of the East African service, Imperial Airways met with early misfortune on the line to the Cape, suffering the ignominy of seeing the first mails to Johannesburg arrive by chartered Puss Moth and the official passengers by rail. <sup>103</sup> The inaugural flight

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101. A small banquet at which Barrett-Lennard presided marked the occasion rather quietly. As Higham has pointed out, Imperials always appeared reluctant to cultivate a good press, and suffered at times from a lack of favourable publicity. Britain's Imperial Air Routes, pp. 157-59. For opening of service, see "Air Transport: London-Capetown", Flight, January 22, 1932, pp. 74-75.
102. The Times, January 21, 1932, pp. 12, 16.
103. AVIA 2/522, Opening of Northern Section of African Route by Imperial Airways Ltd., 1931. Enclosure 31b, 'Report by D.D.C.A. on his Flight by Imperial Airways Ltd., to Cape Town and Baghdad, 20th Jan.-March 16, 1932'. This is Bertram's account of the trip. The title of the file is misleading for it was opened when plans called for Bertram to fly out on the first East African service. He did not. The file also contains Bertram-Shelmerdine correspondence enroute.

southbound was behind schedule almost from the start. The Calcutta to be flown on the Khartoum-Kisumu sector was unserviceable with engine trouble. The Argosy which had flown the route from Cairo was pressed into service to fly the Kisumu leg only to break a landing wire, forcing a return to Khartoum for repairs. Further south, the DH66 flying between Mbeya and Mpika had to force land at Shiwa Ngandu, delaying its arrival at Broken Hill.<sup>104</sup> On the same day, the northbound flight which had left Cape Town on the 27th landed in the Mulungushi swamp, some 40 miles southeast of Broken Hill, victim of the same storm which had forced down the southbound flight. In order to keep the mails moving in some sort of an orderly flow, Imperial Airways decided to turn around the southbound DH66 at Broken Hill and, as mentioned, send mail and passengers to Johannesburg by other means.<sup>105</sup> Because of the series of incidents, the first mails did not arrive in Cape Town until February 2, 13 days after leaving London, while the northbound mails from the Cape were 21 days in transit.<sup>106</sup>

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104. Ibid.

105. Ibid. Bertram and the Vyvians proceeded to Johannesburg by South African Railways, while the mail was carried by a Rhodesian Aviation Company Puss Moth piloted by M. H. Pearce. See Jones, The Time Shrinkers, p. 215.

106. The first air mails arrived in London from the Cape February 16th, and included both the first and second despatches brought together during the delay at Broken Hill. Thus one load was 9 days late, the second, two. The load was 1,000 lbs. of letters and 60 lbs. of parcels. The Times, February 17, 1932, p. 14.

Clearly, Imperial Airways could not have anticipated such a run of bad luck. When the service opened, only 4 of the 5 DH66s positioned on the route were in service, one having been damaged while taking-off from the poorly prepared runway surface at Mbeya on its delivery flight. An additional DH66 scheduled for the service was still delayed while undergoing its programmed overhaul. By February 3, only two DH66s were still flying.<sup>107</sup> With this disastrous beginning, Imperials were hard pressed to maintain even a semblance of the scheduled service. In late April, Sir Kingsley Wood, the Postmaster-General, speaking in the House in reply to the querulous Captain Balfour, had to admit that 12 air mail flights to the Cape, only five arrived on schedule, while of 11 Cape-London flights, just three were punctual.<sup>108</sup> Nonetheless, the air mail service was being used with average weekly loads of 310 pounds of mail departing from London.<sup>109</sup>

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107. AVIA 2/577, Egypt-South Africa Air Service - Payments of Subsidy to Imperial Airways re Flights on 'C' Services, 1932. Enclosure 3a, Dismore to Bullock, February 3, 1932, pp. 1-2.

108. Hansard, CCLXV, April 25, 1932, cols. 27-28.

109. Hansard, CCLXIV, April 18, 1932, col. 1246. The 310 lbs. was broken down; Egypt, 69 lbs., Sudan, 26, Kenya and Uganda, 114, Tanganyika, 26, Northern and Southern Rhodesia, 23, and South Africa, 52 lbs.

Not unexpectedly, echoes of the chorus of complaint and criticism which had attended the opening of the East African route could be heard through the first months of the Cape Town service. In Great Britain, the House expressed its concern about the conditions of the aerodromes and the wireless facilities.<sup>110</sup> In the Union, one aviator, in a letter to C. G. Grey, expressed a not uncommon and decidedly hostile view of Imperial Airways;

There is little doubt that at the end of five years neither the Union nor the Rhodesias will renew Imperials' contract. You, not having seen Imperials abroad, may possibly think they are a good firm. Well, I have studied them for the last five years on and off in Africa, and I assure you that they really are the worst managed and most impossible show that has ever succeeded in bolstering itself up under a monopoly. The chaos in Central Africa at the moment would be a roaring farce if it were not a tragedy, and practically every bit of it unnecessary. Their pilots have pulled them through, and they don't deserve it. 111

Much of the criticism of this kind tended to be more hysterical than helpful. As both Burchall and Woods Humphrey took pains to stress, Imperials alone could not be held responsible for all the problems that were affecting the service, and, moreover, Africa itself presented special

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110. Among the most vociferous critics were Captains Balfour and Cazalet, Mr. P. Macdonald, and Mr. Hall-Caine. See Hansard, CCLXV, April 27, 1932, cols. 357-58, May 11, 1932, cols. 1888-89.

111. Quoted in the Aeroplane, July 6, 1932, p. 6.

difficulties quite unlike those on the European and Indian routes already in operation. <sup>112</sup> In any case, South African political considerations aside, the loudest abuse of Imperial Airways and the Cape operation became more muted as slowly but surely the service improved. In April, the route was opened to passenger traffic south of Kisumu, <sup>113</sup> although others, like the famous Major Ewart S. Grogan, had been carried through to the Cape before the route was opened to the public. <sup>114</sup> At least some of the early passengers were impressed by the service which they later described in the most minute detail. <sup>115</sup> One British writer was sufficiently

112. See, for example, Burchall, "Air services in Africa", and G. E. Woods Humphrey, "Air Communications in Africa", Journal of the Royal Society of Arts, LXXIX (February 6, 1931), 277-91.
113. The first through service departed London April 27. The fare to the Cape was £130. The Times, April 27, 1932, p. 14. Sassoon announced the opening in the House the following day. Hansard, CCLXV, April 28, 1932, col. 5628. No through passengers were actually carried on this service on account of full bookings between intermediate stops.
114. Grogan was the man who walked from the Cape to Cairo. On the occasion of his flight, Imperial Airways sent the following telegram;  
 Heartiest congratulations on your unique double achievement in being the first man to tramp Cape to Cairo in three years, 1898-1901, and first passenger to fly on the regular air service Cairo-Cape in 8½ days, 1932, thus epitomizing 31 years' progress of transport in Africa.  
 Quoted in The Times, February 11, 1932, p. 11.
115. See C. W. Byas, "Swiftly to the Cape", Blackwood's Magazine, CCXXXII (December, 1932), 742-67; "Cape Town to Cairo in Six Days in Unimagined Comfort", Imperial Airways Gazette, IV (April, 1932), 2-3; "A Journey Home by Imperial Airways from East Africa", Imperial Airways Gazette, V (May, 1933), 1-2; R. F. Carnegie, "London to Kenya by Air", Imperial Airways

inspired to write a novel with the route as a setting, certainly the first and probably the last novel about air travel on a route that is now history. <sup>116</sup>

At the same time, improvements along the route were being planned and carried out. In May, 1932, tests were being done to improve wireless communications as the long-wave 900 meter band was proving liable to a great deal of interference in electrical storms. <sup>117</sup> In August, The Beit Trust reached agreement with the authorities in Northern and Southern Rhodesia on ways of spending £50,000 devoted to the cause of aviation in the Rhodesias. In effect this meant building more aerodromes and landing grounds, as well as adding communications facilities, along the difficult 1200 mile stretch between the borders of Tanganyika and the Transvaal. <sup>118</sup> By November, the HP 42s replaced the

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115. (continued) Gazette, IV (May, 1932), 1-3; "London to Salisbury by Imperial Airways", Imperial Airways Gazette, VI (January, 1934), 1-2; and a series in the Gazette titled "A Pleasant Journey in the Air", running from December, 1932 to June, 1933, covering each main leg of the trip.
116. Charles Lorne, Air Liner (London, 1934).
117. The Times, May 7, 1932, p. 17.
118. The Times, August 26, 1932, pp. 10-11. See too AVIA 2/578, Beit Railway Trust - Proposal to Establish Meteorological Service in Rhodesia, 1932; AVIA 2/579, Beit Railway Trust - Allocation of sum of £50,000 for Development and Improvement of Cape-Cairo Line, 1932; and Sir Alfred Beit and J. G. Lockhart, The Will and the Way, 1906-1956 (London, 1957), "being an account of Alfred Beit and the Trust which he founded". For details, note chapter VI.

Argosies and Calcuttas on the Cairo-Kisumu sectors,<sup>119</sup> and in early 1933 the Atalantas, specially designed to operate the southern portion of the African route, were put into operation.<sup>120</sup>

The new aircraft, because of their greater range and higher capacity, enabled Imperials to shorten the route schedule to 10 days in April,<sup>121</sup> and provide a better service in terms of space and comfort. A year later, the schedule was further reduced to 9 days when the Brindisi-Alexandria sector was scheduled for one day instead of the previous two. Finally, at the end of 1934, Imperials had sufficient aircraft on hand to inaugurate a second weekly service as far south as Johannesburg.<sup>122</sup>

In effect, these many changes and improvements meant that Imperials were achieving their aim of providing a fast, reliable and regular service to the African empire. A steady, although unspectacular, growth in the volume of mail carried

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119. Stroud, Annals, p. 99. For the moment this settled the question of whether land or sea planes along the Nile route and across the Sudd, Imperial Airways persuading the Air Ministry that "a more regular and efficient service could be operated" with 4-engined landplanes. AVIA 2/549, 'Note of a Meeting held on 5th October, 1931', p. 1.

120. Higham, Britain's Imperial Air Routes, p. 160.

121. Stroud, Annals, p. 102. This was achieved by flying the Cairo-Khartoum sector in one day.

122. Ibid., pp. 109, 117.

reflected a hard-won public confidence in the African service. In 1932, Imperials carried 15,900 lbs. of letters to and from Africa, compared to 5,500 lbs. the previous year on the abbreviated service to East Africa.<sup>123</sup> In 1933, 24,700 lbs. were carried, excluding parcels, representing a substantial 55% increase, although still a small 12.9% of total mails flown by Imperials' services.<sup>124</sup> Still, the modest achievement was far from the expectations of either the Air Ministry or Imperial Airways. For the latter, the mails were the key to success or failure on the African as well as the other Imperial routes, and to the Board and management of the airline, an increase in public use of the air mail services would have to be encouraged by the General Post Office and a general change in postal policy implemented that would eliminate the discriminatory practice of surcharging mails conveyed by air.<sup>125</sup> From 1932 onwards, Imperial Airways, mindful of the need to work towards financial self-sufficiency

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123. The Times, January 25, 1933, p. 8. The volume of mails for East Africa had increased dramatically, averaging 170 lbs. (5,500 letters) a week outbound from Great Britain, and 160 lbs. (5,200 letters) inbound. P. Cunliffe-Lister, Hansard, CCLXX, November 17, 1932, col. 1296.
124. The Times, January 22, 1934, p. 3.
125. The preferential Empire rate for first class mails by surface transport was 1½ d./oz. By air mail, a letter to East and South Africa from Great Britain, for example, cost 6d.

and concerned about growing air competition in various sectors of the Empire and Africa, <sup>126</sup> pressed for changes in British air policy that would result ultimately in the Empire Air Mail Scheme. <sup>127</sup>

At the eighth general meeting of Imperial Airways in October, 1932, Geddes argued against the injustices being done to civil aviation by postal administrations in the United Kingdom and abroad, noting,

their policy seemed to be that the air mail was a luxury to which the public was not entitled without special payment and a luxury which must be taxed in addition. <sup>128</sup>

Geddes' main point was that the GPO was determined to make a profit on air mail services, whereas it was quite prepared to lose money on the mails carried by surface transport. Referring to the air mail as "the youngest baby of the postal administration", Geddes complained that,

it was expected not only to earn its own living, but to pay for the privilege of being allowed to do so. <sup>129</sup>

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126. Imperial Airways was reducing the amount of subsidy as a percentage of total revenue. In 1924, the subsidy had represented 64% of revenue; in 1932, it represented 45% on European services and 56% on Indian services. AVIA 2/636, Future of Imperial Civil Air Communications. Memorandum Submitted by Imperial Airways Limited, 1933, pp. 5-6. No separate African statistics were provided but in 1934, 45.4% of all receipts were derived from subsidies. Higham, Britain's Imperial Air Routes, p. 349. Competition came from South Africa, K.L.M., and Air France, among others.
127. See below, chapter IX.
128. Imperial Airways, Ltd. Report of the Annual General Meeting, 1932. See too The Times, October 26, 1932, p. 8. In Geddes' absence, the speech was read by Sir George Beharrell.
129. Ibid.

Thus Geddes made public the air line's differences with the GPO and the accusation that "problems arising out of certain working conditions" of the post office were threatening the development of Empire services. As Dismore had pointed out to the Air Council, mail traffic on the Indian and African routes had not approached the estimates on which the initial financial agreements had been made, and the reason was simply that customers would not or could not pay the surcharge. In effect, the postal rates meant that users of the air mail service were being charged for ground transport as well as air transport costs, a discriminatory practice to which the air line took sharp exception. <sup>130</sup> For Imperials, this was adequate explanation for the generally low utilisation of total aircraft capacity which only on the London-Paris run approached satisfaction. <sup>131</sup> On the Empire routes where it

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130. AVIA 2/1897, Imperial Airways Air Mails: Service to India and Africa - Problems Arising out of Certain Working Conditions of the GPO, 1932. Dismore to Bullock, May 3, 1932, and enclosure, 13 page memorandum, Imperial Airways to the Postmaster-General's Committee. The following year, Kingsley Wood admitted in the House that the post office had realised a profit of £1,400 on the South African service. Hansard, CCLXXXIII, November 27, 1933, col. 511.
131. AVIA 2/636. I.A. memorandum, p. 10. The space utilisation expressed in percentages showed London-Paris, 83.9%, Cairo-Kisumu, 73.7%, Brindisi-Egypt-Palestine, 62.5%, Cairo-Basra, 53.5%, Kisumu-Capetown, 49.3%, and Basra-Karachi, 41.9%.

had been hoped to attract a large volume of mail traffic because of the significant time-savings involved, Imperials were carrying only half-loads, and they singled out in particular "the sterility on the African route of the section between Nairobi to Salisbury, in forwarded and received traffic".<sup>132</sup>

Clearly, throughout 1932 and early 1933, the Board of Imperial Airways was pleading for a full reassessment of their mandate, even as the air line was consolidating its position in Africa and pushing the eastern route towards Australia.<sup>133</sup> As had been the case in 1927,<sup>134</sup> Imperials were concerned about the future, and with good cause. The African and other route agreements all terminated in the 1937-39 period or about the same time as even the newest aircraft would be reaching an obsolescent age. While the airline had grown in size and scope of operations since 1924,<sup>135</sup> financial returns were barely sufficient to meet

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132. Ibid., p. 11.

133. In 1933, the eastern service was extended to Calcutta, Rangoon and Singapore. In December, 1934, Imperials opened the London-Australia route in cooperation with Indian Trans-Continental Airways and Qantas Empire Airways.

134. See above, chapter II, pp. 144-147.

135. In the first ten years of operations, the Company's route mileage had grown to 12,000 (vs. 1,700 in 1924), and ton mileage to about 3,000,000 (vs. 650,000 in 1924), and Imperials flew to 19 countries. AVIA 2/636. I.A. memorandum, p. 5.

increasing costs and allow a small return to investors.<sup>136</sup>  
This meant the Company had not been able to create adequate reserves for obsolescence and the elimination of unsaleable assets from the balance sheets. The genesis of the Empire Air Mail Scheme lay in the Company's determination to resolve these related problems without having to resort to an appeal for a greater subsidy to match continental rivals.<sup>137</sup> The place of the air mails in the idea as it developed was to give the Company a guaranteed load on all services, assuming the GPO could be won to the cause of transporting all first class mail by air where air transport provided a regular service. With an accompanying elimination of the surcharge, for which the GPO would have to absorb the loss in revenue, Imperials could be confident of their capabilities to develop further the Imperial routes with a greater frequency of service, and a reduced timetable

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136. Ibid. From 1924-1932, the amount paid in dividends to shareholders was calculated at only 3% paid up capital.

137. In the years ending March 31st, 1933, 1934, 1935, total subsidies paid to Imperials were £545,008, £543,694, and £561,556 respectively. Figures for the African service were £235,008, £204,494, and £174,495. Higham, Britain's Imperial Air Routes, p. 347. At the same time, annual expenditures on civil aviation in France, Germany and Italy were roughly £1,465,000, £850,000, and £766,000. See CAB 24/243, C.P. 249 (33), "The Future of British Commercial Air Transport", memorandum by Lord Londonderry, November, 1933, p. 2.

with new, faster and larger aircraft designed to accommodate the anticipated demands of a new mail service. 138

Such fundamental changes in the development of Great Britain's 'Empire in the Air' could not be brought about overnight, but there was a sense of urgency in the Company's appeal. If the British Government did accept Company suggestions for change, it meant the beginning once again of long and often difficult negotiations with the Dominions and Colonies, and any new aircraft required at least three years from the drawing board until they were put in service. Imperials were not prepared to respond to problems on an ad hoc basis, nor were they content to let the future take care of itself. From early in 1932, Imperial Airways were pointing to the future, reminding their masters in the British Government that challenge had to be met with change, such as indicated in the outlines of a new comprehensive air mail scheme to serve the needs of Empire. 139

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138. As Imperials admitted, "the present small time-saving London-Cape has retarded traffic...."; as to improving the load capacities on the route, "it appears that land aircraft may well be approaching the maximum size which will be commercially possible", and what was needed were marine aircraft. AVIA 2/636. I.A. memorandum, pp. 12-14. See chapter IX for discussion.
139. Pudney (The Seven Skies, p. 78) attributes the genesis of the E.A.M.S. to S. A. Dismore, Imperial Airways' Secretary, but the scheme bears some strong resemblances to proposals put forward by the Civil Aviation section of the London Chamber of Commerce in 1930. See The Times, March 11, p. 13, and May 28, p. 11, 1930.

While concern about future development tended to overshadow all else in the early years of the African service, Imperials were not ignoring the immediate requirement of providing British Africa with the best air service possible. Part of the policy was to assure that the route from Cairo to Cape Town, and the 'feeder' routes connected to the trunk service, were kept securely in British, preferably Imperial Airways', hands. Although hopes to establish an "Imperial Airways of South Africa" or some like aviation company in the Union came to nought,<sup>140</sup> Imperials did acquire substantial interests in Wilson Airways and Rhodesian and Nyasaland Airways in 1933, Geddes disclaiming any intention of obtaining "an octopus grip on the territories over which we pass".<sup>141</sup> Further north in

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140. In 1929, Reuters had reported the registration of "Imperial Airways of South Africa" at Pretoria (The Times, August 16, 1929, p. 9), but this cannot be confirmed in other sources. In 1931, Imperial Airways representative in South Africa was still engaged in forming "a South African Company" with Imperial Airways prepared to put up £25,000. AVIA 2/1879, part I. Enclosure 81d, James Leish (I.A. rep.) to C. W. Malone (South African Minister of Railways and Harbours), July 15, 1931. In June, 1932, Imperials were still interested in forming a company in the Union (ibid., part II, enclosure 4a), but local criticism compelled Imperials to withdraw. See review in The Times, June 24, 1932, p. 8, and below, chapter VII.

141. Imperial Airways, Ltd. Report of the Annual General Meeting, 1934.

Egypt, the situation was less favourable for Imperial ambitions, but it was far more crucial to establish a firm British presence. As discussed earlier, Egypt was ever the problem, explained best by its 'peculiar' status vis-à-vis the Empire.<sup>142</sup> Since 1925, when the German firm of Junkers had made firm proposals to the Egyptian Government for domestic air services and training facilities,<sup>143</sup> Great Britain had been in the difficult position of having to deny foreign access to Egyptian ports of entry and at the same time convince Egypt of the merits of participating in Imperial air plans.<sup>144</sup> Although Egypt finally supported the establishment of the Cairo-Cape Town service and entered into a firm agreement with Imperial Airways on cabotage and other rights in Egypt,<sup>145</sup> the question

142. See above, pp. 115-127.

143. FO 371/10912, Egypt and Sudan, (1925), J2790, September 23, 1925, and J2884, October 2, 1925.

144. The task was to persuade Egypt that "guarantees" given to Great Britain would also be "in Egypt's own interests, inasmuch as they would afford a safeguard against menace to Egypt itself". FO 371/12364, Egypt and Sudan (1927), J422, enclosure no. 1, S/L Long "Note on Prohibition of Foreign Civil Aviation in Egypt", December 25, 1926.

145. See above, f.n. 37. On more than one occasion, Imperial Airways considered by-passing Egypt altogether such was the exasperation of reaching agreements with the Egyptian Government. See FO 371/12365, Egypt and Sudan (1927), Hoare to Beharrell, July 5, 1927, and FO 371/14629, Egypt and Sudan (1930), J2124, Woods Humphrey to Long, June 4, 1930.

remained as to the extent to which Imperials or another British firm could take part in the development of internal air services. <sup>146</sup> Early in 1930, the Foreign Office was calling for a policy in Egypt, warning that,

while the Egyptians have as yet shown no signs of organising a national aviation company, interest in aviation is rapidly growing among individuals. Egyptians are beginning to learn to fly.... <sup>147</sup>

Imperial Airways were "willing and anxious" to move in "with the dual object of guiding it with British principles and influence, and strengthening the Company's position in Egypt". <sup>148</sup> Imperials' concern and interest lay in securing firmly their crucial position astride the two Imperial routes to the east and south. Unfortunately, the Air Ministry, while welcoming the Company's initiative, feared the Company's name and its identification with the grand ideas of empire could not be sold to the politically

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146. FO 371/14641, Egypt and Sudan (1930), J468, Sir Percy Lorraine (UK High Commissioner, Egypt) to Henderson (FO), February 11, 1930.

147. Ibid. Two prominent Egyptian pilots were Hassanein Bey and Mohamed Sidky, the latter having flown out Egypt's first aircraft from Germany. In February, the Egyptian Aero Club was formed, Brancker expressing the British view that "it is most [sic] important that the Egyptian Aero Club is launched under British influence". Otherwise, Junkers would step in. AVIA 2/1873, Aero Club of Egypt - Misr Airwork Company's Proposals, 1930. Part I, minute 48 by Brancker, July 31, 1930.

148. FO 371/14642, Egypt and Sudan (1930), J928, Dismore to A.M., March 19, 1930.

sensitive Egyptians, and preferred that National Flying Services or Airwork, two British companies, step in.<sup>149</sup> National Flying Services lacked the capital to support British ambitions in Egypt,<sup>150</sup> but by 1931, Airwork and their energetic business representative, F.A.I. Muntz, were able to form a company, Misr Airwork, with the Egyptian Misr bank. The Anglo-Egyptian company commenced air transport operations in 1933, developing routes within Egypt and into the Middle East.<sup>151</sup> But more important, Misr Airwork and Imperial Airways were able to work in reasonable harmony until the former was taken over by the Egyptian Government in September, 1939, and this assured the Cape and Indian routes a certain stability not always enjoyed elsewhere.<sup>152</sup>

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149. Bullock at the Air Ministry had initially thought that Imperials might consider setting up "Egyptian Airways" for exploiting internal services. AVIA 2/1880, part I, enclosure 3d, Bullock to Murray (FO), March 11, 1930. As well as the Indian and African services, Imperial Airways did operate some short-lived Middle Eastern routes from Alexandria to Haifa and beyond to Famagusta in 1930 and Limassol in 1931. Stroud, Annals, pp. 84, 90, 95.
150. AVIA 2/1873, part I, minute 57, Bertram to Holloway (Principal Ass't. Secretary, A.M.), August 29, 1930. For more on National Flying Services, see chapter V.
151. Airwork was a private British company registered in 1928 with a nominal capital of £75,000. Misr Airwork (Société Anonyme Misr Airwork) was set up in 1931 with initial capital of £E12,000 to carry out all forms of civil aviation activity including air transport services to the Sudan and Palestine. AVIA 2/1873, enclosures 95b and 117b. See note in The Times, January 5, 1932, p. 8. For a brief history of the airline's activities, see Davies, A History of the World's Airlines, p. 199.
152. Misr Airwork was resurrected as Misrair after the war and became United Arab Airlines under Nasser. Davies, A History of the World's Airlines, pp. 399, 404.

By 1934, Imperial Airways could look back with some satisfaction on its performance in Africa. While a host of problems loomed on the horizon in South Africa, in the implementation of the Empire Air Mail Scheme, in coordinating the operations of the feeder lines, and in developing a service to the West African Colonies, the Cairo-Cape Town route was developing steadily into a quiet rhythm of regularity and routine. One observer insisted that Imperials' regularity was such that Africans in the interior used the service to date occurrences with "yes, that was just before or after the big aeroplane came over".<sup>153</sup> And even the wild animals, it seems, no longer stampeded but now took little notice of the mail aeroplanes.<sup>154</sup> The observations ring with some truth for Geddes could point proudly to the fact that in 1933, for the first time, 100% of scheduled flights on the African and Indian services had been completed.<sup>155</sup> Given the still difficult circumstances

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153. Sir Sam Instone addressing the Rotary Club (London), October 11, 1933. Quoted in The Times, October 12, 1933, p. 9.

154. Ibid. An exception was the lion, "which still resented their aerial intrusion of his domains, growling angrily and lashing his tail, and then retreating into the densest piece of bush he could find".

155. Imperial Airways, Ltd. Report of the Annual General Meeting, 1934. In the first year of the Company's operations, 23% of scheduled flights were cancelled. AVIA 2/636. I.A. memorandum, p. 5.

of the time, this was no mean achievement. Moreover, in 1933, Imperials flew 590,200 aircraft miles on the Cape route carrying 19,781 passengers and an average load of 2,610 lbs. without loss of or serious damage to a single aircraft. <sup>156</sup>

From the start, the route had been a challenge. Aside from the obvious physical difficulties in Africa, Imperial Airways had to tread the narrow path between commercial and imperial aims. It meant that the company was compelled to compromise its own ideals of operation in the premature opening of the Cape route, in the aircraft that would be employed, and in the selection of ports of call. <sup>157</sup>

Compromise seldom serves the aims of excellence as the sorry scene in the first days of both the East African and Cape services demonstrated. Clearly, the factors of imperial and local politics dictated the circumstances in which the airline operated. Still, as one historian has pointed out, by the end of 1934, Imperial Airways was operating "one of the longest and most expensive air routes in the world", <sup>158</sup>

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156. C. G. Burge, ed., The Air Annual of the British Empire, 1934-35 (London), p. 97. The Air Annual is a useful and usually reliable source of airline traffic and other statistics.

157. For a discussion of the criteria used in setting out the African route, see Burchall, "Air Services in Africa", pp. 61ff.

158. Higham, Britain's Imperial Air Routes, p. 164.

and, despite a much criticised schedule of nine days between London and the Cape, was making a success out of it. With the R.A.F., the private pilots, and the small airlines beginning to operate in East Africa, the Rhodesias and South Africa, Imperial Airways was making Rhodes' old dream a reality in bringing a unity to Britain's African empire. <sup>159</sup>

But in 1934 only the first phase of Imperial Airways' role in Africa had been completed, for the story continues on to end in 1939 with war and the formation of British Overseas Airways Corporation. <sup>160</sup> However, before considering the last five years of Imperials' activities in Africa, it is necessary to examine developments originating in British Africa itself. Throughout the inter-war period, many attempts were made to initiate local air transport and other air services. <sup>161</sup> Some were successful, many more were not, yet all these efforts were a part of the grand design to bring Africa into the

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159. R.A.F. operations and flights to East and South Africa may be found in the AIR 5 series. See Bennett, Down Africa's Skyways, or Jones, The Time Shrinkers for private flights in Africa during this period. The "small airlines" will be discussed below, chapters V-VII.

160. See chapter XI.

161. See Appendix II for a listing of companies and proposals for air services, 1919-1939.

modern age of air transport and communications. In East, Central, South and West Africa, African pioneers laid the groundwork for the future, and in the process made civil aviation an integral part of African development. For the most part the beginnings were modest, but a generation later the modern fleets of Air Malawi, Air Rhodesia, Air Zambia, East African Airways, Ghana Airways, Nigeria Airways, Sierra Leone Airways, South African Airways, and Sudan Airways are proud testimony to the persistence of the air pioneers. A study of these pioneer years is the theme of the following four chapters.

## CHAPTER V

BRITISH EAST AFRICA: PIONEERS  
AND WILSON AIRWAYS, 1925-1939

Ours was a young world, eager for gifts....

Beryl Markham. <sup>1</sup>

For over half a century, British East Africa was an important and integral part of the British colonial empire in Africa. <sup>2</sup> In the 1920's and 1930's, it was a large and sprawling territory of some 680,000 square miles, stretching more than 1,000 miles from the Sudanese border in the north to Northern Rhodesia in the south, and spreading inland from the Indian Ocean some 700 miles to the borders of the Belgian Congo. While the terrain and climate vary considerably throughout this vast territory, in general, the topography is characterised by the high plateau which

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1. West with the Night (London, 1943), p. 175. Miss Markham's autobiography recalls her years as a pilot in Kenya in the 1930's.
  2. The political expression 'British East Africa' is used here to mean collectively the territories of Uganda, Kenya, Tanganyika, and Zanzibar. For a general historical background to the area, see, for example, George Bennett, Kenya: a Political History: the Colonial Period (London, 1963), V. Harlow and E. M. Chilver, eds., History of East Africa, vol. II (London, 1965), and K. Ingham, The Making of Modern Uganda (London, 1958). As yet, there is no published history of aviation in East Africa.

rises in the Ethiopian highlands and carries southward the length of the continent to South Africa. Much of Uganda, for example, lies about 3,500 feet above sea level, while through Kenya and Tanganyika, elevations above 5,000 feet are common.<sup>3</sup> Thus, despite British East Africa's geographic location athwart the equator, the generally high elevations temper what might otherwise be a harsh climate. Neither the rains nor the upper range of temperatures are as enervating to Europeans as they are, say, in West Africa or the Sudan. In the history of British East Africa, especially Kenya, these climatic factors are important. They meant that, as in parts of the Rhodesias and South Africa, the area was attractive to white settlement. In turn, this had a crucial bearing on the development of civil air transport. In general, attempts to establish any sort of civil aviation in Africa grew out of the white settler community, and it was the settler group in Kenya, and, to a lesser extent, in Tanganyika, who led British East Africa into the twentieth-century world of aviation.<sup>4</sup>

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3. A brief but comprehensive essay dealing with East African climate and topography is provided in S.J.K. Baker, "The East African Environment", in R. Oliver and G. Mathew, eds., History of East Africa, vol. I (London, 1968), 1-22. In the early years of aviation, high elevations posed special problems for aeroplane operation, critically affecting take-off and single engine performance. For example, Jinja is over 4,000 feet above sea level, Nairobi, about 5,500 feet, and Eldoret, 6,863 feet.

4. The white settler society was never very large but it did command the heights of politics and the economy. In 1937, the estimated European population was: Uganda, 2,111,

Like much of Africa in this period, British East Africa suffered the inadequacies of a transport system which hindered development and communications alike.<sup>5</sup> Three rail lines linked the coast with the hinterland, and there was a scattering of good roads in Kenya and Uganda, but north-south communications, except along the coast, were virtually non-existent.<sup>6</sup> The major ports of Dar es Salaam and Mombasa gave East Africa a maritime link with the outside world, but here emphasis had been placed on the development of facilities for the handling of commercial cargo. Ocean services for the transport of passengers and mails were notoriously infrequent and irregular, re-inforcing the idea that British East Africa stood apart in isolation from the mainstream of Imperial and world traffic.<sup>7</sup> Clearly, in the years following World War I, this large part of Great Britain's African empire was in

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4. (continued) Kenya, 19,211, and Tanganyika, 9,107, for a total of 30,429, excluding Zanzibar. See Colonial Office, An Economic Survey of the Colonial Empire (1937), Colonial No. 179 (London, 1940), pp. 2, 21, 33.
  5. See discussion by Frederick Tymms in AIR 5/1424 (also AVIA 2/350), Civil Aviation in East Africa. Report on Investigation, 1928, (hereinafter, Tymms Report), pp. 313-14. A more 'recent' assessment of road and rail transport development is Irene S. van Dongen, The British East Africa Transport Complex (Chicago, 1954), while a general discussion may be found in Hailey, African Survey, pp. 1555-58, 1578-84.
  6. The railways averaged about 15 miles an hour in the 1920's. The one north-south road was often impassable for weeks on end during the rainy seasons.
  7. See above, p. 261, for comment on sea services to East Africa.

dire need of every kind of transport and communications development, and it was in this world that British East Africa's air pioneers argued the case for the establishment of air transport services. For them, progress and development began with good communications, and in the vastness of East Africa, the aeroplane could serve the community in a way that neither road nor rail transport would do for years to come. <sup>8</sup>

By the end of World War I, the aeroplane was no stranger to many parts of East Africa. The Germans had brought in an aircraft to Dar es Salaam as early as July, 1914. <sup>9</sup> The Royal Navy had used a Curtiss hydroplane in its search for the German cruiser Konigsberg in the Rufigi delta in the same year. <sup>10</sup> In 1915, the first landing ground was laid out on Mafia Island, and others were established at Moshi and Kilwa. <sup>11</sup> At least six aeroplanes

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8. As Tymms could point out, "The country is... one which is naturally fitted for the development of air transport". AIR 5/1424, Tymms Report, p. 314. The Kenyan pioneers, men and women like John (later Lord) Carberry, Tom Campbell Black, Flora Wilson, and many more, of course, shared this view.
  9. See A.M.D. Howes, "Some Details of the First Twenty-five Years of Flying in Tanganyika, 1914-1939", Tanganyika Notes and Records (June, 1958), pp. 39-47.
  10. AIR 1/674. Destruction of the German Cruiser 'Konigsberg' in the Rufigi Delta, East Africa, 6th and 11th July, 1915.
  11. Howes, "Some Details of the First Twenty-five Years of Flying in Tanganyika, 1914-1939", pp. 39-40.

were flying over Tanganyika in that year --- two Sopwith seaplanes, two Henry Farmans, and two Caudron aircraft --- and the Royal Naval Air Service and later the Royal Flying Corps were active in Kenya as well. <sup>12</sup> None of this activity pointed positively to the development of civil aviation in the territory after the war, but it was proof that aeroplanes could operate in the African environment, while the training of both air and ground personnel, and the construction of landing grounds, provided a base upon which future air interests could build.

As noted earlier, in 1919 the Royal Air Force had completed their great survey of the Cairo to Cape Town air route, establishing numerous aerodromes and landing grounds along the way. <sup>13</sup> In East Africa, in addition to emergency fields, aerodromes were set up at Jinja, Kisumu, Mwanza and Tabora, all built with the idea that the Cairo to Cape Town airway would soon attract a steady flow of civil air transport traffic and the scattered parts of the Empire would be days rather than weeks and months apart. <sup>14</sup>

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12. For details see AIR 1/725 (3). Royal Naval Air Service Operations in East Africa, November 22, 1914 - January 28, 1917.

13. See above, pp. 58-62.

14. In 1919, the estimated time to travel overland from Cairo to Mwanza, for example, was given as 30-40 days. To extend the journey southward to Tabora would require another ten days. Aeroplanes, averaging 100 miles an hour, could cover the distance in 4-5 days. See A.M., "Notes on Air Routes; I: To South Africa".

There is no evidence to suggest that the governments or the white settler communities in British East Africa responded with any immediate enthusiasm to the possibilities of this development. Nor was there much more than a quietly interested reaction to the Cockerell-Broome and Van Ryneveld-Brand flights as they passed along the route in their attempts to reach Cape Town in 1920. This general passivity was not unlike that noted in the United Kingdom at the same time.<sup>15</sup> While the case for improved communications facilities was unquestionably a strong one, and it is more than likely that both administrations and the white community generally were conscious of their near isolation, the fact remained that political matters of larger import were commanding the scene.<sup>16</sup> In addition, the disasters which accompanied the five Cape flight attempts did little to inspire confidence in the future of the aeroplane, and what ideas were expressed about civil aviation development were couched in the language of scepticism.<sup>17</sup> Generally, it was evident that the East

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15. See above, pp. 12ff.

16. For the white community in Kenya, especially, energies were being consumed in the Indian and land questions, and an ill-fated struggle for 'responsible government' on the Rhodesian model of 1923. A brief but adequate resumé of the political situation in Kenya may be found in George Bennett, "Settlers and Politics in Kenya, up to 1945", in Harlow and Chilver, History of East Africa, pp. 265-332.

17. See, for example, Leo Walmsley, "The Recent Trans-African Flight and its Lesson". Walmsley, however, was not closing the door on the aeroplane, but on its

African administrations were not prepared to take any initiatives in civil air transport, preferring to follow the British lead at 'home' while holding to a 'wait and see' line of policy in East Africa.<sup>18</sup> Unlike South Africa or Southern Rhodesia, where interested parties were making the attempt at least to promote the cause of civil aviation, British East Africa did little but maintain the airfields inherited from the R.A.F.<sup>19</sup> In a despatch to the Colonial Office in late 1921, Kenya's Governor Northey made clear the dormant state of affairs;

17. (continued) capabilities as a reliable means of transport. On his own flying experiences, see Flying and Sport in East Africa (London, 1920).
18. None of the East African administrations were ready to invest capital in what was clearly a speculative venture at the time. As well, it was assumed that Great Britain would take the lead in promoting imperial ties, a more attractive idea than the establishment of local air services. It should be noted too that none of the early post-war Governors, Sir Edward Northey (Kenya, 1919-22), Sir Robert Coryndon (Uganda, 1918-22 and Kenya, 1922-25), Sir Geoffrey Archer (Uganda, 1922-25), and Sir Horace Byatt (Tanganyika, 1916-25) approached aviation with the same enthusiasm as their successors, Sir Edward Grigg (Kenya, 1925-31), Sir William Gowers (Uganda, 1925-32), and Sir Donald Cameron (Tanganyika, 1925-31).
19. Agreement was reached between the African governments and the Air Ministry on the take-over and maintenance of the airfields built along the Cape route October 1, 1920. See enclosures, AVIA 2/69, Civil Aviation. British East Africa. Policy, 1920-22. For South Africa and Southern Rhodesia, see below, chapters VI and VII.

...no aviation either civil or military having been undertaken in this Colony during the last half year, I have no report to make in this connection. 20

The situation remained much as Northey had reported it until 1924-25 when Tony Gladstone arrived on the scene to spark an interest in developing an air link between the Sudan and Kenya. <sup>21</sup> However, in the interim, the Air Ministry, in its "Summary of Proposals to Operate various Air Routes", did note that suggestions and proposals had been made concerning two routes; Cairo to Nairobi, and Aden to Mombasa. About the former, it reported "no information", but on the latter, the A.M. understood that

For the last two years the East African Trading Company Limited has been endeavouring to induce the British Government and the local Governments in East Africa to guarantee a mail subsidy for either a weekly or bi-weekly air service....

Nothing had come of this, the A.M. reported, because the local governments were inhibited by "financial stringency", and the post office was disinterested in the small volume of mail involved. <sup>22</sup> Thus, for several years after the war, and for five years after the Air

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20. Ibid. Northey to Churchill, November 3, 1921.

21. See above, pp. 110, 186ff.

22. AVIA 2/216. A.M. "Summary", para. 5, April 10, 1924. Reference to a Cairo-Nairobi service probably stemmed from the Vickers proposals in 1919 (see above, pp. 35-39). No record of the East African Trading Company correspondence has been located.

Ministry had taken the first steps to bring aviation to Africa in the 'opening' of the Cairo to Cape Town route, there was neither settler nor official interest in pursuing air transport ideas. In these early years, this situation was typical of most of colonial Africa, with the exception of the Belgian Congo, and, indeed, of the Empire at large, including Great Britain.<sup>23</sup> Until at least 1925, apathy towards the aeroplane and air transport ideas was more general than interest, doubt was more common than confidence, and capital found its way to less speculative enterprises for there was little evidence at this point to argue the ultimate success of air transport operations. But, while a bold few promoted the cause of air transport in England, Australia, Canada, South Africa, and, to a lesser extent, in Southern Rhodesia, in British East Africa there appeared to be no one with the capital or daring, the prerequisites for air transport success.<sup>24</sup> Fortunately, the situation was temporary and amenable to change for a number of reasons, and from 1925 onwards, air transport development in British East Africa moved forward slowly

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23. La Ligne Aérienne du Roi Albert (LARA) operated the first airline service in Africa in 1920, linking Leopoldville with N'Gombe, and by 1922, with Stanleyville. Davies, A History of the World's Airlines, pp. 72-73. For public and general interest in Great Britain, see above, chapters I-II.
24. The proper equipment was also necessary. Most of the aeroplanes and engines built before 1925 were totally inadequate to operate safely in the highlands of East Africa.

but steadily with the result that on the eve of World War II, the colonies were enjoying the benefits of a network of internal air services and a thrice-weekly air link with the United Kingdom.

Undoubtedly the establishment of Imperial Airways in Great Britain had considerable influence in British East Africa. The British government had been won to the idea that civil aviation held out great promise for the future of British and Imperial communications, and, moreover, required capital and moral support to develop its potential.<sup>25</sup> Great Britain, in effect, was acting as the pioneer and model against which the colonies, particularly those with substantial white settlement, could compare and re-evaluate their air transport ideas and requirements. When Tony Gladstone commenced his negotiations with the East African governments for the establishment of a Khartoum-Kisumu air service in 1925, he was received with a great deal more interest and enthusiasm than would have been the case a year or two before.<sup>26</sup>

Gladstone and the North Sea Aerial Transport Company, with whom the East African governments agreed to sponsor

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25. See above, chapter II.

26. As noted earlier, Gladstone was acting on behalf of Robert Blackburn. The Blackburn interest in Africa concerned mainly the Nile route over which it hoped to run Blackburn flying-boats. See The Blackburn Story, pp. 22-3.

experimental flights between the Sudan and Kenya, met with little operational success in their efforts to develop an African service. The 'Pelican' could only complete eight of the contracted 24 flights, a disappointing demonstration of air transport capabilities.<sup>27</sup> Alan Cobham's assistance at this point was helpful, but the resultant merger of the Blackburn and Cobham interests to form Cobham-Blackburn Airlines in 1928 did not alter the fact that much more support for the establishment of air services was required than the small companies or the local governments were prepared to provide.<sup>28</sup> Nonetheless, Gladstone's work in East Africa, helped by the flights of Cobham and the R.A.F. through the area, set in train a number of developments.<sup>29</sup> Most obvious was the awakening of genuine interest on the part of the East African administrations, and their desire to have

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27. See above, pp. 187-94 for details of the experimental Khartoum-Kisumu service. With the failure of the 'Pelican', Gladstone was forced to re-negotiate the agreement. See correspondence in FO 371/12389 (Egypt and Sudan), 1927, E. Hudson, Secretary, North Sea Aerial and General Transport Ltd. to A.M., December 1, 1927.
28. For the moment, both companies and the local governments were interested in the Cape route and the connection to the United Kingdom, not local air services. The East African Colonies followed the A.M. view that the Cairo to Cape Town service "be the first consideration so far as expenditure by the Colony of subsidies for commercial flying is concerned...." AVIA 2/296, enclosure 33A, Holloway (A.M.) to CO, February 21, 1929.
29. Cobham's work is discussed above, chapter III. For reports on R.A.F. flights through East Africa to the Cape, see AIR 5/620, chapter 14 (1926); AIR 2/299(3), AIR 5/435 and AIR 5/821 (1927); AIR 2/336 and AIR 5/823 (1928); AIR 5/461 and AIR 5/824 (1929).

their situation studied by an 'expert'. The Governors who had committed their administrations to support Gladstone were, of course, concerned about the failure of the Khartoum-Kisumu experiment, but they were not discouraged. They recognized that what was needed was a full-scale and thorough examination of the problems and potential of East Africa as a prelude to continuing support of the air transport idea. In a minute to Hoare, Brancker noted that Kenya's Governor Grigg,

was anxious that Kenya should get the full benefit of aviation in the future, and suggested that the only satisfactory means of assessing what could be done in a Colony would be to send out an expert to that Colony to go thoroughly into all its problems on the spot. 30

Grigg was supported strongly by his Tanganyikan and Ugandan counterparts whom Bertram at the Air Ministry recorded as having expressed "in strong terms their desire to have a visit from a civil aviation expert who could spend six months in East Africa".<sup>31</sup> With the three East African governments prepared to pay the costs of their desired study, the Air Ministry acted promptly. On December 1, 1927, Frederick Tymms, A.M. Superintendent

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30. AVIA 2/291, Suggestions for Extension of Aviation in Kenya and other Colonies. Suggestion to send Expert out. Loan of Captain Tymms to Colonial Office to Advise on Civil Aviation Prospects in British East Africa. Minute 3, Brancker to Hoare, May 24, 1927.
31. Ibid., Minute 6, Bertram to Brancker, June 10, 1927.

of the Cairo-Karachi civil air service, was instructed "to proceed as soon as possible by the Nile route so as to make yourself acquainted with the local conditions...." <sup>32</sup> Tymmms departed from Cairo on January 4, and during the next eight months and 13,950 miles of travel, prepared the report which was to guide air transport thinking in East Africa for more than a decade. It was, to use a Churchillian phrase, "Napoleonic both in compass and precision". <sup>33</sup>

Tymmms' first responsibility was to study the area from the point of view of an Egypt-East Africa air service, and his lengthy stay and travels through the colonies were made largely with this in mind. <sup>34</sup> In part, he was charged specifically to examine the Cobham-Gladstone proposals before the East African Governors meeting in Nairobi, and report on the feasibility of the company's ideas on air development. <sup>35</sup> As far as Tymmms was concerned, the company

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32. A.M. Civil Aviation in East Africa. Report on Investigation, 1928. P. 1. A separate bound copy of the Tymmms Report may be found in the Board of Trade, Civil Aviation Archives, London.
33. Churchill's remarks were used to describe Sir Percy Girouard's 1907 report on Nigerian development. Quoted in Hyam, Elgin and Churchill at the Colonial Office, p. 447. The Tymmms' report, which remained unpublished, is a massive document of 332 pages, and a mine of fact and observation pertaining to aviation prospects in East Africa. It was the first detailed study by Great Britain of air transport in Africa and the model for later reports on the Cape route and West Africa.
34. The greater part of the Tymmms Report is devoted to an analysis of the "Egypt-East Africa Air Service". See the Report, pp. 39ff.
35. See above, pp. 195-97 for brief discussion.

could not handle the proposed Alexandria-Mwanza service without a substantial increase in capital support, and as he pointed out, "none of the Governments feels disposed to increase its offer of contribution to subsidy,..."<sup>36</sup> Tymms' solution to the apparent impasse was to have Imperial Airways operate the route as far south as Khartoum and the Cobham group operate with seaplanes over the route to Kisumu.<sup>37</sup> It was a proposal which could satisfy no one, and Tymms' ideas for Imperial Airways cooperation were more sanguine than realistic. Still, his scheme had considerable merit. Imperial Airways could run their part of the service out of Egypt from existing terminal facilities and with equipment identical to that going into service on the Indian route. This would mean a need for a much smaller subsidy on the Khartoum sector than would be the case with the Cobham group. The latter, in the meantime, would base their operations at Kisumu from which point they could operate the Khartoum-Kisumu sector with one type of aircraft, develop internal services, and ultimately prepare and operate the route south to South Africa. The East African colonies would still be required to provide subsidy support in excess of their present scale of commitment, but the amounts would be much less than the

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36. Tymms Report, p. 41.

37. Ibid., p. 49.

Cobham-Gladstone interests were asking for a through service to Alexandria. <sup>38</sup>

In all, Tymms held out high hopes for an East African service. He saw great traffic potential coming out of the Belgian Congo with Belgian air services feeding the Nile route at Juba in the Sudan. <sup>39</sup> Mails to and from East Africa would likewise produce a good volume of traffic, especially as an air mail service would provide "what is now lacking in East Africa, a regular service with an interval of seven days in place of one which has varied up to as much as 18 days". <sup>40</sup> Tymms found possible passenger traffic more difficult to assess, although clearly not as promising as the Indian route. He did point out the use of the service which might be made by the colonial administrations for officials proceeding to and returning from England on leave. In East Africa, officials received six months leave after 30 months service, exclusive of travelling time. The air service could reduce the travelling time from two months

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38. Ibid. However, As Tymms pointed out, "the East African Governments, while anxious to see the service extended towards the south, are not disposed to commit themselves to additional expenditure at an early date".

39. Ibid., pp. 52-53. In Mombasa, Tymms had talks with Belgium's Prince Eugene de Ligne on Belgian-British cooperation. Tymms was convinced that the Congo traffic would be considerable, and the Belgians should be induced to link up with the Nile route rather than with the French route across the Sahara.

40. Ibid., p. 54.

to three weeks, a saving in salaried time of about £60 for each period of leave. <sup>41</sup> In addition, the estimated £87 air fare from Port Said to Nairobi was less than existing transportation costs by other means. <sup>42</sup>

While Tymms was most concerned to study the problems and possibilities of the Nile route, he was not unaware of the need to look at the local situation. In this respect, Tymms' visit was most timely for the settler community was awakening rapidly to the air age. In his correspondence with the Air Ministry, Tymms was struck by the

... very marked interest of a widespread nature in flying, and particularly in the possibility of owning light aeroplanes, not only in Kenya, but in Tanganyika. <sup>43</sup>

This new development owed its genesis to a number of factors, but in the main, it stemmed from the efforts of a few enterprising individuals, eager to promote an 'air sense' in East Africa. In 1927, Captain T. Campbell Black, in a letter to Brancker at the Air Ministry, expressed his

41. Ibid., p. 105. The point here is that official leave started and finished at the port of embarkation, e.g., Egypt, and there was no inducement to save time. In effect, East African governments were losing officials for eight not six months after each tour.
42. Ibid. For example, travel by the Nile route meant train and steamer to Rejaf, then automobile to Tororo, and train to Nairobi. The trip from Port Said (the most used port of embarkation) thus took 25 days and cost about £110.
43. AVIA 2/314, Civil Aviation in East Africa. Enclosure 12a, Tymms to A.M., April 12, 1928.

interest in setting up a light aeroplane club in Kenya and in organising air transport. "I was promised considerable support", he wrote, "to any sound scheme holding promise of ultimate financial success".<sup>44</sup> In August, 1927, the Kenya Aero Club was formed, largely through the efforts of John and Mrs. M. Carberry, Commander L. Mansfield Robinson, A. Dunstan Adams, Sir Piers Mostyn and others. In 1928, the Club had become the Aero Club of East Africa with branches in Mombasa, Entebbe and Dar es Salaam, was publishing a small journal, East African Aviation, and counted some 300 members.<sup>45</sup> As well, the Club had ambitions to act as a reserve air defence force carrying out government and emergency duties in return for subsidized support.<sup>46</sup>

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44. AVIA 2/296, Kenya - Commercial Aviation, 1927. Enclosure 1c, Campbell Black to Brancker, July 28, 1927.
45. The Aero Club also published a monthly newsletter, Aeroken, but it had no buildings or aircraft. Many of its members were ex-servicemen. Tymms reviewed the club's beginnings in "Prospects of Civil Aviation in East Africa", Journal of the Royal Aeronautical Society, XXXVIII (November, 1929), 1050-85. See too, "Humble Beginnings of East Africa's Aero Club", East African Standard, August 1, 1969, p. iv, and J. J. Furniss, "Aviation in East Africa", Corona, XIII (October, 1961), 384-87.
46. AVIA 2/332, Kenya - Proposed Aero Club for Air Defence Force, 16.5.28 -. See AVIA 2/296, enclosures 14b and 14c, Governor Grigg to CO, March 12, 1928, and Aero Club to Colonial Secretary, Nairobi, January 1, 1928, on ideas for an air defence role for the club. The club sought a mail contract as well. Enclosure 30c, A. Dunstan Adams to Colonial Secretary, Nairobi, September 13, 1928. Also Tymms Report, pp. 316-23, on ambitions of club.

Commander Robinson was, in Tymms' view, the "moving spirit" behind the formation of British East African Airways (B.E.A.A.) late in 1928. This company likewise asked for subsidy support and air mail contracts, enlisting the support of Blackburn and Gladstone, still anxious to work in East Africa even as it appeared their hopes for the Nile route were fast disappearing. <sup>47</sup>

In early 1928, Tymms reported there were six aeroplanes in Kenya, including two Klemm Daimlers owned by the German firm, Africana Ltd. <sup>48</sup> Of the latter, the East African Standard noted,

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47. Brancker noted that Gladstone and Blackburn had expressed a willingness to join Sir Piers Mostyn, Lord Delamere, Mr. Carberry and Commander Robinson in the formation of a new company. AVIA 2/296, Minute 28, January 25, 1929. In early 1929, Gladstone, on behalf of B.E.A.A., asked for a subsidy from the Kenya government of £3,000 p.a. for five years. AVIA 2/296, enclosure 37b, March 28, 1929. The request was denied, Kenya having agreed with the Air Ministry that "the grant of any subsidy towards internal aviation should await the development of the main project". Enclosure 37f. One should note here that the exact relationships of the Aero Club, B.E.A.A., and the Gladstone/Blackburn interests are difficult to determine on the evidence. The leading personalities in the first two were in the main identical (e.g., Commander Robinson was Vice-President of the Aero Club and a Director of B.E.A.A.), and the correspondence is not always clear as to what group is requesting assistance.
48. Tymms Report, p. 312. Only one of the German aeroplanes was actually flying, but along with Carberry and Robinson, the German pilot had done "quite a bit" of taxi work and joy-riding in Kenya. By the time Tymms left, only one aeroplane was still in service, the others either sold or destroyed.

Further proof of German enterprise is the exhibition in Nairobi now of the first light aeroplane for private flying to be imported in Kenya for sale in response to the keen interest in flying evinced in the Colony. 49

The implication was clear. Where was British enterprise? Tymms, for one, was sceptical that an air transport company could operate regular air services in the territories successfully, but he did see a future for a light aeroplane organization providing 'taxi' services, flying training, and the sale of aeroplanes and parts. 50 The question was, why not De Havilland or another British firm to supply the aeroplanes and expertise instead of a German company? Here, as elsewhere in Africa during the inter-war period, the British were touched with near paranoia in the face of German plans to develop any form of air services. 51

These several developments pertaining to local air services prompted a number of responses. For Tymms, an immediate need was for the drafting of air navigation directions in the three territories to provide for control

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49. AVIA 2/314, enclosure 12a, Tymms to A.M., April 12, 1928, cutting from East African Standard of April 5.

50. Ibid.

51. The evidence is more obvious, perhaps, in South Africa. See below, chapters VII and XI. The Air Ministry also feared German advances in West Africa and Egypt.

and the maintenance of standards based on the United Kingdom model.<sup>52</sup> Tymms also recommended the building of aerodromes at Kisumu, Nairobi and Mombasa in Kenya, and landing grounds at Njoro, Nakuru, Naivasha, Kajiado, Magadi Junction, Makindu, Kanga, Voi and Mackinnon Road.<sup>53</sup> In 1929, the Kenya government, "anxious to encourage Civil Aviation in this Colony", provided £3,000 in the estimates for carrying out Tymms' recommendations.<sup>54</sup> The Associated Chambers of Commerce of East Africa, obviously caught up in the airmindedness of the moment and aware of the advantages which could come to the commercial community from

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52. Some existing British legislation already applied to the East African territories. The 1922 Air Navigation (Colonies and Protectorates) Order in Council applied certain sections of the 1920 Air Navigation Act. The Air Navigation (Colonies, Protectorates and Mandated Territories) Order in Council of 1927 applied many detailed provisions of the British Order in Council. The International Convention for Air Navigation applied to the territories as well. Local regulations to regulate certain matters had been set out in Kenya and Uganda before 1928, but not Tanganyika. Tymms Report, pp. 298-99. In discussions with Tymms, each of the three territories drafted regulations similar to the British legislation, with provisions for temporary relaxation by the Governor should local conditions make them impracticable. In each territory, an Air Board, headed by the Colonial Secretary and made up of interested Department Heads, was set up to advise the Governor. See Jones, The Time Shrinkers, p. 85, and Tymms, "Prospects of Civil Aviation in East Africa", p. 1078.

53. AVIA 2/351. Enclosure. Report on the Progress of Civil Aviation in Kenya Colony and Protectorate during the Period 1st January, 1928-30th June, 1928. Similar recommendations were made for Uganda and Tanganyika, Zanzibar was ignored.

54. AVIA 2/296. Enclosure 37E. Juxon Barton (Acting Colonial Secretary, Kenya) to Gladstone and B.E.A.A., May 22, 1929.

air development, were prepared to call for greater action than had Tymms. Pointing out "the urgent necessity of making provision for the establishment of Inter-communication by Air transport between the three territories, in addition to the Imperial Airway routes", the Association recommended that,

(a) Land should be reserved in the Town Planning of every Township for an aerodrome and landing ground; (b) Suitable landing grounds should be developed at intervals along routes which can produce traffic; (c) Every encouragement shall be given to any Company or Companies of approved repute which may develop an Air Transport service in the Territories; (d) Investigation should be made to ascertain how far the Governments can support Air Transport service by using aircraft for urgent Official journeys and for the carrying of dispatches and public mails. 55

(a) and (b) were reasonable proposals if one assumed that future traffic would be made up exclusively of light aeroplanes. Otherwise, the ideas were well beyond the means or the will of the administrations to provide. (c) reflected the general concern in East Africa that control of the proposed services along the Imperial route and local routes should remain in East African hands, as represented by Gladstone or others. 56 As to (d), only Tanganyika appears to have

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55. Tymms Report, p. 324.

56. See above, pp. 215-16. This concern was directed to the main Egypt-East Africa line as well as local development. The fear was of Imperial Airways, or as Governor Grigg expressed it later, "the arguments against sole control of the operation of an Imperial route being left to a necessarily monopolistic concern are obvious...." AVIA 2/422. Kenya No. 52, Grigg to Passfield, April 12, 1930.

taken this idea seriously with the establishment of a Government Air Service mainly with air survey work in mind, but also to carry out operations as suggested in the Association proposals.<sup>57</sup> From 1930 to 1933, the Tanganyikan Air Service, with a fleet of six aeroplanes and four pilots, flew a great deal throughout the territory in roles as varied as map-making and the stocking of the Mufindi rivers with trout. In 1932, for example, 70,600 miles were flown, of which 47,000 miles were on transport service, much of the latter in the carriage of government officials and the Governor, Sir Stuart Symes.<sup>58</sup> Unfortunately, the costs of maintaining the Government Air Services could not survive the depression. Tanganyika was committed to a £10,000 p.a. subsidy to the Imperial Airways service until 1936. In addition, it was paying for air mail carriage, and the maintenance of facilities whose costs ranged from £3,000 to £5,000 p.a.<sup>59</sup> This was more than the Tanganyikan

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57. The idea was pressed by P.E.L. Gethin, the Director of Survey, who became Tanganyika's first Director of Civil Aviation. See Howes, "Some Details of the First Twenty-five Years of Flying in Tanganyika". Also Cameron, My Tanganyika Service and Some Nigeria, pp. 72-73, and "Aviation in Tanganyika", Aeroplane, September 10, 1930, p. 628.

58. The Air Annual of the British Empire. 1933-34 (London, 1933), p. 37. The aeroplanes were purchased with funds from the Colonial Development Fund.

59. Colonial Office, Report by Sir Sydney Armitage-Smith on a Financial Mission to Tanganyika. Cmd. 4182 (1932), pp. 68ff. The Report was sharply critical of the extent of Tanganyika's financial commitments to civil aviation. It hoped to see the territory relieved of the costs of maintaining the wireless stations at Moshi, Dodoma and Mbeya, questioned the utility of aeroplanes in survey

economy could bear, and Government air services were sharply cut back. Sir Sydney Armitage-Smith's Report admitted the need for some air transport to be available for the Governor and higher officials, but recommended that "the cadre be reduced to what is indispensable for that necessary service".<sup>60</sup>

In 1933, the Tanganyikan administration responded by limiting the use of air transport to those "cases in which an economy in cost of transport will result or the saving of an officer's time is sufficient to justify additional expenditure".<sup>61</sup>

In this situation, the fleet was broken up and most of the pilot-surveyors discharged.<sup>62</sup> Nonetheless, the work of the Government Air Service had brought aviation to Tanganyika and its work forecast much of the development that would take place after World War II. By the mid-thirties, there were over 30 landing grounds in the territory, excluding the major aerodromes used by Imperial Airways and Wilson Airways, where there had been no more than a handful but a few years before. The two aeroplanes which remained were able to do useful service until 1939 when they were taken over by the R.A.F.<sup>63</sup>

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59. (continued) work, and sneered that the title of 'Director of Civil Aviation' (Gethin), "would appear to represent an aspiration rather than a fact".

60. Ibid., p. 75.

61. Tanganyika Territory, Government Circular No. 37 of 1933 (October 26, 1933).

62. Two of the aeroplanes were sold to Lupa Airways at Mbeya, one to a Mr. Currie at Nyeri. Two pilots, A. N. Francombe and V. W. Soltau, went to Wilson Airways. Howes, "Some Details of the First Twenty-five Years of Flying in Tanganyika", p. 42.

63. Ibid. For a complete listing of facilities in the 1930's, see The Air Pilot of Tanganyika Territory (Dar es Salaam, 1937) issued by the Department of Civil Aviation.

The combined efforts of Cobham, Gladstone, Tymms, and Imperial Airways did much to make possible the establishment of the United Kingdom-East Africa Imperial Airways weekly service in February, 1931.<sup>64</sup> Certainly, this was a development of major consequence and reflected the main thrust of East African interest in air transport. Still, local enthusiasts and those concerned to bring East Africa fully into the air age were not prepared to surrender the field to Imperial Airways.<sup>65</sup> On July 31, 1929, Wilson Airways was founded in Nairobi with the express purpose of exploiting East Africa's civil aviation potential.<sup>66</sup> The idea was Tom Campbell Black's, but the company was made possible by the backing of Mrs. Flora Kerr Wilson, a 50 year old farmer's widow from Timau, near Nanyuki. From modest beginnings in 1929, Wilson Airways over the next decade developed the most successful independent air line operation in Africa.<sup>67</sup> It became East Africa's "chosen

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64. See above, chapter IV.

65. Throughout the period, a number of companies were formed, mainly in Kenya, eager to carry out all forms of air service - transport, taxi, flying training - beginning with the short-lived Kenya Aviation Company in 1927, African Air Services, Africana Ltd., B.E.A.A., Cobham/Blackburn, Dar es Salaam Airways, East African Airways, Lupa Airways, National Flying Services, and Wilson Airways. See Appendix II for details.

66. The Times, July 5, 1929, p. 15. The company was formally registered July 31, 1929. For details of objects and capital provisions, see BOAC, I.A. file No. 47. Memorandum and Articles of Association of Wilson Airways, Ltd., 1929.

67. For Wilsons' beginnings, see "East Africa Historically and Aeronautically", Shell Aviation News (January, 1935),

instrument", in much the same way that Imperial Airways acted as the flag-bearer for Great Britain. <sup>68</sup> Its achievements belied Tymms' assessment that "there does not appear at the moment to be a prospect of success for a regular commercial air service internally in East Africa...". <sup>69</sup>

Wilson Airways began with one aeroplane, a D.H. Gipsy Moth, and did not commence regular air transport flights until 1931. <sup>70</sup> Early activities were in part limited by the paucity of landing grounds and other facilities in the territory, and partly because government support was still tied to the establishment of the United Kingdom -East Africa and Cape route. Nevertheless, Wilsons (as the air line came to be known) made good use of its first two years of life to carry out a number of long-range survey and taxi flights, building a sound reputation in the process. <sup>71</sup> Charter

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67. (continued) pp. 14-19; "Pioneering in East Africa", Aeroplane (February 18, 1931), pp. 290, 292; "Wilson Airways - the Story of a Courageous Woman", East African Standard (August 1, 1969), pp. i and iii.
68. BOAC. I.A. file No. 23. East African Governors in Council/ Wilson Airways, 1936-38. Correspondence makes clear Wilsons' position.
69. Tymms, "Prospects of Civil Aviation in East Africa", p. 1068.
70. Wilson Airways opened the Nairobi-Kisumu route in March, 1931, and on July 8, began regular weekly mail and passenger services. Stroud, Annals, pp. 454-55. This linked Nairobi with the Imperial Airways East Africa service.
71. Long-range flights were mainly to the United Kingdom, but included West African and South African 'route surveys'. On one such trip of a Wilson Airways' Puss Moth, the effusive leader writer of the East African Standard

flights with the Prince of Wales and the American millionaires, Vanderbilt and Marshall Field, enhanced Wilsons' image in the early 1930's. <sup>72</sup>

From 1931 to 1939, Wilson Airways' record of achievement was quite remarkable, and the successes of the airline must be measured against the difficult circumstances of the period. The Depression was an inhibiting factor in the early years, curtailing the amount of government support as well as limiting traffic. Wilsons were able to survive in part by allowing Imperial Airways a minority interest in the company, a move pressed on a reluctant Mrs. Wilson who feared with some cause an eventual Imperial Airways takeover. <sup>73</sup> Local air transport operators from time to time cut into potential profit-making services which might better have been served by Wilsons. <sup>74</sup> Not until the late

71. (continued) (January 12, 1932) noted, "In Nairobi on Sunday and in Johannesburg on Monday sounds like some vision of the future". The pilots were Captain M.C.P. Mostert and Mr. R. R. Fiddian-Green.
72. A Dunstan Adams, secretary of Wilsons, called the Prince of Wales' trip in particular, "a great impetus". "Pioneering in East Africa", p. 290.
73. That Imperial Airways accepted a minority interest in the company in 1933 was in itself remarkable. The general policy of I.A. was to seek a majority shareholding position and therefore control of small air transport companies in the empire. For Wilsons/I.A. correspondence on this and other matters, see BOAC, I.A. files Nos. 48-51, Wilson Airways Ltd.
74. For example, African Airways, a short-lived company, in 1935 flew 172,893 miles and carried 1,278 passengers mainly in the mining areas. Sir H. Osborne Mance, Report on Co-ordination of Transport in Kenya, Uganda and the Tanganyika Territory (Nairobi, 1937), p. 40. Wilsons

1930's did the East African administrations seriously entertain the idea of giving Wilson Airways a complete monopoly of domestic air transport services in the three territories as recommended in Sir Osborne Mance's report in 1936. <sup>75</sup> Such a move taken earlier would have helped considerably to consolidate Wilsons' position financially, especially in the later difficult dealings with Imperial Airways, South African Airways, and Rhodesian and Nyasaland Airways in the organisation of the Empire Air Mail Scheme along the African route. <sup>76</sup> Wilsons would have benefitted too from the formation of a joint inter-territorial organisation to deal with all matters concerning civil aviation development. <sup>77</sup> Thus, the failure of the East

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74. (continued) did operate a Goldfields service until 1939. See J.W.S. Brancker, "Wilson Airways", Shell Aviation News, September, 1935, pp. 12-13.
75. Mance Report, pp. 40ff. In Tanganyika, the Sandford Committee recommended acceptance of Mance's proposals, calling for "a monopoly of local air services in East Africa with railway participation...." Tanganyika Territory, Report of a Committee Appointed to Inquire into the Question of Competition between Road Transport and Railways and the Possibility of Co-ordinating the various forms of Transport in the Tanganyika Territory (Dar es Salaam, 1937), p. 13.
76. For discussion of the problems of the Empire Air Mail Scheme (E.A.M.S.), see below, chapter IX.
77. This idea had been rejected in 1930 by the East African Governors in Council on the basis that "flying in East Africa had not developed to such an extent" as to warrant such an organisation. AVIA 2/422. Enclosure, notes on Governors' conference in January, 1930.

African administrations to co-operate fully and meet the challenges of air transport with a common effort, administratively and financially, precluded Wilsons' expansion much beyond the confines of Kenya.<sup>78</sup> In light of these varied circumstances which worked against Wilson Airways right from the start, the success of the operation speaks highly of the perseverance and dedication to the task of Mrs. Wilson and the airline staff.<sup>79</sup>

In 1931, Wilsons had three pilots, Campbell Black, Mostert, and C.W.F. Wood, the latter in charge of flying training, an important part of the company activities. The company had seven aeroplanes<sup>80</sup> which together flew 151,020 miles during the year.<sup>81</sup> Only the Kisumu-Nairobi

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78. In 1929, the Hilton Young Commission had urged a common organisation and effort on the part of the three East African territories, noting the "great possibilities for the future of communications as a help towards administrative union lie in the development of air routes". The notion was obviously buried along with the idea of an East African Union. Colonial Office, Report of the Commission on Closer Union of the Dependencies in Eastern and Central Africa. Cmd. 3234 (1929), p. 129.

79. Mrs. Wilson was awarded the O.B.E. in 1936 for her work in air transport. For a general review of local difficulties facing air transport operators, see, T. Campbell Black, "Problems of African Air Transport", African Observer, II (March, 1935), 14-18.

80. The aircraft included two Avro 5's, 2 Puss Moths, and three Gipsy Moths. By this time there were more than 50 'landing strips' in Kenya. "Wilson Airways - the Story of a Courageous Woman", p. i.

81. The Air Annual of the British Empire, 1938 (London, 1938), p. 109.

service was in scheduled operation, the bulk of the flying taken up in charter work.<sup>82</sup> By the end of 1936, the airline included eight pilots and six European engineers, 11 aeroplanes, and the mileage flown had risen to 511,997, carrying 2,721 passengers, 18,500 lbs. of mail, and 8,350 lbs. of freight.<sup>83</sup> In 1938, the last full year of peacetime operations, Wilson Airways had expanded to 12 pilots and 14 engineers, the fleet had 15 aircraft, of which eight were twin-engined De Havillands. Over 1,000,000 miles were flown carrying 4,794 passengers and 76 tons of mail, the great increase in the latter amount brought about by the introduction of the Empire Air Mail Scheme in 1937. Seven major services were operated: (1) Kisumu-Nairobi-Moshi-Dodoma-Mbeya-Mpika-Lusaka twice weekly; (2) Nairobi-Mombasa-Tanga-Zanzibar-Dar es Salaam twice weekly; (3) Nairobi-Kisumu-Mara-Musoma-Mwanga-Geita once weekly; (4) Nairobi-Nyeri-Nanyuki-Nakuru-Eldoret-Kitale-Kakamega-Kisumu-Nairobi twice weekly; (5) Nairobi-Kisumu once weekly; (6) Dar es Salaam-Morogoro-Dodoma once weekly; and (7) Dar es Salaam-Mafia-Kilwa-Utete once weekly. Traffic was heaviest on the Nairobi-Kisumu sector and the coastal services,

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82. In 1938, for example, charter flying represented 33% of Wilsons' operations. East African Governors' Conference, Report of the Committee Appointed to Prepare a Scheme for Post-War Local Air Services in East Africa (Nairobi, 1943), p. 1. The Report reviews Wilson Airways activities, 1929-1939.

83. The Air Annual of the British Empire, 1938 (London, 1938), p. 109.

the latter carrying 28% of all passengers. Perhaps the most impressive aspect of Wilsons' performance was that the company operated without direct subsidy support. Mail payments and government charters operated on a basis of guaranteed annual payments assured adequate revenue. <sup>84</sup>

World War II brought an end to Wilson Airways' operations, and in September, 1940, the company went into liquidation and its aircraft were taken over by the R.A.F. <sup>85</sup> But, in a decade of air transport development in British East Africa, Wilsons, along with Imperial Airways, the Aero Club, and others, made a significant and lasting impact, by making the aeroplane an integral part of transport and communications development, by promoting the growth of confidence in and awareness of aircraft capabilities, and by providing the model upon which its successor, East African Airways, would build after 1946. <sup>86</sup> From the beginning, Wilsons' promoters had set out to develop an 'air sense' in East Africa, and their success in this area

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84. Report of the Committee Appointed to Prepare a Scheme for Post-War Local Air Services in East Africa, p. 1. See map, p. 321 for Wilson Airways route structure in 1939. Routes (6) and (7) noted above were operated under charter to the Tanganyika government.

85. Stroud, Annals, p. 457.

86. East African Airways was founded by the four governments of British East Africa on January 1, 1946, with £50,000 capital. Ibid., p. 458.

Wilson Airways Air Routes and Services - 1939.



Number of weekly return air services are indicated thus:

—◆— Once weekly

—|||— Three times weekly

—◆◆— Twice weekly

—||||— Five times weekly

NB. Dar-es-Salaam-Mafia-Kilwa service on request only.

is unquestioned. As early as 1931, a Kenya Chamber of Commerce representative could remark in a matter of fact way that air travel "is considered to be an ordinary means of travel....", and he went on to speak highly of Wilson Airways.<sup>87</sup> From the start as well, the company was able to meet its challengers head on. In 1929, the former British Air Minister, F. E. Guest, brought his National Flying Services to Kenya to promote the extension of air taxi and other services carried out by the company in the United Kingdom.<sup>88</sup> Guest did not help his own cause in East Africa when he commented on arrival that he had come "to undo the harm that had been done by amateurs".<sup>89</sup> The three aeroplanes of the Guest expedition did fly in East Africa and as far south as South Africa, but the hopes of becoming established in Kenya were short-lived. As C. G. Grey pointed out, Guest "seems to have been unlucky in his choice of country",<sup>90</sup> and he might have added, 'unwise',

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87. House of Commons. Parliamentary Paper (H.C. 156). Joint Committee on Closer Union in East Africa (1931), vol. II, p. 535. The remark was made by William Tyson, giving evidence before the committee.

88. The Times hoped for Guests' success in East Africa "where an 'air-taxi' service will be of the greatest use alike to settlers and to inter-Imperial communications". The Times, September 17, 1929, p. 15.

89. Quoted in the Aeroplane, January 22, 1930, p. 142. It seems certain that by "amateurs", Guest meant many of the Aero Club and not Gladstone, Campbell Black, and others. It was interpreted, nonetheless, as a putting down of local efforts to develop what Guest claimed he would.

90. "Kenya and Back", Aeroplane, January 22, 1930, p. 142.

for Wilsons had clearly staked their claim some months before Guest's arrival. Guest had come to 'pioneer', only to find that Wilsons and others before them had left little to be studied. What was needed was an organisation ready to go to work, and one, moreover, prepared to operate without government subsidy. In January, 1930, Guest and his team left the field to Wilson Airways. <sup>91</sup>

As mentioned earlier, the bulk of Wilson Airways activities focussed on Kenya. With the largest white settler community in East Africa and the Kenya administration better able to provide for the construction and maintenance of facilities, Kenya clearly offered the greatest opportunity for Wilsons to exploit its air traffic potential. Nonetheless, Tanganyika made good use of Wilsons in serving the coastal areas, and the company operated to several Tanganyikan centres on the route south to Lusaka from 1937 onwards. <sup>92</sup> Wilsons linked Zanzibar to the Imperial Airways service in 1932, and the island colony remained an integral part of the Wilson network until the war. Only Uganda remained totally outside Wilsons' expansion of scheduled services. The Ugandan commercial community in the 1930's was "anxious", as one historian described it,

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91. A good general review of the Guest expedition in Africa may be found in R. C. Preston (a member of the group), "The Guest Expedition to Africa", Royal Aero Club Gazette, December, 1954, pp. 425-40. See also Jones, The Time Shrinkers, pp. 91-93.

92. See map, p. 321.

that Uganda should not become a backwater like so many important English towns of the coaching era which, in their day, had failed to appreciate the significance of the advent of the railways. 93

In 1936, the Ugandan government did commission a study of their civil aviation needs, but aside from an experimental service between Entebbe and Kisumu in late 1932, and air survey work in the area of the Nile, Imperial Airways was left to bring the air age to Uganda. 94

From the time of Tony Gladstone's efforts to establish a Khartoum-Kisumu air service to World War II, civil aviation had made great progress in East Africa. These were the pioneer years during which the efforts of a few laid the groundwork for the many who would follow. Flying in East Africa in the 1920's and 1930's had all the colour, the romance and the adventure associated with pioneer aviation anywhere in the world. 95 But the aeroplane's contribution

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93. Kenneth Ingham, The Making of Modern Uganda (London, 1958), p. 154.

94. See Uganda, Report on Civil Aviation in the Uganda Protectorate (Entebbe, 1936), prepared by P.E.L. Gathin. The Entebbe-Kisumu service ran for about three months. It was operated by Air Survey Co. Ltd., (Stroud, Annals, p. 456), a subsidiary of Fairey Aviation in 1929. The company was active in the Sudan, Uganda, and Congo borders on surveys designed to assist in Sudd management.

95. See Markham, West with the Night, G. D. Fleming, Blue is the Sky (Bournemouth, 1947), the autobiography of a pilot who flew with Wilsons, and C. Gillman, "Musings from the Air", Tanganyika Notes and Records, April, 1941, pp. 25-31. Gillman flew in Tanganyika in the 1930's. Note too, "Recollections of Moths and Gulls and Donkeys", East African Standard, August 1, 1969, p. iii.

to East Africa meant much more than bringing a life of excitement to a few fliers. By 1939, aeroplanes had carried thousands of people, tons of mail, and millions of pounds' worth of goods to, from, and within British East Africa.<sup>96</sup> Clearly, the impact of aviation, if small relative to that of later years, was of consequence to at least some important sectors of the community. Admittedly, it was only the non-African East Africans who benefitted directly from the services of civil aviation and they represented but a small minority of the total population. However, the aeroplanes did not go unnoticed by the Africans,<sup>97</sup> and hundreds were employed in the upkeep of ground facilities. More important, while the short-term benefits to Africans were few, the long-term advantages stemming from these pioneer years are obvious in today's African States of Kenya, Uganda and Tanzania, and their joint success in

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96. In 1938 alone, goods (including bullion, gold and silver which together made by far the greatest value) valued at £1,712,858 were transported by air. Kenya. Blue Book for the Year 1938 (Nairobi, 1939), p. 562.

97. The Wata wa Mungu (the People of God), a Christian sect among the Kikuyu, at one point blamed aeroplanes for drought and locust invasions, possibly housebreaking, and "an attack with bows and arrows against a force of police in the Ndorugu Forest in February, 1934". Kenneth Ingham, A History of East Africa (London, 1963), p. 284. This response is quite obviously an exception. The likelihood is that aeroplanes soon became a routine sighting and of generally little interest to the majority of the population.

the operation of East African Airways. Following in the footsteps of the pioneers, hundreds of East Africans have moved into the world of air transport as pilots and engineers, and have taken up the countless other trades essential to the operation of a modern airline. This is the real legacy of the pioneers and Wilson Airways.

It is a fact that the air transport industry in the colonies of East Africa is a relatively recent development. The first regular air service was established in 1946 by the British Overseas Airways Corporation (BOAC) when it began to fly from London to Nairobi and then to Dar es Salaam. This was followed by the formation of the Kenya Airways in 1954 and the Uganda Airways in 1955. The growth of the industry has been rapid and is expected to continue for many years to come.

1. The first air service in East Africa was established in 1946 by the British Overseas Airways Corporation (BOAC) when it began to fly from London to Nairobi and then to Dar es Salaam. This was followed by the formation of the Kenya Airways in 1954 and the Uganda Airways in 1955. The growth of the industry has been rapid and is expected to continue for many years to come.
2. The second air service in East Africa was established in 1954 by the Kenya Airways when it began to fly from Nairobi to Dar es Salaam. This was followed by the formation of the Uganda Airways in 1955. The growth of the industry has been rapid and is expected to continue for many years to come.
3. The third air service in East Africa was established in 1955 by the Uganda Airways when it began to fly from Kampala to Nairobi. This was followed by the formation of the East African Airways in 1960. The growth of the industry has been rapid and is expected to continue for many years to come.

## CHAPTER VI

RHODESIA and NYASALAND: the EARLY YEARS  
and the GROWTH of RANA, 1918-1939

I aim at seeing every boy who is physically fit eventually with a pilot's certificate.

Godfrey Huggins. <sup>1</sup>

In the two decades between the world wars, the colonies of Northern Rhodesia, Nyasaland and Southern Rhodesia together made up the area known unofficially as British Central Africa. <sup>2</sup> It was a vast territory, occupying some 429,000 square miles between British East Africa and the Belgian Congo in the north and the Union of South Africa and Bechuanaland to the south. <sup>3</sup> To the west and east, the

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1. Quoted in The Times, May 1, 1935, p. 13. Huggins (1883-1972) was Prime Minister of Southern Rhodesia 1933-1953. He was a keen advocate of civil aviation development although curiously his biographers make no mention of it. See L. H. Gann and M. Gelfund, Huggins of Rhodesia: the Man and his Country (London, 1964).
  2. The term is more convenient than accurate, but it and its shorter form, 'Central Africa' is found in the correspondence and elsewhere. It does suggest a certain community of interest and cooperative endeavour, one expression being the formation of Rhodesian and Nyasaland Airways (RANA) in 1933. For general historical background, see L. H. Gann, A History of Northern Rhodesia: Early Days to 1953 (London, 1964), and A History of Southern Rhodesia: Early Days to 1934 (London, 1965); also John G. Pike, Malawi: a Political and Economic History (London, 1968).
  3. Northern Rhodesia covered 288,130 square miles, Southern Rhodesia, 105,333, and Nyasaland, 36,100. In all, about 2/3 the area of British East Africa.

large Portuguese colonies of Angola and Mozambique respectively denied easy access to the sea, a factor of great importance in the subsequent development of air transport in the Rhodesias and Nyasaland. As a land-locked territory, external communications and transport before the introduction of air services were dependent upon road and rail connections with neighbouring states. In general, road facilities were poor with rail links somewhat better. The Beira Railway passed through Mozambique to Salisbury to meet the line running from Cape Town through Bulawayo and Gwelo, and Bulawayo offered connections to Livingstone, Broken Hill and points north to the Congo and Angola. <sup>4</sup>

Like British East Africa, at the end of world war I, the Rhodesias and Nyasaland appeared to be ripe for the development of air transport services. Their isolation was apparent. Their existing communications facilities, both internally and externally, were primitive or inadequate; in the cases of Northern Rhodesia and Nyasaland, in particular, facilities were in too many areas non-existent.<sup>5</sup>

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4. See map in Raphael, The Cape to Cairo Dream, facing p. 388.
  5. As late as 1938, for example, communications in Northern Rhodesia were described as "really bad", with only a single rail line and two roads of consequence, the Great North Road to Abercorn and the Great East Road to Fort Jameson. Colonial Office, Report of the Commission Appointed to Enquire into the Financial and Economic Position of Northern Rhodesia. Colonial no. 145, 1938, p. 10.

This situation was of genuine concern to the fast-growing European population in the early 1920's. With a larger white settlement than its neighbours, Southern Rhodesia was the most ambitious looking to 'progress' and the creation of a new British dominion in Africa.<sup>6</sup> Central to this ambition was the idea of ultimately uniting the three colonies of British Central Africa, in part to forestall the Union's design to extend itself northward, in part to provide a wider arena for development and a greater attraction to continued white settlement.<sup>7</sup> The fact that this dream was only realized some 30 years later and then for only a decade does not take away its importance to developments in British Central Africa in the 1920's and 1930's. For the few concerned with air transport development,

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6. A beginning was made in this direction when Southern Rhodesia obtained 'responsible government' as a self-governing colony in 1923. By 1921, the European population had reached 33,620, considerably more than in Northern Rhodesia or Nyasaland, and 95.8% of this group was of 'British nationality'. See Barry Schutz, "European Population Patterns, Cultural Persistence and Political Change in Rhodesia", Canadian Journal of African Studies, VII (No. 1, 1973), 9.
  7. European immigration in the 1911-1921 period helped to raise the population from 23,306 to 33,620, a 42.4% net increase. Projecting a continuance of this pattern, there were grounds to support the idea of Rhodesia becoming a strong pro-British counterweight to the Union in southern Africa. On South African ambitions, see Ronald Hyam, The Failure of South African Expansion 1908-1948 (New York, 1972), esp. ch. 3.

the aeroplane would be the agent to service the needs of any political union. For the scattered white communities, the aeroplane could make the sense of unity a reality; settlements days apart would be mere hours apart.<sup>8</sup> Equally important, London would be days rather than weeks away, and the territory would find itself more securely tied to the Empire and less influenced by Pretoria and Cape Town.<sup>9</sup>

Nonetheless, while a strong case could be made for the aeroplane in the first few years after the war, more than a decade passed before air services were placed on a regular and reliable schedule of operations.<sup>10</sup> The deterrents to more rapid development were much as they were elsewhere in Africa: aircraft technology was slow to overcome the problems associated with African weather and terrain,<sup>11</sup> capital was

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8. By 1921, Southern Rhodesia, in particular, was shedding its 'frontier' image and developing a conscious "Rhodesian-ness". Schutz, "European Population Patterns", p. 9.
  9. South Africa, then as now, cast long shadows across the Rhodesian landscape. Ties of trade, communications and blood always suggested the possibility of political union. Apprehension over the latter may explain Southern Rhodesia's general contentment with the limited 'independence' granted in 1923. This provided much-needed Imperial support until such time as political independence was feasible.
  10. Imperial Airways commenced their London-Cape services in 1932, RANA began services late in 1933 linking Blantyre, Salisbury, Bulawayo, Victoria Falls, Lusaka, Broken Hill and Ndola. See below, pp. 358-59.
  11. As in so much of Africa, high airfield elevations were a problem. Salisbury and Bulawayo, for example, are 4,904 and 4,366 feet above sea level respectively.

in short supply, government financial support was never generous, and only a few of the many shared a confidence in the future of the aeroplane. For these reasons, the history of British Central Africa in the first years after the Great War is embarrassingly quiet on matters of air transport.<sup>12</sup> Again, the comparison with British East Africa is obvious. There, development truly begins with the Gladstone proposals to link Khartoum and Kisumu.<sup>13</sup> In British Central Africa, significant development commences with the formation of the Rhodesian Aviation Syndicate in 1927.<sup>14</sup>

Still, there were signs of interest long before that. In 1911, the African Aviation Syndicate was formed in South Africa. Hopes were high that one of its two aeroplanes would be the first to visit Southern Rhodesia, but the company failed in 1912.<sup>15</sup> A Mr. C. F. Webb, visiting Rhodesia in early 1912, prophesied that "in six or seven

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12. Historians too are quiet on what developments did take place. For the whole inter-war period, only Gann gives a glance at the coming of the aeroplane and the beginnings of RANA. History of Northern Rhodesia, p.308.

13. See above, pp. 187-94, 300-02.

14. Aston Redrup, "The History of Civil Aviation in Rhodesia", Shell Aviation News, August, 1934, p. 7. Redrup was one of the founders of the syndicate.

15. See below, chapter 7.

years aerial machinery would be as reliable as the latest car today,...and aeroplanes will be as familiar...in Rhodesia as motor cars are now".<sup>16</sup> This was the language of an enthusiast, but while his vision generated some response,<sup>17</sup> his ideas were premature in the still pioneer world of Rhodesia in 1912 and he left to join the Royal Flying Corps shortly thereafter.<sup>18</sup>

While no aeroplanes were active in British Central Africa during World War I, the war did give a short-lived stimulus to ideas for air transport and other air services development. In 1919, George Holt Thomas, the British air pioneer, seeking new fields to conquer as were a number of his aircraft manufacturing rivals, negotiated an agreement with the Air Ministry and Rhodesia House whereby his companies would be sole concessionaires for air services

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16. Quoted in Jack McAdam, "The Pioneer Birdmen", Illustrated Life Rhodesia, February 25, 1970, p. 20. See also his "An Early Enthusiast for Rhodesian Aviation - Mr. C. F. Webb in 1912", Rhodesiana, September, 1965, pp. 103-10. I am much indebted to Mr. McAdam, a former pilot with Spencer's Air Services and RANA. He has pioneered the task of writing the history of air transport development in British Central Africa, his work appearing in numerous articles.
17. Rhodesia Herald, January 18, 19, 26, February 17, March 27, June 6, 1912.
18. Webb, a former secretary of the Aeronautical Society of South Africa, had hoped to form a similar organisation in Salisbury but the first meeting was poorly attended. McAdam, "An Early Enthusiast", p. 107.

in Rhodesia. The agreement called for the Holt Thomas organization to provide the aircraft, the pilots, and the 'stations', to give mails priority along agreed routes, to carry passengers, and to employ Rhodesians "where possible".<sup>19</sup>

Nothing came of this ambitious document, although it did suggest that at least one British promoter recognized the potential of Rhodesia for air transport exploitation.<sup>20</sup>

In the meantime, the R.A.F. survey party developing the Cairo to Cape route in 1919, and the flight of Van Ryneveld and Brand in early 1920 stirred some enthusiasm in the territory, the 'Silver Queen' heading for Cape Town being the first aeroplane to land in British Central Africa.<sup>21</sup> A few months later, in April, 1920, the territory's first 'aviation' company, Airoad Motors, was registered in Bulawayo with the advertised intention to,

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19. AVIA 2/1711, Civil Aviation - Concession in Rhodesia to Mr. Holt Thomas, 1919.

20. Ibid. Clause 10 of the agreement noted that "should it be decided by the Governments of the territories concerned to establish an organisation for the purpose of operating a Trans-Africa route, of which the Aircraft Company Ltd., or its Allied Service Company is unable to become an integral part so far as Rhodesia is concerned, this agreement shall be null and void". The agreement died with the formation of Imperial Airways in 1924.

21. Major stops being made at Abercorn, Ndola, Livingstone and Bulawayo. See Jones, The Time Shrinkers, pp. 36-44; also J. McAdam, "Air Vice-Marshal Sir Quintin Brand: Co-Pilot of the First Aeroplane to Land in Rhodesia", Rhodesiana, July, 1970, pp. 56-69.

carry on the business of importing, buying, selling, exchanging, manufacturing in whole or in part, equipping, repairing, altering, taking or letting on hire and generally dealing in cars, coaches, carriages, traps, cabs, carts, omnibuses, cycles, ships, boats, aeroplanes, airships and conveyances of every description propelled or worked, ... by steam, electricity, petrol, oil, gas or any other motive powers, ... or drawn by horses or other animals. 22

The company, despite its grandiose ambitions, went into liquidation after a few months, a victim of "trying conditions and lack of airmindedness".<sup>23</sup> It never owned an aeroplane but did act as agent for a South African Aerial Transport Company Avro 504K, the 'Rhodesia', during a 4 1/2 month tour of the territory. Hundreds of settlers were given their first aeroplane ride in the 'Rhodesia', and thousands more in both Northern and Southern Rhodesia were given their first sight of an aeroplane in operation.<sup>24</sup>

Late in 1921, Major A. M. Miller came north from South Africa and organised a new company, Rhodesian Aerial Tours, the first Rhodesian company to own and operate an aeroplane.<sup>25</sup>

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22. Quoted in J. McAdam, "Early Birds in Central Africa: an Account of Flying Activities in the Rhodesias during the Years 1920 to 1922", Rhodesiana, December, 1965, p. 45.

23. Redrup, "A History of Civil Aviation in Rhodesia", p. 7.

24. J. McAdam, "Birth of an Airline", p. 2.

25. Ibid.

In August, 1922, its one aircraft was damaged at Rusape, and never repaired. The company, like Airoad Motors, went into liquidation shortly thereafter. Both of these early attempts to establish air transport services failed in the face of the realities of the moment. The local commercial establishment was reluctant to provide the capital, while government expressed no interest whatsoever. As yet, ground facilities of even the most primitive kind were non-existent, and the small flimsy looking Avros could do little more than suggest possibilities for the future. With the failure of Rhodesian Aerial Tours, all air activity in British Central Africa came to a halt. <sup>26</sup>

Interest was rekindled in 1925-26. Two South African Air Force DH 9 aircraft came north through Bulawayo and Livingstone in July, 1925, and in January, 1926, Alan Cobham arrived on his 'Imperial Airway Survey' from Cairo to the Cape. <sup>27</sup> In May, the first R.A.F. Cape flight passed through Central Africa, Wing Commander Pulford, the flight leader, noting interest in aeroplanes being expressed in the copper belt. "Whilst at Ndola", he wrote,

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26. For other brief accounts of the early days of flying in British Central Africa, see Mark Howard, "Early Days in Rhodesian Aviation", Rafters on Safari, IV (May, 1945), 11; N.H.D. Spicer, "Early Events in the History of Flying in Southern Rhodesia", New Rhodesia, XIV (September 12, 1947), 22-23; T. Scannell, "Aviation in Central Africa", Horizon, II (November, 1960), 18-22.

27. See above, pp. 165-70.

near which are important copper mines, two or three important mineral prospectors expressed the view that as the whole future of Northern Rhodesia was wrapped up in mining and in order that the mining industry could go ahead, aeroplanes were absolutely necessary for transport and survey. At present much time is wasted owing to poor communications. During the rains the roads are impassable and it takes days, sometimes weeks, to get from place to place. 28

Certainly, the prospects for aeroplane use in transport and communications did appear good in Northern Rhodesia, given the appalling state of ground facilities, but as important was the need for aerial survey indicated in the Pulford report. In 1926, the Aircraft Operating Company, a British firm, secured government and private support to commence survey work in Northern Rhodesia,<sup>29</sup> work which provided valuable data for mining as well as government interests, and in the process established the aeroplane as an invaluable tool of development.<sup>30</sup>

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28. "R.A.F. Cape Flight (Official Account)", p. 150. See full report in AIR 5/820, ch. 14, published as AP 1271.

29. A.M. Report on the Progress of Civil Aviation, Cmd. 2844(1927), p. 10.

30. Details on this early survey work may be found in C. K. Cochran-Patrick, "Aerial Reconnaissance Mapping in Northern Rhodesia", Geographical Review, April, 1931, pp. 213-20; H. L. Crosthwait, "Aerial Survey of East and Central African Territories", Journal of the African Society, XXIX (July, 1930), 333-43; W. Norman Roberts, "Aerial Surveying in Northern Rhodesia", Journal of the Royal Aeronautical Society, XXVI (June, 1932), 500-27.

Still, a more general public interest had to be encouraged. While air survey was important and costly, it did little to foster that sense of airmindedness so crucial to air transport success.<sup>31</sup> This task was left to the Rhodesian Aviation Syndicate and its successor, the Rhodesian Aviation Company, the companies which were to grow into Rhodesian and Nyasaland Airways (RANA) in a few short years. The Rhodesian Aviation Syndicate was neither a commercial nor operational success, but in its short two years of life it brought to the fore the men and the money that were to establish civil aviation in the territory. The Syndicate was formed in August, 1927, by Aston Redrup, formerly of Airoad Motors, Captain J. Douglas Mail from South Africa, Herbert L. Stewart, a mine-owner and rancher from the Belingwe district, and two Bulawayo men, Francois Issels and A. G. Hay.<sup>32</sup> The latter three men provided the financial backing, Hay winning a promise from the Beit Railway Trust to provide an annual grant of £500 against losses for three years, conditional on the Syndicate becoming a limited liability company and obtaining a like sum from the government.<sup>33</sup> The interest of the Beit Railway Trust at this

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31. For the fiscal years 1930-31 and 1931-32, for example, the government of Northern Rhodesia voted £84,372 for survey work alone. Air Annual of the British Empire, 1932-33 (London, 1932), p. 28.

32. McAdam, "Birth of an Airline", p. 3.

33. Redrup, "The History of Civil Aviation in Rhodesia", p. 7.

time was a turning point for aviation in the Rhodesias for it marked the beginnings of a long association of substantial benefit to air transport development. Alfred Beit had believed in 1906 that

by the promotion, construction and furtherance generally of railways, telegraphs (including wireless telegraphy) and telephones and kindred or other methods of transmission of persons, goods and messages, civilisation will be best advanced and expedited in Africa for the benefit of the inhabitants thereof, whether native or immigrant. 34

The trustees rightly saw that what Beit had called the 'Railway Fund' was intended to serve much wider purposes, and they acted accordingly. 35

The Syndicate's flying activities were dogged with misfortune. Its first aircraft, a war surplus DH6B, brought from South Africa by Douglas Mail, crashed on its first charter. The replacement aeroplane, a DH Moth, crashed on its first chartered flight as well, and both were scrapped. By mid-January, 1928, the Syndicate was without an aeroplane. 36 Although it had entered into negotiations with the government of Southern Rhodesia to

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34. Extract from the will of Alfred Beit. Beit and Lockhart, The Will and the Way, p. 94. For background, G. S. Fort, Alfred Beit (London, 1932), especially pp. 32-42.

35. Beit and Lockhart, The Will and the Way, p. 94. Before World War II, the Trust granted £49,000 to the improvement of Imperial air routes in the Rhodesias, £19,000 to RANA, and £2,000 to the Rhodesian Aviation Company. Ibid., p.19.

36. McAdam, "Birth of an Airline", p. 5.

operate air services between Bulawayo and Fort Victoria, Lonely Mine and Johannesburg, Salisbury and Fort Victoria, and Umtali and Melsetter, clearly these plans were beyond the means of the Syndicate, and government hesitation was understandable.<sup>37</sup> Thus, for more than a year, the Syndicate did little else than act as the De Havilland agent in the Rhodesias. In the meantime, the principals, underterred by early failure, were active in organising a successor company, one of limited liability to win both Beit Trust and government support. Issels had persuaded the Cobham/Blackburn interests to support a new company in Rhodesia, and with this backing, the Rhodesian Aviation Company was formed in early 1929.<sup>38</sup>

The company functioned for four years, meeting with limited success. With a small fleet which grew to five aeroplanes, it operated a Bulawayo-Salisbury weekly service in 1930,<sup>39</sup> and did a great deal of 'taxi' work in the

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37. Ibid., p. 4. It could be pointed out too that the Central African governments already had an eye to British plans for a route to the Cape already in active discussion in East Africa. Nyasaland, for instance, was most interested in Cobham's proposals. AVIA 2/1857, enclosures 109 and 113, Governor to CO, March 14 and 28, 1928.
38. Redrup, "A History of Civil Aviation in Rhodesia", p. 7. Plans for the new company had been set out as early as October, 1927. Bulawayo Chronicle, October 12, 1927. The authorized capital was £7,500, increased in 1931 to £20,000. For details on company beginnings, see BOAC, I.A. file No. 29, Rhodesian Aviation Company Ltd. - Formation; RANA Company Matters, 1930-32. The Chairman was F. Issels.
39. Air Annual of the British Empire, 1932-33, p. 28. In 1931, this service went on an 'as required' basis.

Rhodesias and Nyasaland. <sup>40</sup> "This company has performed much good work in pioneering aviation and creating public 'airmindedness'," noted a government report in 1931, adding, "and it is a matter of regret that more support is not forthcoming from the public". <sup>41</sup> Problems with certain aircraft and an unfortunate fatal crash did little to win public support. <sup>42</sup>

From the beginning, the Rhodesian Aviation Company was in receipt of an annual grant of £750 from the Southern Rhodesian government, which, along with Beit Trust support, was sufficient to enable the company to keep its financial head above water. However, in early 1931, Imperial Airways took over Cobham/Blackburn Air Lines and its interests in the Rhodesian Aviation Company. <sup>43</sup> Imperials would not

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40. Among the taxi services, the flying of circuit court judges to outlying districts. See, for instance, The Times, July 20, 1929, p. 12. Considerable flying training was done as well; the government grant of £750 p.a. was 'earned' by the training of 7 pilots a year to 'A' licence standard.

41. Southern Rhodesia, Report on Civil and Military Aviation for the Year 1930 (Salisbury, 1931), p. 3.

42. Late in 1931, all DH Puss Moth aircraft were grounded. The company lost another aeroplane and its chief pilot, Pat Judson (and a student pilot) in a crash at Salisbury in November. See J. McAdam, "Pat Judson: First Rhodesian Born Airman", Rhodesiana, July, 1967, pp. 1-16.

43. See above, pp. 211-15.

continue the financial support the Cobham group had provided, and the company suffered accordingly.<sup>44</sup> For the moment, Imperial Airways' African interests were directed to the opening of the Cairo-Cape service. It was not yet apparent that there would be any need to support or even control the small company in Rhodesia. Woods Humphrey, writing to F. R. Walker, Imperials' South African Manager, expressed the position clearly;

The whole question of taking over the control of a Company like the Rhodesian Company is a very big matter and one which should not be rushed into with undue haste.... I would like you to bear in mind the danger of dissipating our resources in purchasing 'nuisance values'. One is apt sometimes to get a little panicky and lose for a moment a proper perspective of values. The mere owning of a few Puss Moths and talk of running airlines with them here and there should not, per se, urge us to commence negotiations to take a controlling interest in the venture. 45

Woods Humphrey was, of course, echoing Geddes' sentiments concerning small airlines which at times stood in the path of Imperial Airways.<sup>46</sup> The corollary to this view was that Imperials were only interested when they could assure

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44. Cobham/Blackburn had also contributed essential technical support and one Blackburn Bluebird aeroplane in exchange for shares in the company. Their representative, Captain B. Roxburgh-Smith, resigned his post as Flying Manager when Imperial Airways absorbed the Cobham interests. McAdam, "Birth of an Airline", pp. 8-10.

45. I.A. file No. 29. Woods Humphrey to Walker, June 8, 1932. Both the Rhodesian Aviation Company and Captain Alston of the Manica Trading Company had suggested an Imperial Airways 'take-over'. See below, pp. 350-53.

46. See above, p. 122, f.n. 102.

themselves a controlling interest in any smaller concern, so that such matters as standards could be assured. Ironically, when Imperials did find it necessary to take a hand in Rhodesian air transport development, local sensitivities denied them the control they would have liked and they had to be content with less than a majority interest in Rhodesian and Nyasaland Airways in 1933. <sup>47</sup>

The point here is that the Rhodesian Aviation Company and air transport in the Rhodesias and Nyasaland generally would have benefitted greatly had Imperials seen fit to provide even modest support. Too, this may have won public interest and sympathy more quickly. As it was, what progress the Rhodesian Aviation Company did make was slow and always with the shadow of financial insecurity clouding its operations. <sup>48</sup> Early in 1931, the Bulawayo Chronicle was

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47. RANA was incorporated October 12, 1933 at Bulawayo. Of the Original 25,172 £1 shares, Imperial Airways took up 8,307, for a 34% interest. BOAC, I.A. file No. 31, 'RANA Board Meetings, 1938-45'.
48. Speaking to shareholders on the eve of the company being re-organised as RANA, Cecil Roberts, one of the directors, pointed out that while company receipts had improved, the airline was still running at a loss and had no reserve to meet competition or the loss of an aircraft. Bulawayo Chronicle, August 6, 1933. Financially, the company had made little headway since 1929, and early in 1933, the Beit Trustees announced that they would be discontinuing their £500 p.a. grant until a more viable organisation was formed.

complaining about the stagnant state of civil aviation and the lack of government support.<sup>49</sup> Fortunately for the territories, by 1932, the pace of progress began to quicken in ways which forecast a sound air transport future even as they meant the end of the Rhodesian Aviation Company. The establishment of the Cairo-Cape route in early 1932, and a £50,000 grant from the Beit Trust shortly thereafter, marked the beginnings of a new era in the Rhodesias and Nyasaland.

The opening of the Imperial Airways service to London and Cape Town made more obvious and urgent the need to develop an internal network of air services to link up with the Imperial services at Mpika, Broken Hill, Salisbury and Bulawayo.<sup>50</sup> Especially in Southern Rhodesia, the Imperial service was immediately popular; in the first year of operation, 2824 lbs. of mail, 3407 lbs. of freight, and 263 passengers were carried. By 1934, these figures had been raised to 10,934 (4970 kgs.), 5,878 (2672 kgs.), and 766.<sup>51</sup> The stimulus that the Imperial service gave to

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49. Bulawayo Chronicle, February 17, 1931. The bulk of Southern Rhodesian support was being directed to the Cairo-Cape route. In 1930, the civil aviation vote provided for £5,660 of which £3,760 was for the trans-Africa service, and in 1931, £10,000 p.a. was voted to subsidise Imperial Airways. Report on Civil and Military Aviation for the Year 1930, pp. 2-3.

50. Important towns like Livingstone, Lusaka, Blantyre, and Umtali were without any regular services.

51. Southern Rhodesia. Annual Report(s) Civil Aviation, 1932 and 1934, (Salisbury, 1933, 1935) pp. 1 and 3.

local traffic may be suggested in the expanding operations of the Rhodesian Aviation Company. In 1931, the air line flew 64,930 miles with 400 passengers. In its final part-year of operations, 1933, it flew 150,545 miles with 2,640 passengers.<sup>52</sup> This was no mean achievement. With few aircraft and limited resources, only a few services could be offered on anything like a regular basis, and its main service had to compete with Imperial Airways.<sup>53</sup>

With Imperial Airways, the Beit Trust provided a powerful stimulus to the growth of air transport in the three territories.<sup>54</sup> In February, 1932, the Trust announced that it had made a grant of £50,000 to improve the facilities along the Imperial Airways route through the Rhodesias.<sup>55</sup> As in all Africa, the sorry state of ground facilities generally was the main barrier to air transport development, and in the Rhodesias, it was

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52. Southern Rhodesia. Annual Report(s) Civil Aviation, 1931 and 1933, (Salisbury, 1932, 1934) pp. 2 and 7.
53. The route was Salisbury to Bulawayo via Gatooma, Que Que and Gwelo, extended in July, 1933, to Johannesburg. Stroud, Annals, p. 438.
54. In the case of Nyasaland, the effect was indirect. The Trust made no reference to developing communications in Nyasaland.
55. The Times, February 24, 1932, p. 11. For correspondence among the interested parties, see AVIA 2/578, Beit Railway Trust. Proposal to Establish Meteorological Service in Rhodesia, 1932; and AVIA 2/579, Beit Railway Trust. Allocation of sum of £50,000 for Development and Improvement of Cape-Cairo Air Route (25.2.32-).

essential that the situation be improved before any great progress could be made. Of course, much had been done to ready the Cairo-Cape route, and both government and private interests had sponsored airfields in both Rhodesias. In Northern Rhodesia, 'airstrips' were laid out at Abercorn, Broken Hill, Fort Jameson, Livingstone, Mongu and Mpika by 1930.<sup>56</sup> By 1933, Nyasaland had 19 aerodromes and landing grounds, the main one being Chileka.<sup>57</sup> In Southern Rhodesia, Bulawayo and Salisbury had been developed to handle the Imperial Airways service, while landing grounds included Gatooma, Gwelo, Fort Victoria, Victoria Falls, Que Que, Banket, Insiza, Miami, Mtoko, Umtali and Enkeldoorn.<sup>58</sup> The problem remained that few of these airfields were adequate in terms of safety and suitability for large aeroplanes. Most were mere grass strips which were poorly

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56. Northern Rhodesia, Blue Book for the year ended December 31, 1930 (Livingstone, 1931), p. Ia4. After 1930, the Blue Books for most of the British African colonies are invaluable sources of aviation statistics and related data.
57. Nyasaland, Blue Book for the year ended December 31, 1933 (Zomba, 1934), p. Ia12.
58. A.M., Report on the Beit Trust Grant of £50,000 to Rhodesia (hereinafter the Grylls Report), p. 3. Submitted by Lt. J.A.B. Grylls, October 12, 1932.

laid out and poorly maintained by unskilled local help. 59  
With the exception of those fields provided for the Imperial service, there was neither pattern nor organisation determining a rational development of ground facilities to meet the area's needs. Radio and meteorological services were at best primitive; aviation maps covered only a few areas; night flying facilities were non-existent, and many more emergency fields had to be set out. Clearly, there was a large amount of work to be done to meet the needs of the Rhodesias, and with neither the Air Ministry, Imperial Airways, nor the local governments willing or able to provide more capital assistance, the Beit Trust grant came at a most propitious moment. 60

The next step was to determine the allocation of the £50,000. Two separate reports were made on the existing situation with recommendations for future expenditures. The first and shorter report was prepared by J.A.B. Grylls

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59. Writing to Imperial Airways, Grylls reported;  
I went up on the Air Mail to Mbeya to see how work was getting on. Progress was not very satisfactory. To begin with the local natives there are a miserable collection and seem quite incapable of doing a proper day's work.  
AVIA 2/578, Grylls to Col. Turner (I.A. representative in Nairobi), October 4, 1932. Most small airstrips employed two Africans to keep the grass cut, discourage wandering animals, and to light smudge fires on hearing the approach of any aeroplane.
60. See above, pp. 251-56, for the financing of the Cairo-Cape route to this point.

for the Air Ministry in 1932.<sup>61</sup> Grylls noted that some £16,370 had already been authorised and recommended an additional £21,800 be put to use immediately, over half of which would serve to upgrade existing aerodromes and landing strips, and construct new ones. In all, Grylls mapped out a future that would have provided 92 airfields scattered about the two Rhodesias; 22 would be suitable for all types of aircraft, 26 for light aircraft use only, and a further 44 would be designated as emergency landing strips.<sup>62</sup> A further £7,900 was recommended for long wave and short wave radio facilities at Mpika and Kanona, and telephones at a number of airfields otherwise without adequate ground communications.<sup>63</sup>

The second and more comprehensive report was prepared in 1933 by Nigel Norman, a director of Airwork, Ltd., and technical advisor on aviation to the Beit Railway Trustees.<sup>64</sup> The Norman report was a cogent statement dealing with every aspect of potential air transport development in the area, and it set out much of the pattern that civil aviation would follow to 1939. Norman's basic recommendations included:

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61. The Grylls Report was only 16 pages.

62. Grylls Report, pp. 3-5.

63. Ibid., p. 7.

64. The Beit Railway Trust, Report on Aviation Facilities in Northern and Southern Rhodesia with Special Reference to the Grant, 1933-34 (hereinafter the Norman Report), 1933.

- (1) the construction of landing grounds and emergency strips every 40-60 miles along the Cairo-Cape route;
- (2) two light aircraft for use by civil aviation authorities for supervision and maintenance work;
- (3) a special aviation map to be prepared for Northern Rhodesia;
- (4) the preparation of 'Pilots' Handbooks';
- (5) the establishment of further 'met' reporting stations, and, possibly, the organisation of all 'met' services under the Director of Meteorological Services in British East Africa;
- (6) three more wireless stations;
- (7) night flying equipment at stations south of Salisbury; and
- (8) a new airport at Lusaka and improvements at Salisbury.

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These recommendations would cost £28,455. With £18,470 already authorised, the Norman report left only £3,075 of the grant not allocated. <sup>66</sup> Norman, however, went a great deal further than planning the expenditure of Beit money. He argued for the "establishment of a local flying company to operate feeder services and to carry out other essential aviation work in Northern and Southern Rhodesia and Nyasaland". Central to this idea was that the Rhodesian Railways Company should be a partner to the scheme, and in order to protect their traffic interests, the railways should have "a controlling interest in future air activity". <sup>67</sup> Basically, Norman wanted

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65. Norman Report, p. 1.

66. Ibid., p. 83.

67. Ibid., p. 79. By the 1930's, the railway companies in British East and Central Africa, and in South Africa, were expressing concern about the possible effect of air transport development on their traffic. Only in the Union did air transport become a subsidiary of the railways, but

to see the "co-ordinated development of aviation in the area", in order to "put an end to unsatisfactory competition between a number of local companies without proper technical control and with inadequate financial backing".<sup>68</sup> A new company was thus necessary, and it should be given a monopoly position "to secure the whole of the turnover resulting from aviation in the area" and "to obtain for the Company the permanent backing of all the Governments concerned and the whole of the financial aid available in the form of subsidies".<sup>69</sup> In effect, this described the framework for Rhodesian and Nyasaland Airways which was established about the same time as Norman was completing his report.<sup>70</sup>

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67. (continued) in the formation of RANA, the Beit Railway Trust, Rhodesian Railways and the Nyasaland Railway obtained a 54% interest in the company, thus assuring that communications development would be cooperative rather than competitive.

68. Ibid. The local companies in question were Christowitz Air Services, operating out of Blantyre, Northern Rhodesian Aviation Company at Ndola, the Rhodesian Aviation Company, and several others at Broken Hill and Salisbury who were operating taxi and charter services.

69. Ibid., p. 81.

70. Norman commenced his survey in February, 1933, and his Report was submitted sometime during the summer. McAdam, in his "Birth of an Airline", suggests that Norman's Report was influential in the formation of RANA. This is not the case as discussions in that direction had begun even before Norman took to the field.

The Beit Trust grant had been well received from the start.<sup>71</sup> Its significance lay in the fact that the progress of civil aviation development in the Rhodesias went ahead at a much faster rate than would otherwise have been possible. In consultation with the two Rhodesian governments, the Air Ministry, the Colonial Office and Imperial Airways, and acting generally on the recommendations laid out in the Grylls and Norman Reports, the Trust provided an air transport framework surpassed in British Africa only by the Union. Nor were its efforts confined to improving the ground organisation. It was Beit Trust capital that enabled the establishment of RANA and its support of that concern assured the Rhodesias and Nyasaland an air service the equal of any in Africa.

Still, the birth of RANA did not come about without a struggle involving a number of interested parties for more than a year. In May, 1932, the Air Ministry received a proposal from Captain C. R. Alston, an ex-R.A.F. pilot and managing director of the Manica Trading Company in Beira. Alston claimed to have support from Imperial Airways, the Portuguese Foreign Office and the important Companhia de Mocambique in a scheme to provide an air service between

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71. African World (September 10, 1932, p. 230) praised the grant as "fulfilling, worthily, the ideals of its illustrious founder". H. U. Moffat, the Southern Rhodesian Prime Minister, was likewise enthusiastic. Ibid., p. 235. See too The Times, August 26, 1932, pp. 10 & 11.

Beira, Blantyre and Salisbury. <sup>72</sup> Alston's idea was to form a British company, "probably absorbing air transport companies already operating in Southern Rhodesia and Nyasaland", to run twice weekly services between Salisbury and Blantyre, and Salisbury and Beira, and once weekly Blantyre and Beira. The proposal was aimed at linking the three centres with the Cape-Cairo air mail. <sup>73</sup> The initial Air Ministry response was that the proposals "merit favourable consideration". <sup>74</sup> Both Alston and the Air Ministry could agree that none of the existing aviation companies in British Central Africa were in a position to exploit fully the potential of the area.

In the meantime, the Rhodesian Aviation Company was active in efforts to consolidate its position. In June, 1932, the acting Governor of Nyasaland advised that a Mr. Newman,

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72. FO 371/16500, Political (Western) Portugal (1932), W8325, Alston to A.M., May 23, 1932. There is no other evidence of Alston's claim of Imperial Airways support, nor was it as certain as he suggested that he had backing from the Portuguese Foreign Office. See below on the Portuguese position.

73. Ibid., W7620, 'Operation in Nyasaland of Air Services by the Manica Trading Company and Rhodesian Aviation Company', CO to Acting Governor Nyasaland, June 8, 1932.

74. Ibid.

representing Rhodesian Aviation Company interviewed me on the 18th June to state a case for the formation of Company combination possibly by arranging terms with the Manica Trading Company but otherwise in opposition to them [my italics]. He stated that he has now received firm offer from Imperial Airways to finance his company £15,000 immediately and additional £60,000 later to cover development expenditure on circular lines from Salisbury to Mpika, one via Broken Hill and Livingstone, other via Fort Jameson and Blantyre. 75

Newman claimed that he would not close the deal with Imperial Airways until he had the details of an alternative offer from the British South Africa Company, but he was, for the moment, asking Nyasaland's "sympathetic consideration".<sup>76</sup>

To reinforce its argument, in mid-1932, the Rhodesian Aviation Company entered into a tentative agreement with Christowitz Air Services, the pioneer Nyasaland company.<sup>77</sup> In a 'Statement of Position of Proposed Aircraft Service between Beira, Salisbury and Blantyre', the two companies agreed to an amalgamation of their services and interests "if a definite service can be run between the above-mentioned places".<sup>78</sup> They proposed to provide services, such as

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75. Ibid., Acting Governor Nyasaland to CC, June 21, 1932. I cannot find any other confirmation of this "firm offer" from Imperial Airways. It appears to be more a case of Newman translating 'feelers' into promises.

76. Ibid. Nyasaland promised "consideration".

77. This company was established at Blantyre in 1930 by C.J. Christowitz. It commenced operations with two Puss Moth aeroplanes, in 1931 adding a Gypsy Moth, flying within Nyasaland and on the Blantyre-Salisbury route. See J.A.C. Florence, "The Growth of Civil Aviation in Nyasaland", Nyasaland Journal, XI (July, 1958), 14-23.

78. FO 371/16501, Political (Western) Portugal (1932), W11239, undated enclosure.

indicated in the Alston scheme, with three Puss Moths, pointing out the great savings in travel time between the cities the aeroplane would provide.<sup>79</sup> What they needed was £20,000 capital to put the scheme into operation.

The several proposals being entertained were all directed to a common aim: a fuller exploitation of the Imperial Airways Cairo-Cape air mail service. Most of the major centres in the Rhodesias were as yet without regular air service, Nyasaland was served only by a weekly connection with Salisbury, and Beira, British Central Africa's port and link with the outside world of Union Castle and maritime travel, had no air transport services at all. By the autumn of 1932, the parties to these concerns were coming together in their own best interests and in the best interests of the territories involved. In October, F. R. Walker informed the Nyasaland government that the "Manica Trading Company, British South Africa Company, and Rhodesian Aviation Company have joined forces with Imperial Airways and that the latter would finance and control management of re-organised company, Rhodesian Airways Ltd."<sup>80</sup> The company planned to provide

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79. Ibid. Scheduled rail times Beira-Salisbury, Beira-Blantyre and Blantyre-Salisbury were 22, 24 and 55 hours respectively. The proposed air services were scheduled to fly each route in three hours, giving travellers savings of 19, 22 and 52 hours.

80. Ibid., 'Proposed Air Services in Southern Rhodesia, Portuguese East Africa and Nyasaland', Acting Governor Nyasaland to CO, October 1, 1932.

Nyasaland with Salisbury and Beira connections but needed a £1,000 p.a. subsidy.<sup>81</sup> The proposed company sought a similar amount from Southern Rhodesia, £1,750 from Mozambique, and guaranteed mail revenues.<sup>82</sup>

While obtaining adequate capital and subsidy support appeared to be the main obstacle facing the proposed company, another more difficult problem arose in Mozambique. Alston and his Manica Trading Company had indeed been granted the air transport concession by the Companhia de Mocambique, but this was subject to Portuguese Government approval. Unfortunately for the planners of Rhodesian Airways, Portugal had granted exclusive commercial aviation rights in Portugal and the colonies to the Companhia Portuguesa de Aviacao and the Sociedade Portuguesa de Estudos e Linhas Aereas, generally referred to as SPELA.<sup>83</sup> Although SPELA

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81. Ibid. The subsidy would be needed for five years. The Acting Governor, while hesitant to refuse help "if link in Imperial chain", felt that "service is at present in nature of luxury for Nyasaland", and offered £500 p.a. only.
82. Ibid., W12032, Holloway (A.M.) to CO, November 2, 1932. Rhodesian Airways was prepared to accept £500 p.a. from Nyasaland if guarantees could be obtained of 40 lbs. mail a week at five shillings a pound. The Colonial Office was advised that the "[Air] Council strongly support the scheme".
83. Also known as Société pour Exploitation des Lignes Aériennes. It was a French company of which little is known, and a forerunner to later French interests in Portuguese aviation. In 1934, the Sociedade Aero-Portuguesa was organised in association with Air France, and operated a Lisbon to Tangier service until 1953. Davies, History of the World's Airlines, pp. 116, 286.

had failed to operate any services at home or in Africa up to 1932, the agreement bound the Portuguese government to uphold SPELA rights in Mozambique and Angola. <sup>84</sup>

From the start, Alston worked endlessly to persuade the Portuguese government to cancel the SPELA contract, enlisting the support of the British Foreign Office, and even C. G. Grey of the Aeroplane. <sup>85</sup> Through much of 1932 and 1933, Portugal withheld its approval of the Companhia de Mocambique's concession, the British embassy in Lisbon pointing out that while the Portuguese Aviation Council admitted the contract with SPELA was "moribund", it was not "defunct". <sup>86</sup> Given SPELA's record and the opportunity to develop air transport in Mozambique, the Portuguese position cannot readily be understood, but it does appear that French influence in Lisbon was more persuasive than the British. <sup>87</sup>

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84. Portugal was the most backward of the imperial powers in Africa in instituting air services. In Mozambique, the Divisao de Exploracao dos Transportes Aereos (DETA) was organised only in 1937. In Angola, the Aero Club of Angola had operated in 1937, but not until 1939 was the Divisao de Exploracao dos Transportes Aereos de Angola (D.T.A.) formed. In 1947, the government airline, Transportes Aereos Portugueses (T.A.P.) established the first service between Portugal and the African colonies. Ibid., pp. 196, 286.

85. FO 371/16500, W11069, Grey to FO, October 6, 1932.

86. FO 371/16501, W11765, R. Jallopp to FO, October 19, 1932.

87. French government interest is not spelled out but clearly the French were concerned to make use of Mozambique in their plans to link up Madagascar. The carriage of mails was a major issue in the Alston-Portuguese discussions. See FO 371/17417, Political (Western) Portugal, (1933), W3293.

By late 1932, Rhodesian Airways were prepared to commence operations directly Portugal ratified the Companhia de Mocambique concession.<sup>88</sup> With that not forthcoming, the Rhodesian Airways scheme began to collapse. Governor Young in Nyasaland, for one, saw no point in pursuing subsidy questions any further in the absence of Portuguese government cooperation.<sup>89</sup> In March, 1933, Nyasaland went one step more by arguing that it only required a scheduled Salisbury connection, a Beira service being apparently surplus to the needs of the colony.<sup>90</sup>

In these circumstances, the principals were forced into a new round of discussions in early 1933, none being prepared to await some undetermined future date when the SPELA contract would be cancelled.<sup>91</sup> Imperial Airways, seemingly no longer reluctant to take the initiative in domestic air transport matters, had already commenced discussions with Rhodesian Railways, the basis being the formation of a Rhodesian airline

88. FO 371/16501, W12310, Alston to FO, November 7, 1932.

89. Ibid., W14161, Young to CO, December 29, 1932.

90. FO 371/17417, W3293, Young to CO, March 17, 1933.

91. Portugal cancelled the contract in October, 1933. FO 371/17418, Political (Western) Portugal (1933), W12168, British Embassy Lisbon to FO, October 26, 1933. For later developments, see AVIA 2/1952, Proposed Agreement with Portugal for Reciprocal Facilities for Operation of Air Services in Africa, 1935. Also, Foreign Office, Exchange of Notes...regarding the Operation of Air Services over Territories in Africa. Cmd. 5047 (1935).

with the two companies as partners.<sup>92</sup> In the meantime, Sir Henry Birchenough, President of the British South Africa Company and Chairman of Rhodesian Railways, had invited the Beit Trustees to take a more active part in establishing a new airline.<sup>93</sup> While this eased any concerns about capital support, the proposals with added Beit capital left Imperial Airways in a minority position in the new company, holding 32.8% of the shares compared to the 52.8% held by the Beit Trust on behalf of the Rhodesian Railways.<sup>94</sup> It was a situation not to Imperials' liking, but one which they were compelled to accept.<sup>95</sup>

In August, 1933, the financing and general outline of the new company were agreed upon by the principals, and the Rhodesian Aviation Company was preparing to withdraw from the scene, its shareholders taking comfort in the fact that the old company's identity would not be completely lost.

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92. BOAC, I.A. file No. 29, enclosure, Notes of a Meeting at Rhodesia House, 25th May, 1933, p. 2.

93. Ibid., p. 1.

94. Ibid., p. 2. With the Beit Trust prepared to invest an additional £5,000, Birchenough proposed the nominal capital of the new company be raised from £20,000 to £25,000.

95. Ibid. Rhodesian Railways were adamant in demanding 'control' of the new company. Imperials agreed when their position as technical and operational managers was clearly spelled out. At this point, there was no question of abandoning air transport development in the Rhodesias. The proposals had the full support of the governments involved, the Colonial Office instructing Northern Rhodesia and Nyasaland to set aside any other proposals until RANA was formed.

The name of the new company was to be Rhodesian and Nyasaland Airways. <sup>96</sup> By September, RANA's organisation and plans were made public. <sup>97</sup> RANA was formally incorporated at Bulawayo on October 12 with an authorised capital of £25,000 in £1 shares, the Beit Trust and Imperial Airways holding 54% and 34% respectively, the balance held by Rhodesian Aviation Company shareholders, the Nyasaland Railways, the Companhia de Mocambique and the Manica Trading Company. <sup>98</sup> The new company took over all the assets of the Rhodesian Aviation Company which went into formal liquidation in November. <sup>99</sup> These assets were few but precious for they enabled the company to initiate operations immediately. <sup>100</sup>

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96. One shareholder suggested the new company could be the first step towards the amalgamation of the three territories. McAdam, "Birth of an Airline", p. 16.
97. FO 371/17418, W12490, enclosures, Rand Daily Mail, September 28, 1933, and The Star, September 29, 1933, the former looking forward to a "Rand-Nyasaland Service Soon".
98. Of the original 25,172 shares, the Beit Trust held 12,993, and Imperial Airways, 8,307. The authorised capital was raised to £30,000 in 1934, Christowitz Air Services becoming a shareholder, and to £100,000 in 1937-38. See summary of RANA financial statistics in BOAC, I.A. file No. 31, RANA Board Meetings, 1938-45.
99. The main assets were three aeroplanes, two DH Puss Moths and one DH Fox Moth. For details, see FO 371/17418, W14262, Quin-Harkin (I.A.) to A.M., December 6, 1933.
100. Before the end of 1933, RANA flew 208 flights carrying 243 passengers and 730.5 kgs. of freight. Southern Rhodesia, Annual Report Civil Aviation, 1933, p. 7.

The birth of RANA could not have come about in more fortunate circumstances. Unlike most African airlines in the pioneer days. RANA's beginnings were attended by powerful supporters, generous subsidy support,<sup>101</sup> and a public increasingly eager to make use of air transport for mails, travel and freight shipment.<sup>102</sup> In addition, RANA began with a near monopoly of air services in the Rhodesias, and, in 1934, in Nyasaland as well.<sup>103</sup> The advantages suggested in these circumstances account in part for the success enjoyed by the company until its dissolution in 1939.

RANA's growth and progress was steady rather than spectacular. The company operated at a loss until 1937-38,<sup>104</sup> but in the process it built up a network of services from Mongu and Fort Jameson in the north, to Beira on the east, and Johannesburg to the South, bringing the advantages

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101. In 1933-34, subsidies were provided by the Beit Trust and the governments of Southern Rhodesia and Nyasaland in an amount of £6,286. Over the first four years, the Beit Trust contributed £19,000, Southern Rhodesia, £4,791, Nyasaland, £1,105, and the Companhia de Mocambique, £3,157. BOAC, I.A. file No. 31.
102. In 1933, aircraft in Southern Rhodesia alone flew 1671 flights adding up to 311,708 air miles, carrying 3,496 passengers, 2122.5 kgs. of mail and 1653.7 kgs. of freight. Southern Rhodesia, Annual Report Civil Aviation, 1933, p. 7.
103. RANA took over Christowitz Air Services in 1934, the former obtaining two Puss Moths, the latter, 1,000 shares in RANA.
104. BOAC, I.A. file No. 31, statistical summary. In 1937-38, profits were £3,665, in 1938-39, £4,600. Of course revenues included government and Companhia de Mocambique subsidies in amounts of £8,561 and £10,719 for the two years.



of air transport to most of the cities and towns of consequence in British Central Africa. <sup>105</sup> Imperial Airways had brought London within a few days' travel, <sup>106</sup> but it was RANA who helped provide a sense of community in British Central Africa. <sup>107</sup> In six years, RANA grew from a small airline of three aircraft and two pilots to an important air carrier flying a fleet of 'modern' aircraft, six of which were the popular DH Dragon Rapide, the aeroplane "responsible for putting civil aviation on the map in Central Africa". <sup>108</sup> RANA's traffic loads grew accordingly. In 1934, the company flew 1,925 passengers 3,149 lbs. of freight, and 692 kgs. of mail. In 1938, RANA carried 3,448 passengers, 7,961 kgs. of freight, and an impressive 135,226 kgs. of mail. <sup>109</sup>

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105. See map, p. 360.

106. For description of a typical flight see "London to Salisbury by Imperial Airways", 1-2.

107. The New Rhodesia (April 1, 1938, p. 3) argued that aeroplanes could implement the idea of a federation in British Central Africa, as RANA and others had demonstrated that the 'great distances between communities' argument was no longer valid. An anonymous writer added that air travel was safer than road travel in any case. Q., "Growth of Civil Aviation in Rhodesia", ibid., pp. 19, 21, 23. He had a point. RANA had not one fatality in its six years of operations.

108. M.C.H. Barber, "Development and Progress of Civil Aviation in the Federation", Holiday and Travel (New Salisbury Airport Issue), December-January, 1957, p.15. For details on the Dragon Rapide and other RANA aircraft, see appendix I.

109. Southern Rhodesia, Annual Report(s) Civil Aviation, 1934 & 1938, pp. 4 & 15. The 1938 report was published separate from the departmental reports as the Report on the Progress of Civil Aviation 1938 (Salisbury, 1939).

Certainly, much of this performance can be attributed to the company's close association with Imperial Airways who, besides providing technical and operational guidance,<sup>110</sup> made full use of RANA as a feeder to the Cairo-Cape route and in the development of the Empire Air Mail Scheme.<sup>111</sup> RANA's role, along with that of Wilson Airways to the north, became increasingly important when Imperial Airways abandoned their land route south of Kisumu for a coastal service to South Africa.<sup>112</sup> RANA also enjoyed the status of the 'chosen instrument' in Southern Rhodesia after 1937, thus being assured of adequate financial and moral support in future operations. In an agreement with the Southern Rhodesian government, the company

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110. Imperial Airways' Captains G. I. Thomson and, later, C. A. Barnard were resident operations managers of RANA. Imperials also loaned a Westland Wessex to provide RANA with multi-engine capacity until delivery of the first Dragon Rapide in 1935.
111. See below, chapter IX, for RANA involvement in the E.A.M.S. Also AVIA 2/1221, Agreement between Imperial Airways Limited and RANA Covering the Air Service between Beira and Salisbury, Blantyre and Lusaka, 16.10.37-; and AVIA 2/1916, Empire Air Mail Scheme - Southern Rhodesia, 1934-.
112. Imperial Airways initiated the coastal route to Durban in June, 1937, 'sub-contracting' the Salisbury-Lusaka route to RANA, the Lusaka-Kisumu sector to Wilson Airways. See review of arrangements in "Air Transport in the Rhodesias and Nyasaland", Imperial Airways Brief to the Rhodesia and Nyasaland Royal Commission, 1938.

agreed to maintain and operate regular and efficient civil air transport services to convey all contract air mail in transit through, originating from or addressed to any place within or to any place outside the Colony, Empire Air Mails excepted, for the payment of £5,200 per annum. The Government by way of guarantee against loss on the operation of these services pays the Company a subsidy at the rate of £8,000 per annum. 113

For RANA, this agreement, and separate agreements with Northern Rhodesia and Nyasaland in 1938, expanded their air services considerably. New routes were opened while the weekly flight frequency on others was doubled and tripled.<sup>114</sup>

World War II brought to a halt RANA's promising development, the company, as per prior agreement with the Southern Rhodesian government, being taken over by the government to become Southern Rhodesian Air Services, a communications squadron of the Rhodesian Air Force. 115

In March, 1940, J. W. Downie, RANA's chairman, addressing the company's seventh annual meeting, explained, "the Company has, so to speak, gone into 'cold Storage'".<sup>116</sup> Downie,

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113. Southern Rhodesia, Annual Report Civil Aviation, 1938, p. 2. The final agreement and drafts may be found in BOAC, I.A. file No. 43, RANA/Rhodesian Government Agreement, 1937-42. The agreement came into effect March 24, 1938; clause two gave RANA the "chosen instrument" status.
114. Southern Rhodesia, Annual Report Civil Aviation, 1938, pp. 5-6. For a brief survey of Developments, see "Flying in Rhodesia", Shell Aviation News, June, 1938, pp. 17-21.
115. Stroud, Annals, p. 441; also "Aviation in Rhodesia: RANA now a Communications Flight", Flight, March 7, 1940, p.211. The formal takeover took place February 1, 1940.
116. Quoted in the Rhodesia Herald, March 15, 1940, p. 5.

like others, had hopes that RANA would be revived after the war, but that was not to be and the company went into voluntary liquidation in 1946.<sup>117</sup>

RANA functioned in an age of increasing airmindedness of which it was as much a protagonist as it was a beneficiary. Throughout British Central Africa the signs were clear that civil aviation was moving out of the pioneer era and towards a future of modern air transport.<sup>118</sup> The three governments involved had developed a strong interest in promoting civil aviation. In addition to subsidising the Rhodesian Aviation Company, Imperial Airways and RANA, in 1938, Southern Rhodesia was contributing £850 to a travelling flying school, and £500 to assist individuals obtain 'A' class pilots' certificates.<sup>119</sup> In 1930, a Director of Civil Aviation was appointed to apply air regulations and standards,<sup>120</sup> and by 1938, his department was operating two government aircraft for inspection purposes and the transport of the Governor and

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117. RANA was succeeded by Central African Airways, a joint undertaking of the governments of Northern Rhodesia, Nyasaland and Southern Rhodesia established in 1946. See J. McAdam, The Story of Central African Airways 1946-1967 (Salisbury, n.d.).

118. There were contrary signs as well. As late as 1939, there was still not a single aeroplane licenced in the area with R/T equipment.

119. Southern Rhodesia, Annual Report Civil Aviation, 1938, p.2.

120. The first Director was Colonel G. Parson. He was succeeded by Major D. Cloete in 1938.

other officials. <sup>121</sup> On the eve of war, the Southern Rhodesian government was operating five airports and 38 landing grounds. <sup>122</sup>

Development was less dramatic in Northern Rhodesia, but the colony could boast of 49 airports and landing grounds by 1936, <sup>123</sup> and it was subsidising the Imperial Airways service. <sup>124</sup> The Nyasaland government maintained the principal airports at Chileka, Zomba and Lilongwe while contributing subsidy support to Imperial Airways and RANA. It could not afford the 'luxury' of an aviation department at this point, but it did encourage flying with a £200 p.a. subsidy to the local aero club. <sup>125</sup>

121. Ibid., p. 11. One aeroplane was purchased with the £3,500 gift for the Colony to assist civil aviation by Sir Abe Bailey. The Times, November 7, 1936, p. 11.
122. Ibid., p. 12. More accurately, only Salisbury, Bulawayo and Umtali were customs 'licenced' airports; Beitbridge and Victoria Falls were customs 'unlicenced' aerodromes (e.g., customs facilities by arrangement only). In addition, there were 18 private airfields.
123. Colonial Office, An Economic Survey of the Colonial Empire (1936). Colonial No. 149 (London, 1938), p. 59.
124. In 1937 in the amount of £4,500. Northern Rhodesia, Blue Book for the Year ended December 31, 1937 (Livingstone, 1938), p. Ga2. A 1938 commission concluded its report on aviation noting that "internal air communications are good for a relatively backward country". Colonial Office, Report. Colonial No. 145, p. 12.
125. See Colonial Office, Report of the Commission Appointed to Inquire into the Financial Position and Further Development of Nyasaland. Colonial No. 152 (London, 1938), pp. 229, 333.

All these factors indicated a steady growth in government responses to the challenge of the air age. By 1938, the need for cooperation was apparent, and at the meeting of the Inter-Territorial Communications Board in Salisbury, the first discussions were held "regarding a uniform system of control and development of civil aviation".<sup>126</sup> These discussions did not bear fruit until after the war.

The Rhodesian Aviation Company, Imperial Airways, RANA, and the territorial governments had all played key roles in bringing civil aviation to British Central Africa, but there were many others as well. South African Airways and Wilson Airways both operated scheduled air services into the area. In Southern Rhodesia, five companies, in addition to RANA, were engaged in civil aviation: the London and Rhodesian Mining and Land Company, Limited (LONRHO) operated a charter service from 1935-38, carrying nearly 1500 passengers as well as freight; Spencer's Air Services began in 1935 at Victoria Falls where it specialised in flights over the falls and game excursions; De Havilland Aircraft (Rhodesia) Limited carried on a varied business in Salisbury, organising air rallies, assisting in the formation of flying schools, training pilots, and flying charters; British Air Transport Service (Rhodesia) Limited was organised in Salisbury in May, 1938, to offer private charter and pleasure flights in Southern and Northern Rhodesia; and in June, 1938, Flights,

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.126. Southern Rhodesia, Annual Report Civil Aviation, 1938, p. 1.

Limited, was formed in Salisbury "to carry on the business of aerial transport of passengers and freight,..."<sup>127</sup> These companies, along with RANA, made over 5,000 flights in 1938, carrying more than 10,000 passengers.<sup>128</sup> When added to the unknown figures for the flying clubs and private owners, the statistics, if modest by the standards of the 1970s, are impressive indeed. All this activity was making civil aviation and air transport a reality in British Central Africa.

The early history of flying in the Rhodesias and Nyasaland had its colourful side as well. One of the first RANA pilots recalled with awe the Christowitz aircraft;

Old hands can still remember these very small aircraft, painted a rather violent yellow, coming in to land with uncanny regularity, irrespective of rain or storm, after completing their three hundred mile flight across the almost featureless wastes which lie between Nyasaland and Salisbury. <sup>129</sup>

As often as not, the pilots of these same aircraft would be carrying shopping lists for Nyasaland settlers

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127. Ibid., pp. 6-9.

128. Ibid., p. 15.

129. A. Dendy Rawlins, "Wings over Rhodesia", Southern Rhodesia 1890-1950, April 1950, p. 123. Rawlins was one of the first pilots with RANA.

unable to get away to Salisbury. <sup>130</sup> Rawlins also recalled the problems in the early meteorological services. Weather reports were sent from point to point by landline, but successful transmission and receipt "often depended on the frame of mind of local elephants who tore down the lines with gusto and departed into the bush draped with telegraph wires and broken poles." <sup>131</sup> In a more constructive role, one particular herd of elephants was used as a navigational aid on the Salisbury-Bulawayo route. <sup>132</sup>

Aviation made its impact in other ways. In Northern Rhodesia, sometime during the 1920s, "stories went around the bush that the British were too stupid to manufacture things like airplanes and that the aircraft in the country were all made by Americans." <sup>133</sup> No evidence has appeared to suggest that this effort to discredit the British won any converts to the cause of Northern Rhodesian nationalism.

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130. McAdam, The Story of Central African Airways, p. 7. The writer can recall his own experiences in Nigeria in the early 1960s when many flights brought back fresh vegetables from Jos on order from neighbours in Ikeja.
131. Rawlins, "Wings over Rhodesia", p. 123.
132. McAdam, "The Pioneer Birdmen", p. 24. For other recollections of the early years, see H.C.N. Hill, "Early Days of Flying in Northern Rhodesia", Northern Rhodesia Journal, IV (No. 2, 1959), pp. 121-26; H.H.C. Perrem, "He Flew off a Mountain", Contact, I (October, 1960), 22-25; and P.P.M. Symons, "Some Aviation Reminiscences", Contact, I (June, 1960), 11-14.
133. L. H. Gann and Peter Duignan, Burden of Empire (London, 1967), p. 93.

In Nyasaland, on the other hand, one African was converted to the cause of aviation in a very personal way. In a letter to the Imperial Airways office in Salisbury, he wrote,

Dear Sir, - I beg to apply for a vacant situation as an aside driver on the Heroplane. I would like to be aside driver on the 'Mail'. I have no qualifications or testimonials as regards my experience of the Aroplane. But I have a life's ambition, which should be favoured me now or never, to drive an Aroplane. You may rest assured that should I succeed I will do my uttermost best to accomplish what may be given me to do. My nationality is a Nyasaland Boy.... 134

There is no record of any response to this application. Nor is there any suggestion here that civil aviation development touched more than a few Africans. Then, as it has been until recently, <sup>135</sup> aviation in all its forms was exclusively a British and settler pursuit.

Development in the Rhodesias and Nyasaland was the product of local ambition, British technology and Imperial design, but it was, above all else, a triumph for those who persevered through these years. The pioneer years in aviation were hard years, and the men who flew the flimsy aeroplanes, maintained the aircraft, organised and financed

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134. Quoted in The Times, December 24, 1935, p. 5.

135. With the formation of Air Malawi and Air Zambia after independence.

the early companies, and dreamed of greater things to come, laid the firm foundations upon which civil aviation would grow in later years. They fought the climate, the miles, Africa itself, and won. They resisted the grasping ambitions of Oswald Pirow and South African Airways,<sup>136</sup> and even tempered the occasional arrogance of Imperial Airways in Africa. By 1939, British Central Africa was a part of the new air age. Civil aviation had taken its place in the development of transport and communications, even as its impact was less immediate than it was long-term.

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136. See below, chapter XI.

## CHAPTER VII

SOUTH AFRICA: APATHY AND AMBITION, 1919-1934

Traditionally, its people have always been transport conscious and the transition from ox-wagon to airliner by way of railway and road traffic has been a natural course of events.

Anon., 1966. <sup>1</sup>

From the very beginning, much of African aviation history has been made in the Union (after 1961, the Republic) of South Africa. No African state or colony can match its 'firsts' in the slow but steady advance of aviation on the continent --- the first heavier-than-air controlled flight in the 1870's, <sup>2</sup> the first aeroplane built in Africa, <sup>3</sup> the

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1. "Winged Springboks", Standard Bank Review, October, 1966, p. 1.
  2. Goodman Household made one, and possibly two glider flights from a 1,000 foot ridge in the Karkloof district of Natal in 1871 and/or 1875. Certainly, one flight was successful, covering about three-quarters of a mile. It is more generally accepted that the German, Otto Lilienthal, was first to make a heavier-than-air flight in 1895. See Klein, Winged Courier, pp. 7-10, and article by David Birch in the Sunday Tribune (Durban), May 3, 1964.
  3. Dr. John Weston built a biplane at Brandfort in 1907. The aeroplane, fashioned after a French Farman design, was later flown in France. Klein, Winged Courier, p. 12.

first powered flight in 1909,<sup>4</sup> the first aviation company,<sup>5</sup> the first air mail service,<sup>6</sup> and it was two South Africans who first flew the Cairo-Cape Town route.<sup>7</sup> Later, in 1934, South Africa organised the first state-owned air line in Africa, South African Airways, a late but welcome recognition of the idea that air transport could serve national aims more fully as a public venture. These, and other manifestations of civil aviation and air transport development suggest the prominent role played by South Africans in the years leading up to world war II. Nonetheless, progress in the Union, while certainly resting on stronger foundations than were found throughout the rest of Africa, was neither rapid nor dramatic in its evolution. The pioneers had to seek sympathy in public and private quarters more often than not apathetic to notions

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4. Albert Kimmerling, the Swiss pioneer, made the first flight at East London, December 28, 1909. Sponsored by a local commercial house, the advertising assured the public "having every chance of witnessing what is certain to be a splendid sight...". Ibid.
  5. In 1911, John Weston and friends formed the John Weston Aviation Company of South Africa Ltd., at Brandfort. Recollections of early Weston flights are gathered in Cressie Leonard et al, How it Feels to Fly (Brandfort, 1927). See Appendix II for details on this and other aviation companies.
  6. Flown by Evelyn Driver, December 27, 1911, between Kenilworth and Muizenberg, a distance of about 20 miles for the return flight. It was an exhibition, not an attempt to institute an air mail service, but it provided good publicity for the newly-formed African Aviation Syndicate, eager "to promote the science and practice of aviation in South Africa". See Klein, Winged Courier, pp. 19-21, and Wyndham, Airposts of South Africa, pp. 3-5.
  7. Van Ryneveld and Brand. See above, p. 68.

of aeroplanes and air lines. The Union government was slow to lend strong support to civil aviation, a reluctance better explained by a failure of imagination than by economic concerns. As elsewhere, the ultimate success of air transport development grew out of the efforts of a few bold men determined to keep South Africa apace with developments in Europe and the United States. Much of the early history of aviation in South Africa thus concerns these men: John Weston, Guy Livingstone, C. Compton Paterson, Evelyn Driver, Albert Kimmerling and others in the years before world war I, and standing head and shoulders above all others in the 1920s, Major A. M. Miller.<sup>8</sup> It was upon their successes and failures, experiments and experiences, that South African Airways was to build and become, by 1939, Africa's largest air transport company.

The most surprising aspect of South African aviation history is that it did not unfold more swiftly than was the case. South Africa had a great deal more to support air transport development than had any other state in Africa. Its status as a self-governing colony, and later, dominion status within the empire, provided a certain independence of political action denied its sister British territories in Africa. Development thus lay largely in South African hands to an extent not known elsewhere on the continent. The Union

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8. Livingstone and Paterson were partners with Driver in the African Aviation Syndicate. Other pioneers were the Belgian, Christiaens, M. Raison, C.J.V. Bredell, E. W. Cheeseman, and Otto Bruckner in South-West Africa. Miller formed the first 'airline' in 1929. See below.

could boast of the strongest economy in Africa, building its wealth and prestige on Rand gold and Kimberley diamonds. It had a large white population which, while but a minority in the country at large, effectively controlled all lines of national development.<sup>9</sup> For air transport developers, the prospects suggested in this group were promising. White South Africans were relatively affluent, therefore more likely than the mass of Black Africans to pay the costs of air communications and transport. Also, they were generally more technologically-oriented and better informed on developments taking place in Europe and North America, and it appeared logical to assume that this segment of the population would take most readily to the novelty of aviation. The Whites of South Africa were, in their own terms, building a 'white civilisation' in Africa, a process which by necessity took its cues and moral sustenance from the motherlands of Great Britain and Europe. If indeed the aeroplane was taking its place as an agent of progress there, it could certainly find its future in South Africa as well. Added to this persuasion was the promise that the aeroplane would bring Europe and South Africa closer together. As the Union looked far to the north for immigration, political support and trade,

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9. The 1926 census counted 1,676,660 'whites' in a population of 6,928,580. In 1936, the figures were 2,003,000 and 9,588,000. For background on South African politics and economy, see Eric Walker, A History of Southern Africa, 3rd. ed. (London, 1965), pp. 538-694.

the aeroplane was to bring London and Amsterdam days not weeks from Pretoria and Cape Town. <sup>10</sup>

There were other factors which lent support to air transport ideas. The Union shared with the rest of Africa a dire need for improved transport and communications of every kind. Although the road and rail network was well developed by the 1920s, travel throughout the vast country remained a time-consuming and tedious process. A trip from Durban to Cape Town by rail, for example, took 50 hours, a journey the aeroplane could do in less than 15. <sup>11</sup> South Africa's external links were likewise handicapped by inadequate or difficult lines of communication, especially those with neighboring African states. <sup>12</sup> Sea transport provided the Union with a strong if slow connection with Europe, but the paucity of natural harbours precluded the serious exploitation of local coastal services where road or rail services were absent. The case,

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10. By sea, the quickest Southampton-Cape Town service took 17 days. In the early 1920s, optimists thought the aeroplane could link London-Cape Town in 4-5 days, but the first Imperials' service in 1932 was scheduled for 11 days.
  11. In 1925, the experimental South African Air Force (SAAF) air mail service, Cape Town-Durban, averaged 14 hours 9 minutes. For general transport developments, see Hailey, African Survey, pp. 1546-50, 1574-78, and a later assessment, J. G. Laight, "Transportation Problems in Southern Africa", Transport and Communications Review, VI (April-June, 1953), 12-23.
  12. Trunk rail lines joined the Union to the Rhodesias, Mozambique, and further north to the Congo, but feeder lines were noticeably absent.

then, was strong for the development of domestic air services. Generally, the climate was more favourable than in other parts of Africa, and the problems associated with engine performances in the high plateau country could be overcome. <sup>13</sup>

From the British point of view, the Union's place in the empire suggested a special priority be given to civil aviation development, both in terms of supplying the aircraft and technology to meet domestic requirements, and tying South Africa more securely to the empire with more rapid and regular means of transport and communications. The Union represented the most powerful British presence on the continent, and its commanding position astride the sea lanes linking Great Britain with the east and Australasia gave it unquestionable strategic significance. British aims from the beginning were to keep South Africa 'British', insofar as that was possible, and "sweet" insofar as it was politically practicable. <sup>14</sup> For British aviation interests, their mission in South Africa was to translate the larger British aim into effective aviation activity. In effect, the efforts were designed to wed commercial and imperial aims.

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13. The high veld country posed problems similar to those in parts of Kenya, Tanganyika and the Rhodesias. Pretoria is 4,517 feet above sea level, Johannesburg, 5,784, Bloemfontein, 4,692, and Kimberley, 3,950.
14. Keeping South Africa "sweet" was certainly the Air Ministry aim, especially during the time of strong South African criticisms of Imperials in 1930-32. See AVIA 2/422. Bulloch to Geddes, June 6, 1930.

Commercially, South Africa invited the attentions of civil aviation promoters, its potential more obvious than anywhere else in Africa. From an imperial standpoint, the Union's position as the anchor to the whole empire in Africa made the aim of air development of pressing concern.

The surprise remarked earlier stems from the fact that while South Africa appeared to offer the best of possibilities for air transport development, it was not until 1929 that the serious business of scheduled air line operations began. And, for all the expressed British concern to play a major role in this development, neither the British government, Imperial Airways, nor other British companies were able to carry the imperial aim to its logical conclusion. Germany was more successful in South Africa than Great Britain, Junkers more active and daring than Imperial Airways, and South African nationalism more persuasive than the appeal to empire. Some of the very reasons that made South Africa attractive to air exploitation --- affluence, population, European influences --- also meant that the course of development would follow different lines than that of British East and Central Africa. There, economic factors dictated much of the pace of development. In South Africa, politics, from the early 1920s onwards, was central to all questions of air transport promotion. Such, then, is the general background to civil aviation history in the Union. <sup>15</sup>

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15. In addition to Klein's and Wyndham's work already mentioned, see the following: "Early Days of Flying", South African Railways and Harbours Employees' Review,

In the few years before world war I, South Africa was the scene of considerable air activity, a harbinger of the enthusiasm that would mark the first few years after the war. <sup>16</sup> John Weston had inspired the formation of the Aeronautical Society of South Africa in 1911. C. Compton Paterson, with backing from fellow enthusiasts in Kimberley, formed The Aviation Syndicate Ltd. in 1912, after the breakup of the African Aviation Syndicate. With headquarters at Alexandersfontein, Paterson, as had Weston and others, worked hard to popularise the aeroplane with demonstration flights and 'joy-rides'. An important step forward was taken when the Union government agreed to subsidise the training of 10 military pilot pupils at Paterson's flying school in 1913. <sup>17</sup>

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15. (continued) June, 1966, n.p.; "ICAO Council Member States: Union of South Africa", ICAO Monthly Bulletin, June, 1952; Personalities in South African Motoring and Aviation (Durban, 1941); South African Airways, 50 Years of Flight (Johannesburg, 1970); P. Jac. Strydom, "Aviation Comes to South Africa", Royal Air Force Quarterly, IX (April, 1938), 175-200; G. B. Treadwell, "Civil Aviation in South Africa: (1) Its Early History, (2) Commercial Air Mail Services, (3) South Africa's Commercial Airways", South African Railways and Harbours Magazine, June-August, 1934, pp. 629-32, 797-800, 918-21; and Treadwell, "Twenty-five Years of Aviation Development", ibid., October, 1930, pp. 1553-55.
16. 'Considerable' only in relation to the dearth of air activity elsewhere in Africa. The sole British activity was McLean's Nile flight to Khartoum in 1914. The French were pioneering aviation in Senegal and North Africa.
17. Klein, Winged Courier, p. 21.

Unfortunately for development in the Union, the Syndicate's only navigable machine was irreparably damaged in a crash in late 1913, and the coming of the war the following year ended, for the moment, the process of making South Africa 'air Conscious'. Still, even this modest background gave the Union a considerable headstart on the rest of Africa. <sup>18</sup>

As in Europe, the Great War brought the air age to South Africa. While civil aviation development had come to a standstill, thousands of South Africans were taking to the air in the Royal Flying Corps and the first South African Aviation Corps. <sup>19</sup> In 1917 and 1918, Major Allister Miller, a Swaziland-born pilot with the R.F.C., made two flying recruiting tours through the Union. Some 2,450 trainee pilots were selected from thousands of applications, as Miller brought the aeroplane to almost every city and town in the Union. <sup>20</sup> For many South Africans, Miller provided the first opportunity to see an aircraft in operation. For Miller, the tours were especially profitable. They gave him a first-hand assessment of the Union as a whole. Miller,

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18. In addition, the Germans gave South-West Africa its first aeroplane exhibition. Otto Bruckner, in a Pfalz biplane, made a number of flights, including an experimental service Swakopmund-Usakos-Karibib-Okahandja-Windhoek, in 1914.
19. The South African Aviation Corps saw service in South-West Africa and East Africa against the Germans.
20. Klein, Winged Courier, pp. 26-29.

looking ahead to the war's end, saw nothing but great opportunities for civil aviation, and from this point onwards, the major worked to provide South Africa with commercial aviation services.

The first efforts to bring civil aviation and air transport to South Africa came in 1919. Miller and others in London formed the South African Aerial Transport, Navigation and Survey Company, whose aims were:

To establish a flying service first at Cape Town and subsequently at Johannesburg and by means of passenger flights to gain the confidence of the public sufficiently to enable a regular commercial service to be established; as a beginning to run a service between Johannesburg and Pretoria subsequently extending it to Kimberley. The ultimate aim being a service between the principal cities of South Africa. 21

It was an ambitious undertaking, but not to be. The company merged with another syndicate, South African Aerial Transports,<sup>22</sup> and with five Avro aeroplanes brought out from England, set up its headquarters at Baragwanath aerodrome south of Johannesburg in October, 1919. The operation lasted slightly more than a year. Although 5,000 passengers were carried on 'joy-rides' and charter flights in the Union and to Rhodesia, and 30,000 miles were flown with a remarkable accident-free record, the company failed to attract adequate public or financial support. General Smuts, the Prime Minister, noted

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21. AVIA 2/1717, R. J. Armes to Major-General E. D. Swinton at the Air Ministry, June 29, 1919. Colonel Armes, ex-R.A.F., was a director of the company.

22. South African Aerial Transports Ltd. was registered in Johannesburg in June, 1919, with a nominal capital of £100,000, under the general direction of two ex-R.A.F. officers, A. Francis and Bill Honnett.

proudly, "this, the first effort in South Africa to turn the instrument of war into the peaceful carriers of commerce", but government interest generally was absent.<sup>23</sup> Miller had hoped to present the government with a scheme for the subsidisation of civil aviation in the Union, but only after his company could demonstrate a success. In 1921, the company went into liquidation. Two of the pilots, C. R. Thompson and C. G. Ross, bought two of the company's machines, but their short-lived Ross-Thompson Aircraft Company had no more success than its predecessor.<sup>24</sup>

A second major effort to establish civil aviation began in 1919. The Handley-Page Company of England organised a South African subsidiary, Handley-Page South African Transport Ltd. Operating from Wynberg, near Cape Town, with two twin-engine converted Handley-Page bombers, the company hoped to establish the first passenger and mail service between the Cape and Johannesburg. Its first demonstration flight, with seven passengers and the Johannesburg mail aboard, crashed at Beaufort West in February, 1920, thus ending an experiment that aimed at linking Cape Town to Cairo in the next few years.<sup>25</sup>

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23. Quoted in Klein, Winged Courier, p. 34.

24. Major Miller flew one of the Ross-Thompson aircraft in Rhodesia in 1921 until a crash ended operations. See above, p. 334.

25. Wyndham, The Air Posts of South Africa, pp. 14-17, gives details.

Other interests attempted to promote aviation in the Union. The Solomon brothers operated two machines at Cape Town until two fatal crashes ruined their hopes and the public support they had been building.<sup>26</sup> In Durban, Douglas Mail ran his Aerial Stunts, and then, the Natal Aviation Company until 1924.<sup>27</sup> In mid-1920, a delegation representing the Vickers Company, Handley-Page, Armstrong-Siddeley, the British engine manufacturers, and the South African Aerial Transport Company, met with the Union Minister of Defence, Colonel Mentz. The collective proposal for government subsidisation of their efforts was ultimately rejected by the Union cabinet, more concerned to build up the fledgling South African Air Force than to promote the aims of air transport operators.<sup>28</sup> This rejection, coupled with crashes which shattered public confidence and a lack of private capital support, signalled the end of these first serious efforts to establish civil aviation on a sound footing, a situation not unlike that facing British air

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26. A reminiscent account is given by Frank Solomon, And the Years Roll By (Cape Town, 1953).
27. Mail was later associated with the Rhodesian Aviation Syndicate.
28. Klein, Winged Courier, pp. 34-35. Some of the plans to operate services in South Africa are also outlined in S. F. Benda, "Flying in South Africa", Overseas, IV (May, 1919), 56-58.

transport companies in the first years after the war. <sup>29</sup>

Perhaps these early ambitions were premature. The road ahead was clearly longer than was thought, and the steps to be taken more cautious. Despite such spectacular contributions to air-mindedness as the Van Ryneveld-Brand flight, South Africa was not ready for the aeroplane. Even the flying clubs, so recently formed, struggled to survive. <sup>30</sup>

In the meantime, the Union government was taking its own steps to providing for the Union's air needs. The South African Air Force under Van Ryneveld was organised as a permanent force. <sup>31</sup> In 1923, the control and regulation of civil aviation was provided for in the Aviation Act, to be administered by the Minister of Posts and Telegraphs. In addition, a Civil Air Board was established "to advise the government", its membership including Major Miller and Van Ryneveld. <sup>32</sup> These were more than token gestures to civil

29. See above, chapters I-II. The British Air Ministry noted one other company formed in the early 1920s, South African Air Ways Ltd., but no other record can be found of this concern. AVIA 2/216, A.M. Summary of Proposals to Link Various Air Routes, April 10, 1924.

30. Both the Aero Club of South Africa and the Aero Union of the Transvaal were formed in 1920 by ex-R.A.F. officers, but, unable to enlist government support, their work and influence was short-lived.

31. Union of South Africa, Official Yearbook of the Union of South Africa and of Basutoland, Bechuanaland Protectorate, and Swaziland (hereinafter, South Africa, Yearbook, No. 5, 1910-1921 (Pretoria, 1921). Basic to this development was the British gift of 100 surplus wartime aircraft.

32. South Africa, Yearbook, No. 6 (1910-1922), p. 1075, and No. 8 (1910-1925), p. 751. The board was to advise,

aviation. Both the Act and the Board were essential prerequisites to the framework within which air transport could develop. They were indications that the government, while turning a deaf ear to commercial proposals, was alive to the potential of civil aviation. Indeed, the generally moribund state of civil aviation in the Union did not last for very long. By 1925, a good deal of interest had been re-kindled. <sup>33</sup>

One of the first proposals submitted by the Civil Air Board called for a three month experimental mail service to run between Cape Town and Pretoria with a £12,000 government subsidy. On grounds that no funds were available, the proposal was rejected. <sup>34</sup> A second proposal for a trial service between Cape Town and Durban was accepted, with much of the credit owed to the persuasive efforts of the indefatigable Major Miller, now a member of parliament in addition to sitting on the Board. <sup>35</sup> The Board recommended

32. (continued) inter alia as to "proposals for the establishment of aerial goods, mail and passenger services within the Union and adjoining territories".
33. See, for example, J. H. Neal, "The Prospects of Commercial Aviation in the Union", South African Journal of Industries, VIII (March, 1925), 169-75.
34. Klein, Winged Courier, pp. 54-55.
35. Miller ran successfully for the Point Division seat in Durban in 1924, under the South Africa party banner. Another persuasive proponent of air transport was Captain P. L. Lindup, secretary to the Minister of Posts and Telegraphs, Thomas Boydell, and secretary to the Civil Air Board 1924-1939.

the South African Air Force (S.A.A.F.) operate the route as a practical demonstration to (a) prove the reliability and advantages of air transport, (b) ascertain to what extent the public would support such a facility, and (c) obtain valuable statistical information respecting civil aviation in South Africa. <sup>36</sup> The service was to have a special appeal to Durban businessmen as well. Existing rail services did not allow Durban to reply to overseas mail received in the same week. The air mail was to be co-ordinated with the arrivals and departures of the Union Castle service at Cape Town so as to enable Durban to return mail within days instead of more than a week later. In all, Durban mail service would speed up by seven days. <sup>37</sup>

The experimental service was an unquestionable success and did a great deal to resolve existing doubts about the efficacy of air transport. Flying open cockpit DH9s, the S.A.A.F. ran a weekly return service between the two centres from March 2 to June 16, 1925, carrying nearly 3,500 lbs. of mail matter with 100% efficiency. <sup>38</sup> The service cost £13,004, somewhat in excess of the amount approved by parliament, <sup>39</sup> but its success appears to have encouraged a warmer government response to air transport ideas. Shortly after the termination

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36. South Africa, Yearbook, No. 8 (1910-1925), pp. 745-46.

37. Ibid., p. 746.

38. Ibid., p. 747. Also A.M., Annual Report on the Progress of Civil Aviation, 1924-25, Cmd. 2489 (1925), p. 42.

39. Wyndham, The Air Posts of South Africa, pp. 17, 24.

of the service, the Union was offering an £8,000 p.a. subsidy for weekly services Cape Town-Durban-Johannesburg.<sup>40</sup>

This first indication that the Union was prepared to subsidise commercial air services opened a new chapter in South African aviation history. At last, the government was ready to take an active role in development, albeit in a modest way initially. Of equal importance was the arrival of Germany on the scene, represented by the Junkers Aviation Company, at this time beginning its rise to prominence in the world of aircraft manufacturing and air transport operation.<sup>41</sup> Like their British counterparts, Junkers was eager to capture a share of the growing world market. In Africa, Junkers was active on two fronts. In Egypt, the company was offering to train Egyptians in all branches of aviation in Germany, and proposing to operate a seaplane service between Cairo and Aswan, proposals the British government could only regard as threatening to British prestige and security.<sup>42</sup> In the Union, Junkers' plans were more ambitious and therefore more threatening. Great Britain was able to refuse the German

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40. A.M., Annual Report on the Progress of Civil Aviation, 1925-26, Cmd. 2727 (1926), p. 41.

41. For background, see F. A. Von Poturzyn, Junkers and World Aviation (London, 1935).

42. The Germans also hoped to establish a Trieste-Alexandria service. Summary in FO 371/10912, Egypt and Sudan (1925), J2884, Foreign Office memorandum, October 1, 1925.

advances in Egypt under the terms of the 1922 Anglo-Egyptian agreement. <sup>43</sup> No such agreement bound the Union where British efforts to head off the Junkers thrust into the empire had to rely upon persuasion and, perhaps, Union sympathy with British aims.

In September, 1925, P. L. Lindup, secretary to the Civil Air Board, circulated a letter to Great Britain and the Dominions. Pointing out that while there had been no civil aviation activity since the termination of the Cape Town-Durban experiment, the Union government had decided to maintain the facilities along the route "pending the consideration of certain aviation proposals which were shortly expected from two or three companies, one being Imperial Airways". <sup>44</sup> Noting that "this Company has since intimated that it was concentrating its efforts on the preparation of a tender for the proposed air route from Cairo to Karachi", the letter ended,

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43. An inter-departmental meeting at the Foreign Office concluded that "no facilities of any kind are to be given to any foreign country or Government in matters relating to Egyptian Aviation". Ibid., J2875, September 30, 1925. See above, pp. 116-26.

44. AIR 2/290, enclosure, South Africa, Department of Posts and Telegraphs, Civil Aviation: Liaison Letter No. 4, September, 1925.

In the absence of any suitable proposals from British aviation Companies, the Minister of Posts and Telegraphs has now under consideration certain proposals from a foreign aviation Company of world-wide repute. 45

Imperial Airways had looked at the situation and discussed matters with Miller in the summer of 1925. But, as Woods Humphrey later indicated, not only was the company involved in planning the Karachi service, but the South African subsidy of £8,000 was totally inadequate. 46 Other British companies, Messrs Vickers, the Aircraft Operating Company, and De Havilland were likewise dissuaded by the low subsidy, the latter concern having submitted a proposal for a Cape-Durban service which called for a minimum subsidy of £27,000 p.a. 47 Almost fortuitously, the field was left to Junkers, 'a foreign aviation company of world-wide repute'.

Early in September, 1925, the British government received formal notification of the Junkers proposal to the Union government. In a cablegram, the Union advised that Junkers was

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45. Ibid.

46. Ibid., Woods Humphrey to J. S. Smit, July 12, 1926.

47. Ibid., Athlone to Amery, November 7, 1925. Also FO 371/11451 (1925), E854.

Forming Aeroplane Company British Directors capital £50,000 Junkers (would) will be prepared to take 30,000 20/- shares supplying 7 aeroplanes 3 spare engines 3 workshops etc. to (this) amount Union Government or private shareholders to take balance. Route Cape Town Durban Johannesburg weekly services running in conjunction with European mails. Subsidy required £8,000 per annum. Aeroplanes Junkers all metal F.13 fitted Junkers Engine 200 horsepower air mail contract yearly basis subject to extension.... 48

The response in Great Britain was immediate and startled. The Air Ministry wanted more details but considered Junkers' estimates of £25,000 annual costs too low, and the JU F13 not capable of operating satisfactorily at aerodromes such as Johannesburg.<sup>49</sup> Brancker expressed the concern that the company "will be subsidised in addition by Germany".<sup>50</sup> Hoare's reaction was that "we should do everything in our power to stop an agreement of this kind", and hoped Imperial Airways or any other suitable British Company could be "induced without delay to put in a tender for the service".<sup>51</sup> In October, Amery passed on the Air Ministry 'request' that "an opportunity will be afforded to British companies to tender

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48. AIR 2/290, Department of Posts and Telegraphs to High Commissioner's Office, London, September 11, 1925. Parentheses appear in original document.
49. Ibid., Holloway (A.M.) to South Africa High Commissioner, September 28, 1925.
50. Ibid., Brancker to Hoare, November 13, 1925.
51. Ibid., Hoare to Brancker, September 25, 1925.

for such a service if it is decided to proceed with the scheme".<sup>52</sup> South Africa's reply noted simply that British Companies "have already had equal and every opportunity of tendering", while Imperial Airways were asked to submit proposals "but at their request the matter was left in abeyance".<sup>53</sup>

By December, the Air Ministry, becoming increasingly desperate to discourage any final Junkers-Union agreement, advised that both the Aircraft Operating Company and the DeHavilland Aircraft Company were "still seriously considering possibility of submitting proposals", and had asked Alan Cobham to act as their agent while in South Africa on the 'Imperial Airway Survey'.<sup>54</sup> It was hoped that Cobham could not only sell the Union on British proposals, but sell the De Havilland DH50 aeroplane too, in the view of Air Ministry experts, an aircraft better suited than the JU F13 to South African conditions.<sup>55</sup>

Fortunately for the British interests at this point, the Hertzog government seemed to be in no haste to conclude the protracted negotiations with Junkers. Although Athlone reported in January that the Union "has provisionally entered

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52. FO 371/11451, Amery to Athlone, October 19, 1925.

53. Ibid., Athlone to Amery, November 7, 1925.

54. Ibid., Amery to Athlone, December 1, 1925.

55. Ibid.

into a favourable agreement with promoters of a South African Aero Company", and thought the probability of further negotiations failing, "remote", <sup>56</sup> the fact remained that the Union had certain reservations regarding the German proposal. In terms of South African-British relations, the nationalist-minded Hertzog and his associates were prepared to challenge but not to alienate London. Nonetheless, along lines from which would evolve the new concept of 'dominion' for the Union, Canada, Australia and New Zealand, national aims were given priority over imperialism in all its forms. Hertzog clearly preferred the shadow to the substance of empire. <sup>57</sup> Thus, the Union government was less anti-British than it was pro-South African, and, in the context of air transport development, policy was not so much dictated by the need to restrain British ambition as it was to assure that control was vested in South African hands. In negotiations with the Junkers firm, the issues were clearly political, turning on questions of Union control and the training and employment of South African personnel. <sup>58</sup>

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56. Ibid., Athlone to Amery, January 15, 1926.

57. For background to General J.B.M. Hertzog (Prime Minister of the Union, 1924-1939) and his attitudes to empire, see Hyam, The Failure of South African Expansion, 1908-1948, esp. pp. 101-62. Also, O. Pirow, James Barry Munnik Hertzog (Cape Town, n.d.)

58. The Union wanted Junkers to employ South African pilots and mechanics to operate the service "right from its inception". FO 371/11451, Athlone to Amery, November 7, 1925.

There was the added objection that there would be "a real and serious difficulty" in obtaining spare parts for the aircraft should a world or European crisis ensue.<sup>59</sup> In any case, the Union did not want to embrace a German Junkers imperialism while in the process of loosening the British tie. Matters, then, moved more slowly than the excitement in the British Air Ministry and Dominions Office suggested.

In the meantime Cobham arrived in South Africa to broadcast the British cause and sell De Havilland aircraft.<sup>60</sup> In neither case was the mission successful. Cobham's reports on the situation were valuable contributions to the British assessment, but, as he pointed out, "most people" wanted a British service in the Union, but the government could not resist the appeal of the low cost Junkers bid.<sup>61</sup> Although the Cobham flight gave a great boost to the popularity of aviation in the Union, the Air Ministry was obviously disappointed that he could not have achieved more positive results. With still no competitive British bids to influence the Union's decision, by March, 1926, the Air Ministry was asking the Union government to postpone again any final

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59. AIR 2/290, Lindup Liaison Letter, September, 1925.

60. See above, 170-73, 180-82.

61. AIR 2/290, enclosure re Cobham in South Africa. See too The Times, February 19, 1926, p. 13.

agreement with Junkers until matters could be discussed with Cobham after his return. <sup>62</sup> What was to be gained by these requests is not very clear, nor can it be said that they influenced the Union-Junkers discussions in any way. The British government was heartened by the news that "there is a possibility that the scheme may not be proceeded with", but the basis of this lay in troublesome financial and other stipulations in the proposed Union-Junkers agreement, not in considerations of British concern. <sup>63</sup> By April, 1926, in fact, the first Junkers 'scare' was over, negotiations having broken down on the question of financial guarantees, and the Union once again open to tenders, British or otherwise. <sup>64</sup>

Coincidentally, Imperial Airways now felt that Egypt-Karachi service arrangements were settled, and "adequate attention" could now be paid to South Africa. Woods Humphrey was prepared to explore the situation with the Aircraft Operating Company, thinking it desirable that "British interests work to a certain extent hand in hand". <sup>65</sup> Imperials' view was that a careful survey and investigation should be made in

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62. FO 371/11451, Amery to Athlone, March 5, 1926.

63. Ibid., Athlone to Amery, March 13, 1926.

64. The Times, April 15, 1926, p. 13. See discussions in Cape Times, February 18 and March 13, 1926, and the Star (Johannesburg), April 6, 1926.

65. AIR 2/290, Woods Humphrey to Smit, April 14, 1926.

South Africa, and offered its expert services to the Union for £2,500, pleading its own inability to finance such an investigation.<sup>66</sup> With Junkers temporarily out of the running, and the Union government in no haste and not prepared to raise the £8,000 subsidy, hopes for a start to air transport development in South Africa in 1926 were ended. It was becoming increasingly clear, too, that the impetus was going to have to come from within not without. With the exception of an indication of interest on the part of Short Brothers, Ltd., British firms appeared content to sit back and let matters lie.<sup>67</sup>

Still, aviation was moving ahead in South Africa on several fronts. By 1926, the Union could boast of 70 'landing grounds',<sup>68</sup> and the Union had joined Great Britain and the other dominions in the airship scheme. A mooring mast was to be constructed at Cape Town or in Natal, and the ill-fated scheme promised to link London and the Union in 6 days.<sup>69</sup> Cobham's first flight to the Cape sparked a

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66. Ibid. Brancker endorsed the idea, claiming "South Africa would obtain a first class report....Imperial Airways probably know far more about the possibilities of air transport than any other firm in the world". Ibid., Brancker to Smit, July 28, 1926. The idea did not materialise.

67. Ibid., A.M. to DO, April 15, 1926.

68. Imperial Conference, 1926, Summary of Proceedings, Cmd. 2768 (1926), p. 211.

69. Apparently a tower was built at Grantville and later dismantled when the airship scheme collapsed. Higham, The British Rigid Airship, 1908-1931, p. 277. See AIR 2/303, 'Memorandum on Proposed Flight to South Africa and Australia by H.M. Airships R.100 and R.101', 1927.

revival of flying club activity, notably the Aero Club of South Africa. <sup>70</sup> Major Miller flew a 2,300 mile 'round the Union' tour in 1927 and was instrumental in starting light plane clubs at Port Elizabeth, East London, Durban, Bloemfontein and Kimberley. <sup>71</sup> From 1926 onwards, the Union became the popular target destination of a steady stream of pilots eager to set new records for the London-Cairo-Cape Town route. <sup>72</sup> The annual service flights of the Royal Air Force and the South African Air Force between Cairo and Cape Town likewise made their contributions to air progress in the Union and the emergence of a new air-mindedness. <sup>73</sup> In the process of these varied activities, public apathy was being overcome. Only government short-sightedness inhibited more rapid development.

In 1928, after discussions with Cobham, Miller was again active in the pursuit of a government agreement to subsidise air transport, this time on the Durban-Johannesburg route.

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70. South Africa, Yearbook, No. 9 (1926-27), p. 763. It noted "a remarkable revival of interest in aviation", especially the flying club movement which aimed "to encourage and promote the fullest development of civil aviation in South Africa".

71. Klein, Winged Courier, p. 69.

72. Beginning with R. R. Bentley in 1927 who flew a DH 60 London to Cape Town in less than 28 days. On the record-breakers, see Jones, The Time Shrinkers, pp. 135-204.

73. The R.A.F. made five Cape flights from 1926-1930, the S.A.A.F., four Cairo flights.

It was to be operated by a new South African Company, African Airways Ltd. <sup>74</sup> Negotiations broke down once more in the face of government intransigence, in part because of concern that non-nationals would control the company, in part for fear that the airline would woo passengers away from the government-owned rail service. <sup>75</sup> In 1929, Miller's persistent efforts were rewarded. With new backing, the determined major re-opened his negotiations with the Union government, and by summer, agreement had been reached. The three year contract called for Union Airways Ltd. <sup>76</sup> to provide weekly mail and passenger services Port Elizabeth-Cape Town, Port Elizabeth-Durban, and Port Elizabeth-Johannesburg, via Bloemfontein. The flying schedule was to connect with the sea mails at Cape Town. The subsidy remained at £8,000 p.a., the arbitrary limit set out in the parliamentary estimates yearly since 1925. <sup>77</sup>

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74. Klein, Winged Courier, p. 69. Another company, British Airways Service, was reportedly seeking to establish a Durban-Johannesburg service in 1927. Particulars cannot be found. See John Goldstrom, A Narrative History of Aviation (New York, 1930).
75. By 1932, a South African Railways official expressed the view that if a private company commenced air services on the Johannesburg-Durban route, the railway would have to introduce a competitive service to monopolise air and rail revenues. The Times, July 3, 1931, p. 14.
76. The company was registered at Pretoria, July 24, 1929, with a capital of £5,000. Two officers of the Atlantic Refining Company of Africa held one share each, Miller the balance of the 5,000 shares.
77. In addition, monies were spent in the administration of the Aviation Act (1923) to the benefit of civil aviation;

The birth of Union Airways marked the first major step in providing South Africa with a network of domestic air services. Operations commenced in August, 1929, with five DH Gipsy Moth aircraft, Miller and three other pilots, and one ground engineer.<sup>78</sup> Along routes which totalled 1,438 miles, the airline put up an impressive performance in the first years of operation. In the first six months, 130,000 miles were flown, carrying 104 passengers and over 6,000 lbs. of mail.<sup>79</sup> By 1930, such was the popularity of the services that the airline added two more aircraft, a cabin Puss Moth and a six passenger Fokker Universal, to handle the increasing mail and passenger traffic, and to speed up services.<sup>80</sup> But despite the obvious operational success, financial difficulties plagued the air line from the beginning. The government

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77. (continued) 1923-24, £480, 1924-25, £8,038, 1925-26, £5,093, 1926-27, £1,536, 1927-28, £209, 1928-29, £2,215. South Africa, Yearbook, No. 10 (1927-28), p. 804, and No. 16 (1933-34), p. 796.
78. Klein, Winged Courier, pp. 71-72. On beginnings, see also Graham Bellin (one of the pilots), "South Africa's First Airmail Service", Cape Argus, July 3, 1948, and "Passengers Sat in the Open Cockpit", ibid., July 10, 1948; Wyndham, The Air Posts of South Africa, pp. 27-29; The Times, August 27, 1929, p. 9.
79. Klein, Winged Courier, p. 72. Official Union statistics for the period indicate totals for all flying, providing no separate category for Union Airways.
80. In 1930-31, 10,023 lbs. of mail and 761 passengers were carried; in 1931-32, 12,334 lbs. and 1,056 respectively. Wyndham, The Air Posts of South Africa, p. 32. For new aircraft details, see Appendix I.

subsidy, the backing of the Atlantic Refining Company, and steadily increasing passenger and mail revenues were not enough to offset high running costs and provide for re-equipment. Just two months after Union Airways commenced services, negotiations were being held with General Motors. The big American firm had obtained a substantial interest in the Atlantic Aircraft Company, the American concessionaires for Fokker aircraft. General Motors' South Africa branch acquired an interest in Union Airways with plans to re-equip with Fokker aeroplanes and develop services, including a route to Rhodesia. <sup>81</sup>

Throughout 1930, Miller attempted to provide a more substantial financial footing for his company, but overtures to British and European companies were rejected. The problem was that Miller was determined to keep the air line in South African hands while potential investors would not step in without being guaranteed control. Barrett-Lennard of Imperial Airways, visiting South Africa in 1930, proposed the purchase of Union Airways, the aim clearly to obtain a foothold in the Union prior to the opening of the London to Cape Town route. <sup>82</sup>

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81. AVIA 2/422, B.E.H. Clifford (United Kingdom Representative in South Africa) to DO, October 26, 1929. Clifford suggested Imperial Airways start the African route from the south end as well, a move which might forestall the establishment of Fokker "if undertaken quietly and expeditiously". See also The Times, October 26, 1929, p.11.
82. Imperial Airways had established a non-operating subsidiary in the Union in 1929, Imperial Airways of South Africa (The Times, August 16, 1929, p. 9), but it wanted a "National Air Transport Company" with South African participation. AVIA 2/1879, A.M. to DO, March 17, 1931.

The proposal would have resolved Miller's problems, but on the advice of Oswald Pirow, the Union Minister of Defence, Miller rejected it. "Pirow asked me especially not, under any circumstances, to sell out to Imperial Airways", Miller reported, and Miller was assured of government support by Pirow and Hertzog if he would break off negotiations with Imperials.<sup>83</sup> In light of later developments, the decision to reject Imperials' offer was unfortunate for Miller and Imperial Airways. Miller's future would have been secured as managing director of the subsidiary, and Imperial Airways would have controlled the development of air transport in the Union. Ironically, in January, 1932, the Union government approached Imperial Airways with a proposal that the British company be responsible for all internal lines in the Union.<sup>84</sup> Public opinion in South Africa discouraged the development of this idea and ended any hopes Imperials had of establishing themselves in the Union.<sup>85</sup>

By 1932, Union Airways was near bankruptcy. The year before had been marked by several set-backs. A proposed

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83. Quoted in Klein, Winged Courier, p. 76. For Pirow's role in South African aviation, see below, chapters IX and XI.
84. The Times, June 24, 1932, p. 8. Aeroplane, July 6, 1932, p. 6.
85. In mid-1932, Imperial Airways was still thinking of organising a local company. AVIA 2/1879, part I, Bulloch to DO, June 6, 1932. The Junkers takeover of Union Airways ended these hopes. See below.

merger with Glen Kidston ended when Kidston and Tony Gladstone were killed in an air crash in Natal.<sup>86</sup> In November, Union Airways suffered its first fatalities when a Puss Moth on the Port Elizabeth-Cape Town route crashed killing the pilot and two passengers.<sup>87</sup> In December, the pride of the fleet, the Fokker aircraft, was irreparably damaged in a crash at Kayser's beach.<sup>88</sup> For Miller, the losses were more than the company could tolerate without additional outside support. In the spring of 1932, negotiations were under way with Junkers. Pirow's promise of government support was not forthcoming, and Miller by this time was ready to accept outside control or risk seeing his airline go out of business entirely. His three year air mail contract was to expire in August and there were questions whether it would be renewed.<sup>89</sup> By June, 1932, Miller, who had rejected a Junkers take-over bid in 1931, came to an agreement with the German firm which effectively gave Junkers control of the airline and placed them in a position

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86. The Times, May 6, 1931, p. 9. Kidston's plans for Union Airways are outlined in the Cape Times, May 8, 1931.

87. Eastern Province Herald (Port Elizabeth), November 14, 1931, p. 11.

88. South African Airways, Fifty Years of Flight (Johannesburg, 1970), p. 46.

89. Cape Argus, January 9, 1932. This newspaper was most sympathetic to Miller and Union Airways. See "A Pioneer Unrewarded", ibid., January 11, 1932.

to monopolise the bidding for air services in the Union.<sup>90</sup> Equally important, the agreement called for the airline to be re-equipped with Junkers aircraft, a development which found the airline £85,000 in debt within two years.<sup>91</sup> All in all, the Junkers 'take-over' was complete, despite Miller's protestations to the contrary and the British view that he had persuaded the Union government that the airline remained in South African hands.<sup>92</sup> Moreover, it was Junkers' second triumph in South Africa in the face of British competition and the professed 'South Africa first' idea espoused by Union nationalists.

In 1930, the Union had called for tenders for a Windhoek-Kimberley mail service to link up with the planned Imperial Airways service to the Cape.<sup>93</sup> By October, Junkers were

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90. A full discussion is provided in The Times, June 24, 1932, p. 13. The leader noted that if the Junkers-controlled Union Airways obtained a new mails contract, it would be "in so strong a position for meeting the future aviation needs of South Africa that no competitor could hope to challenge it".
91. Klein, Winged Courier, p. 76.
92. Miller was adamant that Junkers had not 'taken over'. As he did obtain a further one year contract, it appeared to the British that he had satisfied the Union government that the airline was "not subject to control from outside the Union". The Times, June 25, 1932, p. 11, August 4, 1932, p. 9. The fact was that the Union was planning its own take-over (African World, August 13, 1932, p. 132) and temporary outside control was of little consequence.
93. Rand Daily Mail, September 18, 1930. More accurately, it was the South-West Africa administration which called for tenders, but the Union controlled the interested department of Posts and Telegraphs, as well as defence.

confirmed as the successful bidders.<sup>94</sup> The five year contract provided for a £7,000 p.a. subsidy plus 3/ lb. on mail carried up to 6,000 lbs. p.a. Provision was also made for South-West Africa Airways to be acquired "in the event of a state of national emergency, or for any other urgent reason which the administration may consider advisable", a power the Union exercised in 1935.<sup>95</sup> With Junkers aircraft, the airline commenced operations in 1931, linking Windhoek to Grootfontein, Keetmanshoop, Walvis Bay and Kimberley.<sup>96</sup> In January, 1932, the connection with the Imperial Airways service was made, and until its take-over by the Union, the services were run with "noteworthy consistency".<sup>97</sup> In its last full

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94. AVIA 2/1879, encl. 3b, Clifford to DO, October 21, 1930. Also Cape Times, October 18, 1930.
95. Union of South Africa, Report Presented by the Government of the Union of South Africa to the Council of the League of Nations Concerning the Administration of South West Africa for the Year 1930 (hereinafter, South West Africa Report, year) (Pretoria, 1931), p. 125.
96. The airline used JU A50 and F13 aircraft. Stroud, Annals, p. 549. See too, Wyndham, The Air Posts of South Africa, pp. 33-37, and "The South-West African Air Services", Flight, January 19, 1933, pp. 62-63.
97. South West Africa Report, 1934 (Pretoria, 1935), p. 84. Also BOAC, I.A. file No. 18, South-West Africa Airways, 1931-1935, for data on company operations. History is reviewed in "The Airways of South-West Africa", Aeroplane, August 12, 1936, p. 216.

year of operation, the small company carried 135 passengers, 5,581 lbs. of mail and 466 lbs. of freight over 80,000 miles.<sup>98</sup>

The award of the contract to Junkers did not go unnoticed. The Cape Times reported "a storm of criticism has arisen at what is described as a 'break' from the Government's policy of 'South Africa first' in connection with this contract".<sup>99</sup> Walter Madeley, the labour M.P. and former Minister of Posts and Telegraphs, was especially critical. He accused the government of having had a standing agreement with Junkers since 1925, despite Junkers' failure to agree to terms at the time. The Union, according to Madeley, had guaranteed the Junkers contract even before tenders were submitted, and Union Airways, who had submitted an identical tender, had been ignored.<sup>100</sup> He further castigated the government for supporting Imperial Airways on the Cape route,

giving away, as they have done, the ownership and control of South African aviation to an outside company, and for using taxpayers' money, to the tune of £400,000, to enable this company to beat our own South Africans out of the field.<sup>101</sup>

For Madeley, Die Burger,<sup>102</sup> and other nationalist critics in the Union,

98. South Africa, Yearbook, No. 16 (1933-34), p. 350.

99. Cape Times, October 24, 1930.

100. Ibid.

101. Ibid.

102. AVIA 2/1879, press clippings attached, Stanley to DO, April 17, 1931. Die Burger, April 14, 1931.

nothing is likely to be done for the real benefit of the Union so long as the disposal of the Government subsidy is taken out of the hands of the local authorities.... 103

Thus, the contract award to Junkers in South-West Africa merely aggravated a situation that had begun with the British-South African agreement on the Cape route. For British interests, however insignificant South-West African affairs per se might be, the Junkers intrusion was a matter of grave concern. This was 'the thin edge of the wedge' of German ambitions in Africa, obviously important politically, and a clear threat to the British aircraft industry, whose vitality depended upon access to markets like the Union for aircraft, engines and spares. <sup>104</sup> Ramsay MacDonald, the Prime Minister, noting the Junkers award, queried the Dominions Office "whether we can take the matter up", a reflection of high level concern.<sup>105</sup> In Pretoria B.E.H. Clifford, the British Representative, hoped the Air Ministry would "appreciate the risks inherent in leaving civil aviation in the Union to develop on 'natural

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103. AVIA 2/422, Bulloch to Geddes, June 6, 1930, in explanation of South African hostility to Imperial Airways.
104. From a high of 525 aeroplanes exported in 1929, British exports showed a marked decline over the next few years; in 1930, 317, 1931, 304, 1932, 300, and 1933, 234. In 1930, the total value of complete aircraft, engines and spares exported was £2,049,921, a business certainly worth fighting for. Summary to 1937 in The Air Annual of the British Empire, 1938, (London, 1938), p. 614.
105. AVIA 2/1879, Holmes (DO) to Bertram, October 28, 1930.

lines', and urged Imperial Airways to answer the challenge.<sup>106</sup> Clifford had taken the matter up with Hertzog, but had to accept the bland assertion that it was a concern of the South-West Africa administration and the Union was "anxious to let them make their own arrangements".<sup>107</sup>

Imperial Airways responded to the challenge as best they could. For almost three years, negotiations were held with the Union government and other interested parties in an attempt to establish a South African-based company to cater to all Union air transport needs. Early in 1931, Woods Humphrey advised the Air Ministry that

Imperial Airways has proposed setting up a South African Company with a South African directorate and offering opportunity to South African capital to participate; but Imperial Airways will finance the Company initially if South African capital is not forthcoming. Two very responsible South Africans, Mr. James Leish and Mr. Alexander Rennie have agreed to be directors and to select other South Africans of good standing as their colleagues. 108

This was not the £250,000 scheme suggested by Imperials' Barrett-Lennard in 1930,<sup>109</sup> nor did it follow High Commissioner

106. Ibid., Clifford to Harding, December 31, 1930. Up to this point, Clifford had been against any Imperial Airways expansion in the Union. Now he was concerned that while two British manufacturing companys (Vickers and Armstrong Siddeley) had been invited to tender, neither Imperial Airways nor any other British 'operating' company had been invited. Ibid., Clifford to DO, December 9, 1930.

107. Ibid., Clifford to DO, December 9, 1930.

108. Ibid., Woods Humphrey to Bertram, April 24, 1931.

109. Ibid., Clifford to DO, December 9, 1930.

Sir Herbert Stanley's suggestions to form a company with Miller, Gladstone and Kidston, in order to win public support.<sup>110</sup> The proposed South African company was to have an authorised capital of £100,000, of which Imperials would subscribe £25,000. Three-engine aircraft were to be used, and the first service was to operate the Durban-Johannesburg route twice weekly. All mail was to be sent by air at agreed rates, and no competition was to be allowed for the life of the ten year contract.<sup>111</sup> It was an ambitious proposal but hardly one to quiet South African fears of an Imperial Airways air transport monopoly in the Union. Clearly, Woods Humphrey and Geddes wanted an 'all or nothing' position in South Africa, a demand that neither the Union government nor public could be expected to accept. In any case, the Union was pursuing another line of development. Parliament passed an Act (Act No. 21 of 1931) which granted the South African Railways and Harbours administration powers "to operate own departmental aircraft for transport of passengers and goods".<sup>112</sup> Although no

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110. Ibid., Stanley to DO, April 17, 1931.

111. Ibid., Leish to C. W. Malone (South African Minister of Railways and Harbours), July 15, 1931.

112. In the same year, a new Civil Air Board was constituted under the chairmanship of Van Ryneveld but without Major Miller. South Africa, Yearbook, No. 8 (1931-32), p. 300, and No. 16 (1933-34), pp. 722-23, spells out terms of the Act.

steps were taken immediately to implement the Act, it did suggest that the Union was looking forward to assuming the control and operation of all air transport, not merely the supervision and regulation of civil aviation. The wedding of air transport and railways also expressed the Union's determination to co-ordinate all forms of transport. <sup>113</sup> It was a discouraging development for Imperial Airways, now compelled to defer further action on their proposal until the future situation became more clear.

The news that "Junkers are in the field" prompted a renewed outbreak of British concern in 1932. <sup>114</sup> The Aircraft Operating Company, the British air survey firm whose earlier plans in South Africa had come to nought, <sup>115</sup> presented a comprehensive proposal for air mail services in the Union to F.H.P. Creswell, the Minister of Defence. <sup>116</sup>

113. Predicting the transfer of civil aviation to the Railways department, the Rand Daily Mail (July 14, 1931) echoed the government view that the Railways was "more competent to deal with the position than the Post Office".
114. AVIA 2/1879, Stanley to Harding, April 26, 1932.
115. AVIA 2/452, encl. 10a, note on Captain S. M. Wood, representing Aircraft Operating and Armstrong Siddeley. The companies, along with the Anglo-American Corporation, and possibly, National Flying Services, had hoped to operate a Johannesburg-Ndola service in 1929.
116. AVIA 2/1879, G. E. Lavin to Creswell, April 20, 1932. Civil aviation was transferred to the Defence department in August, 1931. Star (Johannesburg), August 28, 1931.

The proposal received immediate support from the British High Commissioner, concerned that Junkers not be the only alternative to Imperial Airways. Stanley went further to suggest that Imperial Airways back or work with the two principals, Major Cochran-Patrick and G. E. Lavin. <sup>117</sup>

The Dominions Office response was that the Aircraft Operating Company could be supported if Imperial Airways was not too popular, as Stanley suggested, but in any case, "it seems clear that the British interests concerned should spare no effort to defeat, as Stanley urges, the foreign challenge whether it be German or United States [sic]

....". <sup>118</sup> Imperial Airways, in the meantime absorbed in consolidating their operations on the Cairo-Cape Town route, clung to the idea of forming a South African company with Leish as chairman, an idea already overtaken by events. <sup>119</sup>

Both The Times and the Aeroplane urged South Africa to accept one or the other of the British bids should the Union Airways contract not be renewed. <sup>120</sup>

117. AVIA 2/1879, Stanley to Harding, April 28, 1932.

118. Ibid., Harding to Bulloch, May 13, 1932.

119. Ibid., Bulloch to Harding, June 6, 1932.

120. The Times, June 24, 1932, pp. 8, 13. Arguing that "we look like being defeated by the Dutch South Africa element", C. G. Grey went on to claim that Hoepfner had returned to South Africa with £70,000 of German money "as backing for the South-West-cum-Union Airways Combine". "On the South African Air-Line Scandal", Aeroplane, July 6, 1932, pp. 1-2, 4, 6, 8-9.

The renewal of Union Airways mail contract for one year in August, 1932, and the successful tender of the Junkers-Union company against the two British rivals, ushered in a new era in South African air transport.<sup>121</sup> From this point onward, South African aviation development moved toward state control, a growing dependence upon German support, a diminution of British influence, and the utilisation of the aeroplane in the vanguard of South African efforts to further ambitions north of the Limpopo. All this becomes particularly apparent under the direction of the "very un-British" Oswald Pirow,<sup>122</sup> from 1933-1939, Minister of Defence, as well as Railways and Harbours, in the Hertzog-Smuts coalition government. In a very real sense, the Junkers triumph was a South African triumph, as it was a British defeat.

Under the joint management of F. Hoepfner of Junkers<sup>123</sup> and Miller, Union Airways survived for almost another two years. In April, 1932, the Durban-Johannesburg route was opened for passenger and freight traffic with a JU F13 aircraft and a Puss Moth.<sup>124</sup> The mails contract, renewed

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121. AVIA 2/1879, encl. 14a, 'Memorandum on Feeder Services', n.d.

122. Ibid., Stanley to Sir Geoffrey Whiskard, May 13, 1933.

123. Hoepfner was a former German U-boat commander and the organiser of South West Africa Airways. In 1935, he returned to Germany and a post in the Air Ministry.

124. Stroud, Annals, p. 550. Klein, Winged Courier, p. 77.

in August, was replaced by a new one year agreement in March, 1933, with an increase in subsidy to £10,000 p.a. <sup>125</sup> Although the company continued to operate in the red, the commercial returns were gratifying. In 1932, 1,139 passengers and 10,003 lbs. of mail were carried. In 1933, the figures were 2,388 and 12,935 respectively, representing load increases of 109.7% and 29.3%. <sup>126</sup>

Despite Junkers support in aircraft and money, and their efforts to expand operations in the Union, <sup>127</sup> by January, 1934, it was apparent that Union Airways could not continue. The financial picture darkened with each passing month, and the loss of an aircraft and five lives in December, 1933, seemed to sound the death knell. <sup>128</sup> In January, Hoepfner left Durban for Cape Town and meetings with the government, and the press was reporting the impending take-over of the airline by the Union. <sup>129</sup> On February 1, 1934, it was publicly announced that the Union government had acquired the assets and liabilities of Union Airways, and a newly

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125. South Africa, Yearbook, No. 15 (1932-33), p. 331.

126. Ibid., p. 336.

127. Imperials' Leish reported that Junkers "are exercising tremendous pressure to get the Imperial Airways Service stopped at Johannesburg...", with a view to obtaining the Johannesburg-Cape Town route. AVIA 2/1879, Liesching (acting UK High Commissioner) to Batterbee (DO), October 4, 1933.

128. Klein, Winged Courier, pp. 77-78.

129. Cape Times, January 30, 1934. The Times, January 30, 1934, p. 13.

formed state-owned airline had been formed with authority for control vested in the Railways and Harbours administration.<sup>130</sup> It was a move long in coming and perhaps overdue, although forecast as early as August, 1933.<sup>131</sup> The company, at this point, was "clearly insolvent", with debts amounting to £74,000 and assets of only £48,600.<sup>132</sup>

The Union take-over of the Junkers-Miller airline signaled a closing of the door to the British air presence in South Africa. Pirow was now master of the situation and German influence had been, if anything, strengthened. Herr Hoepfner was appointed Technical and Commercial Air Superintendant of the new South African Airways and advisor to the government.<sup>133</sup> Hoepfner's new role meant that he would have access to confidential information related to imperial defence, a matter of no small concern to British officials.<sup>134</sup> It meant, too, that Hoepfner's influence

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130. Details of acquisition in Cape Times, March 2, 1934. Also AVIA 2/1879, G. N. Trace (Imperial Airways South Africa Manager) to Woods Humphrey, February 22, 1934.
131. Star (Johannesburg), August 2, 1933. And there was concern that the coupling of German interests and a Union take-over would "shut out" British aircraft manufacturers. AVIA 2/1879, Liesching to Batterbee, August 15, 1933.
132. Union of South Africa, House of Assembly, Debates, No.6, March 5, 1934, p. 990. Pirow pointed out that £45,000 of the debt was owed Junkers, of which £35,000 was for aircraft on order. The takeover paid overseas creditors 10/ on the £, but provided nothing for shareholders and no payment for goodwill.
133. AVIA 2/1879, Trace to Woods Humphrey, February 22, 1934.
134. Ibid., Liesching to Batterbee (secret), April 10, 1934.

would be crucial in determining the aeroplane needs for the Union. Despite Pirow's invitation for British aircraft manufacturing interests to establish factories in the Union, <sup>135</sup> Pirow quickly ordered £85,000 worth of Junkers aircraft, in addition to the orders already placed by Union Airways in 1933. <sup>136</sup> The first JU 52/3m aircraft arrived in November, 1934 and commenced operations on the Durban-Johannesburg route. <sup>137</sup> By 1939, South African Airways operated an all-Junkers fleet of 29 aircraft. <sup>138</sup>

It was also evident that Pirow planned to force Imperial Airways to make changes in their trunk service to the Union after the five year contract had terminated. By requiring Imperials to stop at Germiston, and instead operate a coastal service to Durban and Cape Town from East Africa, South African Airways could thus move onto the Cape Town-Johannesburg route

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135. The Times, March 7, 1934, p. 13. De Havilland was in South Africa in a modest way, having established a subsidiary in 1930 to develop the southern African market. Ibid., February 25, 1930, p. 13.
136. The Times, May 15, 1934, p. 16. Pirow repudiated suggestions that he was not serious in negotiations with British aircraft manufacturers. Ibid., June 5, 1934, p. 13.
137. Star (Johannesburg), November 5, 1934. The JU 52/3m was the first multi-engine aircraft to be employed. An excellent pictorial record of the Dessau-Johannesburg delivery flight of the three aircraft may be found in F. A. Fischer von Poturzyn, Afrika von Oben (Berlin, 1935). Press response to the JU aircraft was favourable. See Rand Daily Mail, November 12, 1934, for extracts.
138. South Africa, Department of Railways and Harbours, South African Airways Comes of Age, 1934-1955 (Johannesburg, 1955), n.p. Also Stroud, Annals, p. 553.

and begin pushing northward to Salisbury and beyond. 139

It was an idea that disturbed Van Ryneveld, the S.A.A.F. Commander and most prominent member of the Civil Air Board, <sup>140</sup> but the Board, having been disbanded by Pirow in 1933, was no longer in a position to influence air transport decisions. <sup>141</sup> In the British Air Ministry, the new state of affairs was regarded with suspicion.

"I am very much exercised", wrote Bulloch,

at the news of German intrigue in South Africa and the reports that Pirow is lending a most favourable ear to it. ... The latest that I hear is that Union Airways [sic] are proposing to run a service right up to Salisbury. There are even vague rumours of a German service from Europe to South Africa - possibly via the West Coast. <sup>142</sup>

Bulloch was reflecting the general Air Ministry and Imperial Airways concern that any South African cum German plans to expand operations in southern Africa could only come at the expense of existing British operations. The imperial defence consideration merely added a frightening dimension to the problem.

139. The Times, April 12, 1934, p. 11, May 15, 1934, p. 16.

140. AVIA 2/1879, Stanley to Batterbee, March 29, 1934.

141. In its stead, Pirow used the office of the Director of Civil Aviation under Major J. Holthause, and after November, 1934, General A. J. Brink.

142. AVIA 2/1879, Bulloch to Shelmerdine, March 26, 1934. Bulloch's "vague rumours" had substance. According to the Rand Daily Mail (July 15, 1933) and Mr. Peter Falk of Junkers, plans for a German service were under way. Ibid., Stanley to DO, July 17, 1933. See below, chapters IX-XI for varied Europe-South Africa proposals.

The most outspoken criticism of the turn of events in South Africa came from C. G. Grey, a sometime sympathiser of German policies in Europe and Africa, but an even stronger proponent of the British aircraft manufacturing industry. Arguing that flying in the Union should be "predominantly British", and adding, parenthetically, that South Africa should be returned to "Crown Colony status" if necessary, Grey insisted upon the better performance and reliability of British aircraft as opposed to Junkers. In typically outrageous language, Grey pointed out that Cobham's 'round-the Union' air display in 1932-33 showed "even the little dorps the possibilities of British aircraft".<sup>143</sup> Such criticism did not go unnoticed in the Union, and Grey, as an authoritative spokesman for British aviation interests, did little to help the deteriorating state of Union-British relations in air transport matters. The Cape Argus referred to him as a "reckless critic" and challenged the idea of a "pro-German plot".<sup>144</sup> An incensed Pirow called Grey's attitudes "scurrilous" and "disgraceful".<sup>145</sup> It is questionable at this juncture whether any British criticism mattered very much. By 1934, the die was already cast and

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143. "On South African Affairs", Aeroplane, June 20, 1934, p. 949. Many other such comments from 1930 onwards.

144. Cape Argus, May 5, 1934.

145. Cape Times, June 2, 1934.

the moulding of a non-British air transport empire well underway. Nonetheless, Grey was making public a reaction felt privately in British air transport circles.

Under Pirow's direction, civil aviation in the Union was to forge ahead until 1939. Although the transfer of Union Airways to government control had occasioned some serious personnel and morale problems, with Miller ultimately eased out of the company,<sup>146</sup> the first year's operations of South African Airways suggested a strong foundation upon which Pirow could build. In 1934, the airline flew 246,306 miles with 1,973 passengers and 93,031 lbs. of mails and freight.<sup>147</sup> With more and larger aircraft in service,<sup>148</sup> South African Airways operated with greater flexibility and was able to achieve what Miller and his impoverished organisation could not. On such a basis, Pirow was laying the plans for future growth. As early as April, 1934, the

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146. For a critical assessment of the take-over, see 'Afrikander', "On South African Airways", Aeroplane, February 20, 1935, p. 206. Why Major Miller was treated in such a cavalier way is not certain. Klein is no help in suggesting reasons "which time should allow to die". Winged Courier, p. 76.
147. South Africa, Yearbook, No. 17 (1934-35), p. 759. Somewhat different figures are given in The Air Annual of the British Empire 1938 (London, 1938), p. 109.
148. While the JU 52/3ms did not commence operating until November, they performed yeoman service with their higher load capacities. In addition, the company continued to use the three JU F13 and one JU W34 aeroplane inherited from Union Airways.

acquisition of South West Africa Airways was being considered, a plan which would complete the monopoly of all air services in the Union, with the exception of the Imperial service to the Cape. <sup>149</sup> Pirow also wanted early links made with Salisbury, Luanda and Lourenço Marques. <sup>150</sup>

Thus, by the end of 1934, civil aviation and air transport development in the Union was at last attaining the pace expected of it more than a decade before. There were now 73 aircraft flying in the Union, and 59 aerodromes of fair to good standard in service. <sup>151</sup> The government planned to erect wireless stations at the major airports in 1935. <sup>152</sup> Miller, with his early efforts, and with Union Airways, had done much to make all this possible. So too had Junkers, British antagonism notwithstanding. Whether the Germans' activity was a "clever tactical exploitation of the position" as part of some grander scheme of eventual world domination, <sup>153</sup> or

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149. The Times, April 12, 1934, p. 11. Rand Daily Mail, November 30, 1934.
150. Arrow Air Lines, a private company, operated a Durban-Lourenco Marques weekly service in 1932-33. Stroud Annals, p. 550; Davies, A History of the World's Airlines, p. 193.
151. South Africa, Yearbook, No. 16 (1933-34), p. 350.
152. The Air Annual of the British Empire 1935-36 (London, 1935), p. 79.
153. Klein, Winged Courier, p. 76. Certainly it is hard to subscribe to Klein's "Nazi master plan" thesis, Junkers Flugzeugwerke had formed the Junkers Luftverkehr with the express purpose of exploiting its own products in 1921, many years before the nazi menace.

simply an expression of an aggressive commercial policy, their efforts rewarded the Union with a stepped up pace of air transport development. Germany was building and able to deliver aircraft while British rivals still hovered over the drawing boards.<sup>154</sup> The lines of development may well have run a different course for British interests and Union Airways had the Depression not struck so hard from 1929-1933, but there is nothing to suggest that Junkers would not have been just as formidable in its bid for a presence in Africa.

For Pirow, Junkers aims served the ends of South African policy. In the contest with British air ambitions in the Union, Boer nationalism had emerged triumphant. Thus far, the fight had been confined to a struggle within South Africa, but, under Pirow, it was ripe to spill over into Central and East Africa. Union air policy could now move beyond the mere making of greater 'air consciousness', and beyond the establishment of a network of domestic air services to keep South Africa apace with the modern world. Air transport was to move South Africa northward to challenge Great Britain in its African empire. In later chapters, much of this thesis will emerge as Pirow's ambitions provide South Africa with an increasingly larger role in the history of British African aviation.<sup>155</sup>

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154. Two competitive British aircraft were in the works in 1934, the De Havilland DH86, and the Airspeed Envoy. See appendix I for details.

155. See below, chapters IX and XI.

CHAPTER VIII  
BRITISH WEST AFRICA: PROBLEMS  
AND PROPOSALS, 1919-1934

... the English had brought trains,  
then motor cars, and then the wind  
train, and there was only Allah left  
to see.

Nigerian Emir, 1925. <sup>1</sup>

Thus far, little has been said about air transport developments in British West Africa. <sup>2</sup> The colonies of Gambia, Sierra Leone, Gold Coast and Nigeria, along with the mandated territories of Togo and British Cameroons, <sup>3</sup> together comprised more than 500,000 square miles of the British empire in Africa. <sup>4</sup> They were scattered some 2,000 miles along the Atlantic, from the Gambia river to the Gulf

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1. Quoted by Sam Hoare, Hansard, CXCII, February 25, 1926, col. 774.
  2. See above, pp. 35, 55, 72-73, 105-09, 201-09.
  3. Togo and the British Cameroons were former German colonies lying to the east of the Gold Coast and Nigeria respectively.
  4. Nigeria, the largest of the colonies, contained 356,669 square miles with a population in excess of 30,000,000. In terms of British investment and trade, only India and Ceylon were more important colonies. See A. N. Cook, British Enterprise in Nigeria (London, 1943), p. 281.

of Guinea, thrusting inland from the seaboard as enclaves of British power in the vastness of French West Africa. To a great degree, this unique geographical/political setting had much to do with the rate and direction of civil aviation development after world war I.

Unlike the bulk of the British empire in Africa lying along the Cairo-Cape Town route,<sup>5</sup> the colonies in West Africa lacked the geographical contiguity so essential to the co-ordination of transport planning and policy. Surrounded by French territory and separated from one another, the isolation was only relieved by common access to the Atlantic and the sea-lanes to Europe and South Africa. Set apart, as they were, from the mainstream of imperial air transport development between the wars, the West African colonies were relative late-comers to the world of civil aviation. It was not so much a case of being "ignored", as one observer noted,<sup>6</sup> but rather the case that the problem of integrating the colonies into the imperial air scheme posed a problem that was not resolved until late in the period. Ideas about domestic air services were ever circumscribed by economic limitations. To link West

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5. See above, chapter IV. An exception was British Somaliland.

6. Margery Perham, The Times, December 28, 1932, cited in Perham, Colonial Sequence (London, 1967), p. 54.

Africa by air with Great Britain and the empire meant a turning to France, across whose territory any British air service would have to fly, either along the Atlantic coast, across the Sahara, or across Chad from Khartoum to Nigeria.<sup>7</sup> Not until the late 1930s was Great Britain prepared to set aside questions of pride and security and, making use of French facilities, provide an air service to West Africa. An earlier effort would have certainly sponsored a more rapid stirring of 'air-mindedness' and the beginnings of local feeder air lines. As it was, the eve of world war II found British West Africa still without local or regional air transport.<sup>8</sup>

Still, the 'isolation' of British West Africa was but one factor inhibiting air progress. Although British contact and trade with West Africa went back to the 16th century, time had done little to erode the notion that much of this territory was unfit for European settlement. The 'white man's grave' idea persisted long after its reality had passed into history. But, the result was that unofficial discouragement and official prohibition of white settlement

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7. A Khartoum-Nigeria service was instituted in 1936. See below, chapter X.
8. These were developed mainly after the formation of West African Airways corporation (WAAC) in 1946. See E. H. Coleman, How Aviation Came to Nigeria (Lagos, 1960). Also H. Walker, "Air Transport in West Africa", West Africa, XXXII (October 16, 1948), 1049-51, and "Some Problems in the Development of Air Transport in West Africa", Journal of the Royal Aeronautical Society, LVII (August, 1953), 477-90. Walker was first chairman of WAAC.

in the West African colonies prevented Europeans, other than transient traders and officials, from establishing a permanent community.<sup>9</sup> In the long term, this was unquestionably a good thing, making travel along the road to independence easier for African nationalists. In the short term, especially as it applied to civil aviation development, the lack of a British white community, as in Kenya or Rhodesia, meant the near-absence of an articulate group demanding closer ties with 'home' and the empire. Of the few white 'residents' who did champion the cause of the aeroplane, they had to be content with what communications road, rail and the shipping lines could provide.<sup>10</sup> The large African population was as yet not caught up in the spirit of enthusiasm which marked air transport promotion elsewhere.<sup>11</sup>

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9. Thus, for example, in 1931, out of a population of 3,163, 568 in the Gold Coast, only 3,182 were "non-African". Colonial Office, An Economic Survey of the Colonial Empire (1932), Colonial No. 95 (London, 1934), p. 77. On the role of Europeans and their impact on West Africa, see Michael Crowder, West Africa under Colonial Rule (London, 1968).
10. On early transport history, an excellent chapter is provided in Alan McPhee, The Economic Revolution in British West Africa (London, 1926), pp. 106-29. More recent assessments are found in Albert Adefolalu, "Communications and Transport in Nigeria", unpublished M.A. thesis, Queen's University of Belfast, 1966; R. J. Harrison Church, "The Transport Pattern of British West Africa", Geographical Essays on British Tropical Lands (London, 1956), pp. 54-76; and P. R. Gould, The Development of the Transportation Pattern in Ghana (Evanston, Illinois, 1960). Elder Dempster provided the main sea link with Great Britain with four major services along the coast to Lagos, Benin, Opobo and Calabar. Allister MacMillan, The Red Book of West Africa, 1920 (London, 1968), p. 296.
11. See above, chapters V-VII.

For West Africa, this was the age of the train, the lorry and the bicycle. <sup>12</sup>

A further discouragement to both settlement and air transport exploitation was the climate of West Africa. While medical science was providing an expanding range of treatments and cures to the myriad diseases common to tropical Africa, <sup>13</sup> the weather remained a constant of extremes, inimical to the operation of primitive under-powered aeroplanes as it was enervating to man and machine alike. <sup>14</sup> Like the fears once wrought by disease, the weather too made its contribution to the 'white man's grave' portrayal of West Africa. The downpours of the rainy season, particularly along much of the coast, can inundate an area in a few hours. The line squalls, which form up over the sea, move inland like an advancing wall, towering at points over

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12. While major rail projects had been completed for the most part by the end of the war, and the bicycle provided short distance individual travel, the most promising development was "the native-owned lorry which is doing so much to open up British West Africa". By 1926, 2,401 were in use in the Gold Coast. Colonial Office, Report by the Hon. W.G.A. Ormsby-Gore, M.P. on his Visit to West Africa during the Year 1926, Cmd. 2744 (1926), pp. 28-29.
13. For an interesting and descriptive evaluation of health problems, see Air Ministry, Medical Notes and First-Aid Treatment for Detached Personnel in the Tropics and Sub-Tropics, AP 1486, 3rd. ed. (London, 1937).
14. A thorough analysis of West African weather is provided in Great Britain, Meteorological Office, Weather on the West Coast of Tropical Africa (London, 1949). Also R. J. Harrison Church, West Africa, 5th. ed. (London, 1966), pp. 21-62.

60,000 feet high. Only the sturdiest of aeroplanes and the boldest of pilots can meet their violence as paths cross along the airways. And everywhere there is the heat, debilitating in the saturated air of the coast, scorching, with record temperatures, as one moves towards the Saharan interior. <sup>15</sup> For the men and aeroplanes of the period after world war I, the challenge was more obvious in West Africa than anywhere else on the continent, and the odds against their success formidable. The story, then, of the early years of aviation in British West Africa, suggests more failures than successes, ideas rather than realities, and a staggered development unlike the even pattern evolving elsewhere in the African empire in the 1930s. <sup>16</sup>

Nonetheless, attempts were made to establish some forms of civil aviation, and needs could be argued for local, inter-colonial and international communications by air. Here, too, arguments could link civil and military aviation in a general thesis aimed at bringing West Africa into the air age. A Royal Air Force establishment in West Africa could be but a prelude to commercial air enterprise, acquiring knowledge and prompting development at one and the same time. In addition, the air force would facilitate police and other

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15. The writer recalls one unrecorded moment in 1962 at Maiduguri, in north-eastern Nigeria, when the temperature at the airport reached an incredible 131 degrees fahrenheit.

16. See above, chapters V-VII.

official business in the colonies. While these ideas were slow to mature, it is not surprising to find them first appear during the latter stages of world war I when the successes of military aircraft in East Africa suggested a peace-time application. <sup>17</sup>

The first suggestion concerning aviation in West Africa appeared in 1917 from one Captain W. B. Hellard, ex-RFC, and living in East Africa. <sup>18</sup> Hellard envisaged a small organisation of four aircraft with headquarters at Zungeru in Nigeria. <sup>19</sup> While it would provide limited mail services and assist in general administration, its prime function would be to suppress "local uprisings". "I think", wrote Hellard,

the chief point to bear in mind in the suggested use of aircraft in Nigeria is the incalculable moral effect in the Native mind.... The affect of the prestige attaching to the English, if they are the first to introduce the Aeroplane into West Africa should not be overlooked. <sup>20</sup>

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17. See Jones, War in the Air, vol. III, pp. 1-68.
18. CO 583/81, Nigeria, 'Aviation in Nigeria', West Africa 1273, January 6, 1919. Hellard was formerly an officer with the Nigerian Forest Service.
19. Ibid., Hellard to Strachey, December 1, 1917. Initial costs were estimated at £23,500, with £10,200 annual maintenance charges.
20. Ibid.

The suggestion was greeted with little enthusiasm at the Colonial Office, although Charles Strachey, the senior principle clerk, admitted, "the question of introducing aeroplanes into West Africa (possibly from a civilian as well as a military point of view) will certainly come up sooner or later,...<sup>21</sup> A CO minute took the view that "aeroplanes were great instruments for producing disorder and destroying property --- but of little use for the preservation of order which is our object in W. Africa and elsewhere".<sup>22</sup> Lt.-Col. Jenkins of the West Africa Frontier Force was totally unimpressed by the proposal. Taking up Hellard's argument that one aeroplane was the equivalent of one battalion, Jenkins pointed out that an aircraft cannot disperse in detachments, and asked rhetorically if, when one aeroplane went unserviceable, a whole battalion was out of action?<sup>23</sup>

At the newly-formed Air Ministry, the response was warmer if no more helpful, Trenchard, the Chief of the Air Staff, pointing out that no "mechanics" were available, but "there is no doubt in my mind that machines will be wanted in Nigeria one day".<sup>24</sup>

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21. Ibid., Strachey notation on file.

22. Ibid., minute probably authored by J. F. Green, n.d.

23. Ibid., Jenkins to Strachey, December 9, 1917.

24. Ibid., Trenchard to Strachey, January 1, 1918. Trenchard later pointed out that no "machines" were available either, as all aircraft suitable for hot climates were already in use. Ibid., Trenchard to Strachey, April 2, 1918.

The Colonial Office, despite some coolness towards these first ideas, did not close the door on further discussions. Nor did the Air Ministry and its ambitious R.A.F., already poised to plunge into Africa along the Cairo-Cape Town route.<sup>25</sup> With war's end, all parties were becoming more amenable to investigating aviation possibilities in West Africa, and a brief note by Lt.-Col. Ross on the possible potential of the area in early 1919 appears to have sparked a new round of interest.<sup>26</sup> In addition, British commercial interests were eyeing the possibilities of West Africa. Captain A. J. Swinton, an aeronautical engineer and author of The £.S.D. of Flying (London, 1918), wrote to Governor Clifford (1912-1919) in the Gold Coast, expressing a desire "to enter into negotiations with your Government on the question of Aerial Transportation".<sup>27</sup> A more precise proposal was prepared by the Vickers Company, wanting to bring to Clifford's notice, "the great advantage that would accrue to those Colonies of ours that are prepared to take up seriously the question of employing aircraft".<sup>28</sup> Noting

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25. It could be argued, too, that the R.A.F., as the youngest service, was eager to assure itself a role in the management and development of the empire.
26. CO 554/44. R10767, West Africa, 'Aeroplanes in West Africa', note by Ross, February 17, 1919.
27. Ghana National Archives (hereinafter, GNA), 17073/18, Aeroplanes - Employment of in the Colony, Swinton to Clifford, January 2, 1919.
28. Ibid., H. Hood (Vickers) to Clifford, October 22, 1918. Also CO 96/605, Gold Coast 982(1920), enclosure, 'Use of Aircraft in the Gold Coast', Guggisberg to Milner, November 30, 1919.

that the war had "proved and established the fact that a reliable and speedy method of transport in the air is possible", Vickers argued,

the value, therefore, of the Aeroplane in carrying mails, passengers and goods to those Colonies of ours where Railways are slow or do not exist, would be inestimable. 29

Clifford's response was to let matters stand for the moment as, with fears of declining government revenues, "we are little likely to afford new departures of this description".<sup>30</sup> At this point, Clifford left the Gold Coast on leave to return to West Africa as Governor of Nigeria (1919-1925), and matters were left in abeyance in the Gold Coast until the arrival of Governor Guggisberg (1919-1927). In the meantime, having studied the question in England, Clifford called for some expert opinion on the situation in Nigeria, especially in the north where communications were notoriously slow. In July, 1919, he suggested the Air Ministry send out someone "to furnish a detailed report, and formulate a scheme, including estimates of the cost of establishing and maintaining an Air Service in Northern Nigeria".<sup>31</sup> A few months later,

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29. GNA, 17073/18, Hood to Clifford, October 22, 1918. A second letter provided full aircraft details. *Ibid.*, Caddell (Vickers) to Gold Coast Governor, May 31, 1919.

30. CO 96/605, Clifford to Guggisberg, March 22, 1919, cited in Guggisberg to Milner, November 30, 1919.

31. CO 583/82, Nigeria, CO 40812, Clifford to CO, July 16, 1919.

in apparent contradiction, Clifford shifted his emphasis to the south, calling for the Air Ministry expert to furnish a report on aviation

for postal and passenger purposes between Lagos, Victoria, and intervening ports, also upon Air Service between Kano, Maiduguri, Sokoto, Kaduna. Northern Provinces service less urgent and important of the two. 32

The Colonial Office had acted quickly on Clifford's first request, and by August, arrangements had been made for the dispatch of Squadron Leader J.C.P. Wood. 33 Wood proceeded to Nigeria, where, with the help of Captain F. A. Bates, he prepared and presented the first comprehensive report on aviation possibilities in the colony. His 19 page report took little account of the government need for economy. Admitting the many problems to be faced, Wood nonetheless proposed a coastal service on a line Lagos-Forcados-Degema-Calabar-Victoria. 12 seaplanes would be used, which with other support equipment called for a capital outlay of £90,347. Running costs were estimated at £37,994. 34 In all, Wood's report was optimistic, as was that of Bates, who surveyed the north. Clifford was unquestionably dismayed at the forecast

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- 32. CO 583/78, Nigeria, 60885, Clifford to CO, October 22, 1919.
  - 33. CO 583/81, Nigeria, A.M. to CO, August 12, 1919. Wood replaced the original appointee, Wing Commander J. T. Cull.
  - 34. CO 583/85, Nigeria, enclosure, 'Aviation in Nigeria', report by S/L J.C.P. Wood, and Captain F. A. Bates on aviation prospects in Northern Provinces.

costs. Admitting that "the establishment of an aerial passenger and postal service between Lagos and Victoria and the intermediate ports would be of great practical utility,.. " he recommended against any action on the basis it was "prohibitively expensive".<sup>35</sup> The Nigerian government, like its colonial counterparts, had to operate within the framework of Colonial Office policy which dictated the 'colonies must pay for themselves'. The acceptance in general of Wood's proposals would have thrust Nigeria into the forefront of aviation development in Africa, but without imperial or other outside support, Nigeria was plainly in no position to implement the scheme. The Colonial Office concurred with Clifford's assessment, at the same time expressing concern over British prestige in Northern Nigeria and fearing the French would be flying along the upper Niger "soon enough".<sup>36</sup> Milner suggested to Clifford that a scaled-down scheme might be established in the north, but offered no financial support, and with this exchange the whole question was laid to rest.<sup>37</sup>

Discussions in the Gold Coast followed a similar pattern. Guggisberg, noting that the colony's financial picture had improved "immeasurably" since Clifford's concern in March,

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35. Ibid., Clifford to Milner, April 3, 1920.

36. Ibid., Milner to Clifford, August 5, 1920.

37. Ibid.

requested Wood be sent to the colony following his completion of the Nigerian survey.<sup>38</sup> While doubtful that the shortage of labour in the colony could meet the demands of an air service clearing and building programme, Guggisberg thought it worth considering "whether aircraft might not be usefully employed even at the present time on a small scale".<sup>39</sup> In March, 1920, with Colonial Office and Air Ministry concurrence, Wood arrived to prepare a second report. His report on the Gold Coast was a short document and clearly less optimistic about possibilities than his Nigerian report.<sup>40</sup> In Wood's view, "the Gold Coast Colony in no way lends itself to aviation". Similarly, "the Ashanti is by no means an ideal country for aviation".<sup>41</sup> Only the Northern Territories appeared to offer reasonable possibilities.<sup>42</sup> Much of Wood's concern stemmed from the fact that, unlike his proposed Nigerian service with seaplanes, the needs of the Gold Coast would have to be met with landplanes. To Woods, the setting up of airfields and clearings every 12 miles to accommodate 'forced landings' would be an enormous and

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38. CO 96/605, Gold Coast, Guggisberg to Milner, November 30, 1919.

39. Ibid.

40. GNA, accession No. 2548/58, S/L Wood's Report on Possibilities of Aviation in the Gold Coast Colony, Ashanti and Northern Territories, M.P. 17215/20.

41. Ibid., paras, (A), (B).

42. Ibid., para (C).

expensive task in this heavily-timbered country. Nevertheless, it was the weather which troubled him the most. "The Climate of the West Coast of Africa lends itself to flying", he wrote, "but only in limitation".

The early morning and evening are the only times during the day when aviation becomes practicable. The Flying Services, even during the war, found it impracticable to fly during the heat of the day in the tropics.... as the sun causes air disturbances so great that flying not only becomes most arduous and dangerous, but the strain put on the machine is so great that she has to be re-rigged after every flight, and her life is considerably lessened, and so in a commercial enterprize [sic] it becomes impracticable. 43

Furthermore, according to Wood, no flying could be carried out for a good part of the year because of the harmattan and the heavy rain, leaving only about 5½ months of fair flying weather. 44

Nonetheless, Wood proposed the establishment of two services; Akuse-Ada-Longoro-Tamale-Gambaga, and Accra-Sekondi. The capital outlay for 12 aircraft and other equipment was estimated at £110,388, with annual running costs of £37,009. 45 Here, too, Wood was over-ambitious,

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43. Ibid., para (D).

44. Wood stated that all flying would have to be suspended for the two or three months of the harmattan and one to two months on account of the rain. Ibid.

45. Running costs would be slightly lower if both services were operated by one company.

prescribing an air transport system well beyond the means of the colony to sustain. For the same reasons, it met the same fate as his Nigerian proposals. Not for almost a decade were any serious air transport proposals to receive consideration in either the Gold Coast or Nigeria.<sup>46</sup> Both colonies were victims of circumstance. Certainly the prevailing economic situation allowed little leeway to aviation experimentation, however useful and prestigious such a pursuit might be. But there was the matter of technology as well. In 1920, the aeroplane was not yet ready to tackle the special circumstances of West African climate and topography. Much of the high costs anticipated in proposed plans were in recognition of high overhead and replacement expenses. Add to these factors the lack of any special enthusiasm on the part of the Nigerian and Gold Coast governments, a total disinterest on the part of Sierra Leone and the Gambia, and an Air Ministry more concerned with developments elsewhere, and the slide of West Africa into aviation obscurity for the next several years is understandable, if regrettable.

As was the case on other parts of the empire, much of the credit for stirring up interest in aviation in West Africa could be given to the R.A.F. and the British Air Minister, Sam Hoare. It was Hoare who recalled "our

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46. See below for proposals by Alan Cobham Aviation in 1928-29, and above, pp. 203-09.

settled policy to show the Air Force, as the Navy showed the Fleet, in the distant parts of the Empire", <sup>47</sup> and ordered the squadrons to visit West and South Africa in 1925. <sup>48</sup> From that year onward, until 1937, Khartoum-based aircraft flew into West Africa, on one flight as far as Bathurst, <sup>49</sup> and from 1936, R.A.F. flying boats came along the coast from the Mediterranean. <sup>50</sup> As noted earlier, the British were concerned about the obvious successes the French were enjoying in their efforts in West Africa and the Sudan. Their mails service to Dakar was in regular operation by 1925, <sup>51</sup> the Société Air Afrique was formed in 1925 to establish a trans-Saharan service, <sup>52</sup> and French military

47. Hoare, Empire of the Air, p. 213.

48. Details of planning in AIR 2/287.

49. The Bathurst flight was made in 1930, led by Squadron Leader Howard-Williams. AIR 5/825, chapter 63, West Africa Flight, 1930. The first Freetown visit was in 1933, led by Air Commodore G. R. Bromet. AIR 5/1228, chapter 128, West African Cruise, 1933.

50. See, for example, Sierra Leone, Blue Book for the year 1936 (Freetown, 1937), p. 397.

51. Prompting one British observer to argue that a British service to West Africa "need be no dream of some hair-brained visionary". A. G. Linney, "Liverpool to Lagos by Air", Elder Dempster Magazine, V (Christmas, 1926), 114.

52. Davies, A History of the World's Airlines, p. 183. A French military flight had crossed the Sahara in 1920, a commercial proving flight made in 1927. By 1929, developments were well in hand to establish a regular service. "Aviation Transafricaine", L'Illustration, LXXXVII (April 23, 1929), 500. As with the Cairo-Cape Town route, the aeroplane was achieving what the railways could not. See R. J. Harrison Church, "Trans-Saharan Railway Projects", London Essays in Geography (London, 1951), pp. 135-50.

aircraft were regular visitors at interior ports of call, using the growing string of airfields which stretched from Senegal to Chad. <sup>53</sup> The job of the R.A.F., then, was to prop up British prestige and 'show the flag'. Incidentally, their experiences and reports contributed in no small way to the ultimate establishment of air transport services in British West Africa. The impact of these flights was considerable. One letter, written by the Chief of Kaltungo (Nigeria) to Hoare in November, 1927, merits quoting at length.

We went to Bauchi and we saw something that everybody declares he has never seen. It came to us travelling in the sky, making a noise like the sound of a great rushing wind -o-o-o-o-o. There was a large piece of cleared ground, and we, a great multitude, surrounded it. The thing came, circling the air, receding and returning as a bird tracks the sky.... O-o-o-o-o it went. And the people said, 'It will fall on us and kill us.... As I looked up at them flying about, I said, 'They will just play a bit and then return'. But while we beheld, they made away, and we saw them no more.... Men said, 'How was it done?' In a moment, while we were thinking, they will have just a bit of play and then return, off they went beyond our sight! All men, therefore, who witnessed that --- even the Hausas, all and sundry --- were seized with fear. They said, 'There is none like the white man. None can match him. The white man has God. What we have seen mere man could not do; God alone could do it. The white man's works are the works of God, not of man'. These were the exclamations of the people. 54

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53. For French developments, see H. De La Vaux, "L'Aviation Française en Afrique Occidentale", L'Illustration, LXXXIV (June 12, 1926), 610-612. In contrast, only a few 'airfields' were laid out in British West Africa; in Nigeria, their condition was described as "indifferent"; of the two in Sierra Leone, "neither ground is fit for use without considerable notice". Colonial Office, An Economic Survey of the Colonial Empire (1932), pp. 102, 110.
54. Quoted in Hoare, Empire of the Air, pp. 214-15. Also, "Chief of Kaltungo's Account of his Visit to Bauchi in

Certainly, the R.A.F. flights were achieving some measure of success in their mission if the above comment suggests a general response.<sup>55</sup> Amery, at the Colonial Office, moved to assure R.A.F. visits to "all the West African Dependencies", expecting they would achieve results of "political and imperial importance". Amery was concerned, as were others, at the number of foreign aircraft showing up in West Africa. "It is unnecessary for me to emphasize", he wrote, "the increasing importance of air communications, and the future will probably show that aeroplanes can serve various useful purposes in West Africa".<sup>56</sup> Flight Lieutenant Gayford, in West Africa to arrange the 1929 R.A.F. cruise to the Gold Coast, echoed Amery's concern more precisely;

In all Colonies I was conscious of great confusion which existed in the minds of residents, official and unofficial, as to the difference between Service and Civil Aviation, and most people imagined that I was there to inaugurate a Civil Air Line to England. Great resentment was expressed on the subject of the almost total non-appearance of British aircraft and adverse comment was made on the fact that in most

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54. (continued) November and of the Two Aeroplanes which he saw there", Royal Air Force Quarterly, I (April, 1930), 358-60.
55. A British observer in Kano suggested the "natives" were suitably impressed, having received "the greatest object-lesson of their lives". West Africa, IX (November 28, 1925), 1591. Also, Val Murray, "In the Air in Nigeria", ibid., 1599.
56. GNA, accession No. 3197-58, Royal Air Force - Visit to Gold Coast 1929, Amery to Guggisburg, October 18, 1927.

places the only aircraft seen had been French, Spanish or Portuguese.... Great keenness was evident to become 'air-minded' and to do something to help aviation, but nowhere was there any idea of what could be done or of any definite air policy. 57

While it seems clear that R.A.F. activities were leaving a "definite impression on the public mind", <sup>58</sup> it was equally apparent that these flights by themselves were inadequate to promote air transport establishment. Nor, for that matter, were they operating within the framework of a policy designed to introduce civil aviation to the colonies. With the Air Ministry content to 'show the flag' and "create enthusiasm amongst the people", <sup>59</sup> and the 'chosen instrument', Imperial Airways, absorbed in the Indian and Cape routes, new impetus had to be provided by other commercial operators.

In 1928, the ever-enthusiastic Alan Cobham arrived on the scene, promoting the British cause in his 'round Africa' tour. Cobham's study of the situation in all four West African colonies was the first such obtained since Wood had reported on Nigeria and the Gold Coast. From this study

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57. AVIA 2/401, enclosure, 'Tour of West African Colonies', extract from Gayford's reports, n.d. The four reports (from Lagos, Accra, Freetown and Bathurst) may be found in AVIA 2/1836, Collection of Information re Possible Landing Grounds and Seaplane Stations in West Africa, part I, 1925, encl. 42b.

58. West African Review, V (January, 1934), 37.

59. AVIA 2/1836, J. Salmond (Chief of Air Staff) to Lord Thomson, March 18, 1930. A first-hand assessment can be noted in E.L.A. Howard-Williams, "The 1930 West African Flight", Royal Air Force Quarterly, II (October, 1931), 573-86.

came a set of proposals by Alan Cobham Aviation to develop internal services. <sup>60</sup> Cobham received some support. The Officer Commanding the Gold Coast Regiment at Akuse recommended the government accept the proposal, arguing, among other things, that Africans would be employed, and "such Africans will be learning a trade which is still in its infancy...." <sup>61</sup> R. S. Rattray, the Provincial Commissioner at Navarongo, urged the acceptance of Cobham's offer. Rattray was himself a pilot, having flown an aeroplane from England to the Gold Coast in 1928. <sup>62</sup> Of that trip, he wrote,

I trust that the enthusiasm and keenness everywhere displayed will not be permitted to die away entirely, but that all this good work on the part of those who helped and so largely contributed to make this flight a success, will soon bear fruit, and bring appreciably nearer the day when the Gold Coast can boast of its own Air Service. <sup>63</sup>

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60. See above, pp. 201-07 for details. Cobham was much more impressed with opportunities along the coast than was the Air Ministry (See Cobham, "My Flight Around Africa", p. 84, also The Times, April 12, 1928, p. 11). The A.M. sounded a discouraging note, pointing to little protection along the coast for seaplane operation, and a limited number of sites for airfields. AVIA 2/1836, A.M. brief, 'Present Position with Regard to the Reconnaissance for Air Bases in the West African Colonies', October 27, 1927.
61. AVIA 2/401, Lt.-Col. W. Wilson to Colonial Secretary (CS), February 19, 1929.
62. Background and correspondence in AVIA 2/341, Captain R. S. Rattray, Flight to the Gold Coast, 13.7.28-.
63. R. S. Rattray, "A Solo Flight from England to the Gold Coast in Cirrus-Moth G-EBZZ", Gold Coast Review, V (January-June, 1929), 71. Also published in Blackwood's Magazine, CCXXV (June, 1929), 731-65.

Rattray was more emphatic in dealing with the Cobham proposal. "The question at issue is," he argued,

I respectfully submit, the necessity for an immediate decision whether British enterprise and capital are to be allowed to launch a new venture in these parts, a venture, the ultimate scope and ramifications of which no man can foresee. ... every month's delay in settling the question, is only serving to jeopardise British interests, and to reduce British prospects of gaining a belated footing in West Africa, in a new field of development and a new form of transport.... 64

In the Gold Coast, the Accra and Kumasi Chambers of Commerce endorsed Cobham's offer, as did Brigadier H. S. Winterbotham.<sup>65</sup> Unfortunately for Cobham, supporters were too few here and in the other West African colonies. The official response of the West African governors was that the proposals could not be entertained at the time for economic reasons. Governor Byrne in Sierra Leone doubted very much "whether the commercial community would avail themselves of this mode of transport".<sup>66</sup> Governor Slater in the Gold Coast was convinced that "in existing circumstances very little use would be made of aeroplanes for local transport".<sup>67</sup> In Nigeria, Governor Thompson

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64. AVIA 2/401, Rattray to CS, March 19, 1929.

65. Ibid., correspondence with CS, May 21, May 7, and March 14, 1929.

66. Ibid., Byrne (1927-1931) to Amery, February 9, 1929.

67. Ibid., Slater (1927-1932) to Passfield, July 8, 1929.

advised his rejection of the Cobham proposal, and a separate proposal by the Aircraft Operating Company,<sup>68</sup> intimating that Nigeria was to purchase its own aircraft.<sup>69</sup> In the Gambia, Governor Denham, noting the rejections of Nigeria and the Gold Coast, suggested it would be "useless" to continue negotiations with Cobham, but warned of the swift progress of French aviation development based in Dakar, and urged the whole matter be considered "as an Imperial and not as a local question".<sup>70</sup> To Denham, as to other observers close to the scene, the French had a definite policy in hand to bring aviation to its African empire, in sorry contrast to the lack of an overall British policy.<sup>71</sup> While the Governors thus rejected Cobham's proposals, and indeed appeared somewhat pessimistic about air transport possibilities, they urged some action be taken, inviting the Air Ministry to advise on existing proposals and future plans.<sup>72</sup>

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68. See below on the Aircraft Operating Company.

69. AVIA 2/401, enclosure, 'Aviation in West Africa. Notes for Meeting at Air Ministry on 18th September', p. 2. Governor Thompson (1927-1931) proposed a government service in April, but cancelled the plan in August.

70. Ibid., Denham (1928-1930) to Passfield, July 31, 1929.

71. For a general survey of French activities to the 1950s, see Jean Paul Rey, Le Rôle de l'Aviation dans le Développement Economique de l'Afrique Noire Française (Paris, 1961). See too the excellent study, S. Reichman, Air Transport in West Africa, 2 vols. (Paris, 1965), esp. vol. I, pp. 1-19.

72. AVIA 2/401, CO to Bullock, April 8, 1929.

The Air Ministry was generally agreeable with Cobham's plans insofar as costs estimates were concerned, as it was with the Nigeria proposal set out by the Aircraft Operating Company.<sup>73</sup> The latter company had been invited by the Niger Company to establish an aviation organisation in Nigeria, and on that basis had submitted a proposal to operate a Lagos-Victoria weekly service with two Moth seaplanes.<sup>74</sup> "It is quite clear", Tymms pointed out, "that we should do everything to get these two companies to co-operate in West Africa", and some general lines of agreement were worked out with Cobham and Major Cochran-Patrick.<sup>75</sup> A separate proposal for a service operating along the coast from Dakar, submitted by L.H.G. Walford of Walford Lines Ltd., and calling for a £273,000 p.a. subsidy, was set aside as prohibitively expensive, Walford being advised to seek technical advice and cooperation from the Aircraft Operating Company.<sup>76</sup> In all, while no final decisions had been made, and a great deal more information was wanted, this spate of interest in West Africa was not to be ignored.

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73. Ibid., Tymms memorandum, 'Proposals by Alan Cobham Aviation Ltd and Aircraft Operating Co. Ltd. for Air Surveys in West Africa', May 7, 1929, p. 2.

74. Ibid., pp. 1-2.

75. Ibid., p. 2.

76. Ibid., 'Aviation in West Africa. Notes', p. 2.

At a meeting held in the Air Ministry in September, 1929, the first steps were taken that would bring British West Africa into the expanding world of civil aviation. The meeting agreed, "as to the necessity for air communications being established by British interests as early as possible within and to our West African Colonies particularly in view of French activities in that region".<sup>77</sup> It was also decided to send out an Air Ministry representative to West Africa "to study conditions on the spot and to report on the air requirements of the various Colonies".<sup>78</sup> Finally, it was decided to have the Air Ministry prepare a definite scheme to provide for,

(a) inter-communication by air between the British West African Colonies, (b) local air services, (c) connections with the French air service to Dakar, (d) possible future connections with the proposed French Trans-Sahara air service, and (e) a central organisation for air survey.<sup>79</sup>

Acting swiftly, by early January, 1930, the Air Ministry was ready to call for tenders from British companies to operate a return weekly service Dakar-Bathurst-Bolama-Freetown-Port Robert-Cestos River-Grand Bassam-Takoradi-

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77. Ibid., 'Notes of a Meeting held on 18th September', para. 2.

78. Ibid., para. 3.

79. Ibid., para. 6.

Adda-Lagos-Forcados-Lokoja-Kaduna-Kano, a total distance of 2,561 miles to be flown in 3½ days.<sup>80</sup> Tenders were invited from the Air Survey Company, Aircraft Operating Company, Alan Cobham Aviation, Imperial Airways, and National Flying Services.<sup>81</sup> For most, it was still very much a question of operating in the dark. Cobham's flight had been the only 'on the spot' study of consequence, and he had come to the conclusion that "an air transport line running the whole length of the West Coast from Bathurst to Nigeria had little chance of success at the present time from a commercial point of view".<sup>82</sup> The response to the Air Ministry scheme was thus disappointing, although Imperial Airways asked for more information and promised to look more closely at the matter once a study had been made by an Air Ministry representative.<sup>83</sup> The problem was obvious. Commercial operators were being asked to operate a service to meet imperial aims of meeting French ambitions in the area. The prospects suggested by the route were dim. There was no evidence that the service would be used sufficiently for mails, passengers or freight to cover the inevitable losses

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80. Ibid., Tymms minute to Bertram, January 11, 1930.

81. Ibid., A.M. to companies, January 17, 1930. It asked that the "machine employed be capable of carrying a paying load of 600 lbs. (3 passengers)".

82. GNA, accession No. 3182/58, CSO 9372, Cobham to CS, August 1, 1928.

83. AVIA 2/401, Dismore to A.M., March 18, 1930.

of the service. The imperial government, for all its professed interest and concern, hinted at no financial support,<sup>84</sup> allowing this responsibility to remain with the hard-pressed colonies. "I only wish", wrote Brancker to Governor Slater,

I could promise you some serious activity on the part of the Imperial Government. But at present we are very hard up and cannot even suggest any measure of financial support. On the other hand, if your Colony, or all the West African Colonies combined, could put up some concrete suggestion of financial support locally, I feel sure that the Imperial Government would do its very best to take a share of the financial burden.... One thing is clear to me; we must strain every nerve to get the British Flag flying in the air in our West African Dependencies. 85

In the summer of 1930, W. A. Campbell went to West Africa as the Air Ministry representative with three main purposes in mind; to determine the needs of the colonies, the extent to which they were willing to co-operate, and to set out the lines along which development would have to take place.<sup>86</sup> Always sanguine in these matters, The Times added that "more recent reports indicate a keen desire for local air services wherever possible,..."<sup>87</sup>

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84. Even the costs of the Air Ministry survey were to be borne, for the most part, by the colonies themselves.

85. GNA, accession No. 3182/58, Brancker to Slater, May 28, 1930.

86. The Times, August 20, 1930, p. 5.

87. Ibid.

Campbell's five-month tour of West Africa produced an excellent report.<sup>88</sup> In addition to detailing requirements for each of the colonies, his main recommendation called for the establishment of a mails and passenger service to operate Dakar-Bathurst-Bolama-Konakry-Freetown-Monrovia-Tabu River-Grand Bassam-Takoradi-Ada-Lagos on a four day schedule, not unlike that set out by the Air Ministry earlier in the year.<sup>89</sup> Campbell was confident that such a service "could be operated successfully and would undoubtedly be beneficial to the Colonies".<sup>90</sup> Such confidence was premised on the belief that the air service would attract a good portion of the overseas mails traffic, even with the additional air mail fee of 6d. per ounce.<sup>91</sup> With the added possibility of carrying French mails along the coast, some 300 lbs. a week might be carried on the service with room still for two passengers.<sup>92</sup>

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88. Air Ministry, 'Report of a Visit to West Africa between June and October, 1930, for the Purpose of Studying Local Conditions and Ascertaining the Air Requirements of the British West African Colonies (hereinafter, the Campbell Report), November 29, 1930.

89. Ibid., pp. 132-145.

90. Ibid., p. 149.

91. The Blue Books of the colonies are the best source of mail statistics. In 1929, about 600 lbs. of letters and postcards were being sent to the United Kingdom each week. Campbell Report, p. 147.

92. Campbell Report, p. 147.

Campbell focussed special attention on Nigeria, the largest and most inviting colony for air transport services. Here he recommended a Lagos-Calabar (or Victoria) route, and a Forcados-Onitsha-Lokoja-Minna-Kaduna-Kano service, both to link with the inter-colonial line. The preparation of ground facilities would cost the colony £7,620, with annual maintenance charges of £350.<sup>93</sup> In the Gold Coast, a service was recommended linking the coast with Tamale and Yendi in the interior, with initial costs of £1,740, and an annual charge of £235.<sup>94</sup> Sierra Leone offered few domestic possibilities, other than a taxi and flying school organisation at Freetown, but a hangar, slipway and mooring facilities were estimated at £2,040, and annual maintenance costs of £60.<sup>95</sup> Finally, in the Gambia, "the most poorly served of all West African countries as far as mail service is concerned", Campbell recommended a weekly Bathurst-Georgetown-Basse seaplane service to link with the Dakar-Nigeria route, facilities for both services to cost £1,750.<sup>96</sup>

All in all, Campbell produced a fine detailed report on every aspect of potential aviation development in the colonies;

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93. Ibid., p. 17a.

94. Ibid., p. 71.

95. Ibid., p. 103.

96. Ibid., pp. 118, 123.

weather, airfield and mooring requirements, wireless needs, and traffic potential. In short, the Air Ministry, the local governments, and the commercial air transport developers now had in hand a documented study from which to work and plan. Only the timing of the report was poor. This was 1930 and the depression, not a propitious moment for the implementation of plans, great or small, had begun to hit hard. Campbell's report remained unpublished, although the general outline was known as early as January, 1931.<sup>97</sup> None of the recommendations were acted on in full before 1939.<sup>98</sup> Such a pattern of development had to await the end of the world war II, when they were clearly the basis for the expansion of West African Airways in the colonies.

One enterprising group did take note of the West African situation, and in August, 1931, the Aero Development Company was formed by J. I. Cowan, C. H. Bembridge, and E. S. Cotterill.<sup>99</sup> With one aircraft, a Junkers single-engine seaplane, the company proposed "to operate with Lagos as a base for linking up the coast probably to Dakar and to work

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97. The Times, January 2, 1931, p. 6.

98. See chapter X for developments 1935-1939.

99. BOAC, I.A. file No. 9/15/15, Internal Correspondence Re Air Services in West Africa, November 15, 1932. Details on the 'Aerial Development Company' [sic].

up the rivers for inland commercial transport".<sup>100</sup> Cotterill asked for no subsidy, and asserted confidently that "this undertaking is definitely one to commence immediately on a commercial basis. It is not an advertising stunt".<sup>101</sup> The Air Ministry response was less than enthusiastic. Bertram regretted the choice of a German aircraft, but admitted that was not "sufficient reason for obstructing their proposed activities".<sup>102</sup> Holloway did not even want to give a "qualified blessing" to the enterprise;

The moving spirit in the Walcot Trust Ltd., which has a paid up capital of £500 only is Mr. E. S. Cotterill who was bankrupt in 1923 and is the managing director of Walcot Air Lines, a 'catpaw' subsidiary of the Walcot Trust, with a paid up capital of £10. The latter company owes us £220 and Mr. Cotterill is trading on the fact that the Walcot Air Line has no assets to refuse any payment of our debt. I do not think that any air service in Nigeria floated under such financial auspices is likely to prove a success. <sup>103</sup>

Shelmerdine, in response to a French query, replied, "I cannot say that we have any great confidence that the Walcot Trust Ltd. are in a position to make a commercial

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100. AVIA 2/544, Flight of Mr. Bembridge and Mr. Cowan in a Junkers F13 Float Seaplane G-AAGU from England to Nigeria, July, 1931, Cotterill to CO, June 25, 1931.
101. Ibid. The Aeroplane (September 2, 1931) felt "Mr. Cotterill is probably justified in his optimism".
102. AVIA 2/544, Bertram to Holloway, July 9, 1931.
103. Ibid., Holloway to Bertram, July 11, 1931.

success of their venture".<sup>104</sup> Although Cowan insisted that the "present venture is purely a private one and is quite apart from the Walcot Trust Limited",<sup>105</sup> the Air Ministry remained unconvinced, and the experiment suffered accordingly. This did not deter Cowan. Leaving England on August 18 with Bembridge as pilot, and a German, Freiderich Kulig as mechanic, the Junkers arrived in Lagos on October 5, 1931.<sup>106</sup> Initial plans called for a weekly mail service, Lagos-Port Harcourt-Calabar-Tiko, to commence on November 6th.<sup>107</sup> The Aeroplane was enthusiastic, so too was the Nigerian Daily Times, the latter disappointed that the apparent government interest of a couple of years ago "seems to have vanished".<sup>108</sup> "It now remains", preached one editorial, "for the commercial community generally to make the fullest use of this valuable and interesting new line of communication".<sup>109</sup>

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104. Ibid., Shelmerdine to M. E. Chaumie, Directeur de l'Aéronautique Marchande, Paris, September 22, 1931.
105. Ibid., G.C.H. Parish (acting governor, Gambia) to CO, September 14, 1931.
106. Nigerian Daily Times, October 6, 1931. On the trip down, 120 persons were given 'joy-rides' at Freetown, and 2,000 more were on the waiting list when Cowan left.
107. AVIA 2/544, clipping from Nigeria Gazette, No. 59, October 29, 1931.
108. "Nach Niger", Aeroplane, September 2, 1931; Nigerian Daily Times, October 29, 1931.
109. Nigerian Daily Times, November 2, 1931.

This, the first and only air transport experiment in British West Africa before 1936, lasted less than a week.<sup>110</sup> Traffic failed to meet expectations. More important, Cowan realised how poorly prepared the country was to handle an organised air service. The company continued with charter work, 'joy-rides', and some mail carrying in southern Nigeria, for part of December in the Gold Coast, and until the middle of February, 1932, in northern Nigeria. On February 21, the aircraft was returned to Accra where it was dismantled for storage, and ultimately sold to Union Airways.<sup>111</sup> In the meantime, Cowan persisted with even grander plans. He proposed the formation of a new company, West African Airways Limited, with £50,000 capital, to operate 6 services in West Africa: Lagos-Kano, Lagos-Calabar, Accra-Kumasi-Takoradi-Accra, Lagos-Accra, Kano-Khartoum, and Kano-Niamey. The proposal required 6 pilots, five aircraft, and mail contracts with the Gold Coast and Nigerian post offices.<sup>112</sup> It suggested, if nothing else, that Cowan was incredibly ambitious, and certainly optimistic about possibilities in West Africa. With adequate capital and official support, the idea might have succeeded. As it was, Bembridge and Cowan separated and the proposal was not heard of again.

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110. Ibid., November 11, 1931.

111. BOAC, I.A. file No. 9/15/15, 'Aerial Development Company'.

112. Ibid., 'Commercial Considerations'.

Bembridge tried briefly to form a new company to operate a Kano-Niamey service to link up with the French trans-Saharan service, but when this failed, he followed Cowan into aviation obscurity. <sup>113</sup>

While failure thus seemed to be the hallmark of British West African aviation development, the whole of West Africa was becoming increasingly a focal point of interest in the early 1930s. In part, this was reflected in the growing number of private flights through the area, including those passing to and from England and South Africa. <sup>114</sup> A few private owners imported aeroplanes to Nigeria and the Cameroons. <sup>115</sup> The Shell company was particularly active in the Sahara, working with the French and Belgians on the trans-Saharan route. <sup>116</sup>

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113. Ibid. Little is known of Cowan before or after his Nigerian experiment. Bembridge was described as both a former Royal Canadian Air Force pilot and a former Royal Air Force pilot. His final African efforts attempted to obtain the support of Joe Allen, a Gold Coast and Nigeria trader, to no avail.
114. See, for example, R.W.H. Knight, "England to Nigeria across the Sahara", Shell Aviation News, XLIV (February, 1935), 4-10; R.C. Preston, "Timbuctu, Kano and Khartoum", ibid., IL (July, 1935), 14-16; W.G. Pudney, "Flying Down the West African Coast", Flight, October 27, 1932, pp.1001-03.
115. One Bud Carpenter owned a Moth and flew in Nigeria. In the Cameroons, Herr Blaitsch owned two German training aircraft, giving rise to the rumour that he was training German pilots. Coleman, How Aviation Came to Nigeria, p.11.
116. See "Air Transport in West Africa", Shell Aviation News, XLIV (February, 1935), 13-15; "Africa is no Longer Dark", ibid., IL (July, 1935), 19-21; "A Shell tour of Western Sudan", ibid., L and LI (August, September, 1935), 18-19, 8-11; "A Complete Organisation Across the Sahara by Shell", ibid., XXXVI (June, 1934), 17-20.

More important was the new emphasis placed upon West Africa as a 'jumping-off' point for services to South America, and as an alternative route to South Africa. Great Britain, as yet, had no interest in developing a South American service,<sup>117</sup> but the French and the Germans were active and successful. As an extension of the Toulouse-Dakar Aéropostale service, the French commenced experimental flights from Dakar to Natal (Brazil). By 1936, Air France was able to operate a scheduled mail service which ran until 1940.<sup>118</sup> The Germans, whose efforts elsewhere in Africa have already been noted, began the organisation of their South American service in 1930. Deutsche Luft Hansa (D.L.H.),<sup>119</sup> and affiliates in Spain and Brazil, initiated a Stuttgart-Rio de Janeiro service, with the Las Palmas-Fernando Noronha sector operated by ships, thus cutting 10 days from the all sea mail service.<sup>120</sup> At the same time,

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117. For later British interest, see below, chapter X.
118. Summary in Davies, A History of the World's Airlines, pp. 218-19. Details in E. Blanc, "Histoire de la ligne France-Amérique du Sud; de Toulouse à Dakar", Revue Scientifique, LXXIII (August 10, 1936), 485-94. Aéropostale was absorbed by Air France in 1933.
119. D.L.H. was formed in 1926 from the Aero Lloyd and Junkers groups of companies.
120. Davies, A History of the World's Airlines, p. 219. Notetoo, New York Times, June 4, 1931, p. 1.

airships of the Deutsche Zeppelin Reederei operated a summer service, Friedrichshafen-Recife-Rio de Janeiro, from 1932-1937.<sup>121</sup> In 1933, D.L.H. moved into British West Africa, winning British approval to establish a base at Bathurst, including a short-wave wireless station.<sup>122</sup> In February, 1934, D.L.H. inaugurated the first regular trans-Atlantic air mails service, using the ingenious device of depot ships, equipped with catapults, stationed in the Atlantic to pick up, re-fuel and launch the seaplanes on the next leg of the journey.<sup>123</sup> In November, 1934, D.L.H. was awarded a Gambian mail contract, the oft-neglected Gambia thus being the first of the British West African colonies to obtain a fast air mails service to Europe.<sup>124</sup>

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121. Ibid., p. 221. Like British airship hopes, German plans crashed with the 'Hindenburg' in New Jersey, May 6, 1937.
122. FO 371/16713, Political (Central) Germany, 1933, Proposed Experimental Trans-Atlantic Flights via Bathurst by Luft Hansa Flying Boats, January, 1933, C8803, Wigram(FO) to von Hoesch (German embassy), October 11, 1933. See also ibid., C290, C1896, C5649, C6289.
123. An excellent brief summary of this operation is provided in R.E.R. Dalwick, The Gambia (London, 1953), pp. 37ff. For background, see H.J.C. Harper, "The Development of the Aircraft Catapult", Journal of the Royal United Services Institution, LXXXI (August, 1936), 566-76.
124. Gambia, Blue Book for the Year 1935, p. 250. By 1938, of £1,346 spent that year on the "conveyance of mails beyond the colony", D.L.H. earned £1,058. Ibid., 1938, p. 278.

While these developments were watched closely in Great Britain, the main thrust of interest lay elsewhere, aimed generally at linking Nigeria and the Gold Coast with Europe and Great Britain, and possibly, South Africa. Beginning in 1930, the Air Ministry had to study a seemingly endless stream of proposals with these purposes in mind, some responsible, others of questionable merit. In November, 1930, a firm styled Thwaites, Jellicoe and Partners approached the Air Ministry for support of a scheme to operate across the Sahara and in West Africa. In May, 1931, Colonel Thwaites claimed that negotiations were in progress with French interests for a service Oran-Gao, with branches to Nigeria and the Gold Coast.<sup>125</sup> By 1932, the company, now incorporated as Anglo-African Airways Limited, had widened its horizons;

We are preparing to operate an international Air Route between London and Cape Town via Paris, Oran, Colomb Bechar, Reggan, Gao, Niamey, across Nigeria to Duala [sic], Boma, Lobito and Windhock [sic]... One of our objects is to offer an air mail service (without a Government subsidy) to Nigeria and the Gold Coast.... The Route across Nigeria would be approximately Jebba or Ilorin and Enugu....<sup>126</sup>

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125. FO 371/16421, Political (Western) General, 1932, W10067, Proposed International Air Route between London and Cape Town across Nigeria, Dannreuther (A.M.) to CO, August 24, 1932.
126. Ibid., W8191, Col. R. V. Jellicoe to Surveyor-General, Nigeria, April 16, 1932.

The proposal called for Nigeria to provide facilities, a request the Nigerian government turned down on the basis, "the demand for air transport in this country has not yet been sufficient" to justify government expenditure. <sup>127</sup>

This scheme appears to be the same one rumoured in South Africa. <sup>128</sup> Stanley was especially concerned about the French interests, and the implied threat to the Imperial Airways Cairo-Cape Town route. "The scheme looks fantastic", he wrote, but "hardly financially payable. Nevertheless,

there may be some fire behind the smoke,  
and I think it right to bring the alleged  
intentions of our Gallic friends to the  
notice of the powers that be in London. <sup>129</sup>

The Air Ministry calmed these fears for the moment, pointing out that no air transport company could operate the proposed service without a heavy subsidy, and that was not forthcoming. <sup>130</sup>

In March, 1933, L.H.G. Walford of Walford Lines Ltd. formulated a scheme for a new company, West Coast Airmails Ltd., to run a weekly trans-Sahara London-Nigeria air service, again in conjunction with the French company,

127. Ibid., G. Hemmant (CS, Nigeria) to Anglo-African, June 11, 1932.

128. Rand Daily Mail, July 15, 1933.

129. FO 371/17331, Political (Western) General, 1933, Air Mail Service between Europe and South Africa, W9518, Stanley to Harding, July 21, 1933.

130. Ibid., W12563, Holmes (DO) to Liesching, November 2, 1933.

Compagnie Générale Trans- Saharienne (C.G.T.S.), with branch lines to the Gold Coast, Dahomey and the Cameroons.<sup>131</sup> Both the British Air Navigation Company and Spartan Air Lines Limited aired proposals for local services in Nigeria and the Gold Coast.<sup>132</sup> The former claimed to have come to an agreement with C.G.T.S. to run a feeder service at Niamey and Cotonou where mails from the British West African colonies could join the service to Paris.<sup>133</sup> Yet another scheme involved the Portuguese company, Companhia de Informacao e Trafico Aerco (CITA), Peter Falk, the sometimes Junkers promoter in South-West Africa, and the ubiquitous Colonel Jellicoe, now described as head of General Airways Trust Limited. Falk approached the Dominions Office with a proposal to link Toulouse and Cape Town, with C.G.T.S. operating to Cotonou, the Belgian company, SABENA, to Boma, CITA to Lobito, and Jellicoe's new company, West African Airways, to Cape Town. Feeder services would run from Bathurst and Freetown, Zinder and Kaduna.<sup>134</sup>

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131. FO 371/19591, Political (Western) General, 1935, W230, A.M. aide-mémoire, January, 1935, 'Civil Aviation in the British West African Colonies'.
132. Ibid., Begg (CO) to Bertram, memorandum, 'Schemes for Air Services in or to British West Africa', January, 1935.
133. FO 371/18499, Political (Western) General, 1934, W10947, H.C.W. Hayter (British Air Navigation) to CO, November 20, 1934.
134. FO 371/19591, W230, A.M. aide-mémoire, January, 1935. See too, Aeroplane, July 17, 1935, p. 94.

There were other schemes in the wind as well,<sup>135</sup> and both French and Belgian airlines had approached Nigeria for landing rights or services at Kano and Katsina.<sup>136</sup> All had two things in common; a major role for French interests, and the aim of crossing the Sahara to the West African colonies, "a more rapid communication northwards and southwards than could be offered by a long feeder line linking them with the Imperial Airways service near the Great Lakes".<sup>137</sup> Of the three possible routes which might serve British West Africa, the Sahara, now mastered, was the most practical, political and strategic considerations aside. In September, 1934, the Franco-Belgian pool service went into weekly operation linking Europe with the Congo, thus demonstrating the route's feasibility.<sup>138</sup> The question posed of Imperial Airways and the Air Ministry was no longer that of whether or not British West Africa should be brought into the empire's network of air communications, but how such a policy was to be effected.

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135. See that of R. H. McIntosh in The Times, September 13, 1932, p. 3.

136. FO 371/19591, W230, Begg memorandum, January, 1935.

137. The Times, September 13, 1932, p. 3.

138. French-Belgian cooperation on the Sahara route commenced in 1929. FO 371/14076, Political (Western) France, 1929, Granville to FO, February 4, 1929. For background and British observations, see AIR 2/322, Features of Convention regarding an Air-line from Belgium and France to Central Africa and the Congo. Also, AVIA 2/676, Proposed Extension of French Air Service between Antananarivo and Broken Hill across Nigeria to Algiers, 1934.

With the main thrust of British efforts aimed at linking India, South Africa and Australia in the imperial chain, the 'chosen instrument' was in no position to establish a third major trunk service to West Africa. Nor could there be any suggestion of making major use of foreign ground and/or air facilities, such as contemplated by the various private proposals. The main reason why they received such little encouragement from the Air Ministry was that the gist of their intentions delivered British traffic into the hands of foreign carriers, a notion inimical to British political interests and plans in the making to establish the Empire Air Mail Scheme. <sup>139</sup> There was the additional fact that under the terms of the 1930 agreement with Imperial Airways for an African service, Imperials had first right of refusal on all proposed British services in Africa. <sup>140</sup> In effect, the West African field remained clear for Imperial Airways until such time as they decided to act or relinquish their claims to the area. Unwilling to surrender their mandate, and mindful of the factors of costs and politics, Imperials opted to develop a Khartoum-Kano feeder service across French Chad to link British West Africa with the main imperial African route.

Although Imperials' interest in this route appears publically only in 1934, it is certain that discussions

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139. See below, Chapter IX.

140. Cmd. 3696 (1930).

had taken place long beforehand. The Air Ministry was obtaining information on the route since the first R.A.F. flight in 1925, and in 1929, a British-French concordat exchanged rights of transit through Chad and the Rhodesias.<sup>141</sup> In 1932, the Under-secretary of State for Air, Sassoon, hinted that "a branch civil air line will be brought into being...."<sup>142</sup> In 1934, Imperial Airways formally requested a copy of the 1934 R.A.F. West Africa flight report, and plans were clearly well underway.<sup>143</sup> Such planning was coming none too soon. With developments taking place in other parts of Africa, the imperial neglect of British West Africa's needs did not go unnoticed.<sup>144</sup> Lord Plymouth, Under-secretary of State for the Colonies, complained that, during a 1934 visit to West Africa, he had been "reproached" because no air service was being provided.<sup>145</sup> The decision to develop the Khartoum-Kano line did not go unchallenged either. C. G. Grey and the editors of the West African Review argued for a direct route (trans-Sahara), suggesting that West Africa was being sacrificed for political reasons by being offered a slower and roundabout route to Great Britain.<sup>146</sup>

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141. A copy of the so-called Thomson-Eynac concordat of August 7, 1929 may be found in FO 371/19639, Political (Western) General, 1935, W9582.

142. Hansard, CCLXII, March 10, 1932, col. 2012.

143. FO 371/19591, W230, A.M. aide-mémoire, January, 1935.

144. See letter by Sir William Geary in The Times, February 13, 1933, p. 17.

145. The Times, July 19, 1935, p. 9.

146. C. G. Grey, "Air Transport in West Africa", West African Review, VI (March, 1935), 5-6. Editorial, Ibid., pp.4,10.

All the criticisms rang with some truth, but given the still difficult problems Imperial Airways had to face elsewhere, and the legitimate concerns of imperial prestige, the answer given to the West African problem was probably the only one in the circumstances. With the decision made, Imperial Airways now faced the special practical difficulties of putting the route into operation, some of which, like the need to provide anti-amaryl facilities at airports in Nigeria to prevent the spread of cholera and Yellow fever, inhibited a more rapid rate of development. <sup>147</sup>

Subsequent progress in West Africa will be discussed later. In the meantime, Great Britain was poised to introduce a dramatically new concept, the Empire Air Mail Scheme, designed to provide Great Britain and the empire with the finest air mail service in the world. The scheme was introduced first in Africa.

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147. See discussion, "Air Transport to West Africa", West African Review, V (August, 1934), p. 11, and below, chapter X.

## CHAPTER IX

GRAND DESIGN: AFRICA AND THE  
EMPIRE AIR MAIL SCHEME, 1934-1939

The advantage of receiving the earliest intelligence, and of conveying their orders with celerity, induced the emperors to establish throughout their extensive dominions, the regular institution of posts.

Edward Gibbon, 1776. <sup>1</sup>

PART I: THE IDEA

While air transport matters in British West Africa were attracting an increasing amount of interest in the early 1930's, the bulk of British concern continued to focus on the larger questions affecting Imperial Airways and the empire air routes. Basically, the questions turned on the capacity of Great Britain's 'chosen instrument' to continue its appointed task of linking the sprawling empire with a chain of imperial air routes, and, at the same time, to pursue the goal of 'commercial self-sufficiency'. <sup>2</sup> Since

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1. Christopher Dawson, ed., Gibbon's Decline and Fall of the Roman Empire, vol. I (London, 1954), 51.
  2. 'Commercial self-sufficiency' points simply to the idea that Imperial Airways would be able to operate without government subsidy. As late as 1935, the airline continued to pay lip service to the idea. Noting an increase in net profit to £133,769 in 1934-35 (v. £78,571 in 1933-34), a report argued that  
this progressive improvement serves to  
illustrate the success of a policy which

1924, these two aims had been explicit in the agreements between the government and Imperial Airways. The subsidies provided for the operation of the European, Indian and African services <sup>3</sup> were modest in amount and of limited term, clearly intended as interim support to be withdrawn once Imperial Airways could profitably operate on a non-subsidised basis. In short, British air policy had held to the Churchill dictum that "civil aviation must fly by itself", if not immediately, then in the near future. <sup>4</sup>

Some arguments could be made for the success of this policy. Air traffic returns and receipts showed a progressive increase in the early 1930's, <sup>5</sup> Imperial Airways had shown a profit since 1926 and paid dividends since 1929, <sup>6</sup> and

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2. (continued) has consistently had as its aim the establishment on a commercial basis of a new system of communications of vital importance to the British Empire.  
Imperial Airways, Report of the Directors and Statement of Accounts for the Year ended 31st March, 1935.
3. See Cmds. 3143 (1928) and 3696 (1930).
4. See above, pp. 44-46.
5. Total ton mileage increased from 1,060,800 in 1931 to 4,772,200 in 1935; passengers increased from 23,817 to 66,324 during the same period. A.M., Civil Aviation Statistical and Technical Review (1938), p. 11.
6. The company operated at a loss in 1924 and 1925. For dividends paid, see Higham, Britain's Imperial Air Routes, p. 349.

subsidies as a percentage of total company receipts were decreasing.<sup>7</sup> On the operational side, Imperials had pursued their mandate with some success, having established the Indian route in 1929, the Cape route in 1932, and the route to Australia in 1934. Plans were also afoot to serve West Africa<sup>8</sup> and to cross the Atlantic.<sup>9</sup> Clearly, much had been accomplished in a few years.

Yet, by 1932, there were certain signs that the future was not as rosy as appeared. British air policy was not designed to take into account an air world of rapidly changing technology, an increased emphasis on speed, and the expanding competition for markets, routes and prestige. The agreements between the Air Ministry and Imperial Airways made no provision for the costs of rapid change and modernisation which would allow Imperials to continue the expansion and improvement of services throughout the empire. As had been the case since the formation of the company, the need was for more operating capital than was being provided, especially to allow a faster rate of obsolescence and

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7. From 64% in 1924 to 45.4% in 1934.

8. The Times, April 27, 1935, p. 7; Aeroplane, May 1, 1935, p. 488. See below, chapter X.

9. For a short survey of progress on the trans-Atlantic route, see Higham, Britain's Imperial Air Routes, pp. 182-202.

re-equipment of the company fleet.<sup>10</sup> A corollary to this need was the necessity for British policy to re-affirm Imperial Airways' monopoly status, preferably in the form of long-term agreements between the airline and the government. Both adequate financial resources and security of operation were essential to facilitate future planning. Clearly, as the Spectator argued, what was called for was a "wider outlook and more vigorous spirit" in the formulation of a new British air policy, and more emphasis should be placed on "the mails".<sup>11</sup> Writing in The Times, Harry Brittain advocated a "speed up" of the air mails,<sup>12</sup> a view endorsed by W. Sempill;

The time is, I suggest, overdue for a complete review of the Imperial and parochial policies of the country in connexion with the development of civil and commercial aviation.<sup>13</sup>

The tying of a 'new' British air policy to an emphasis on air mail services was timely and to the point. There were

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10. While Imperial Airways annually allowed an amount to cover obsolescence, it was becoming increasingly inadequate to meet the needs for a larger fleet of more expensive aircraft. A 1926 Argosy cost about £28,000; a 1936 Short S.23, £61,000.
  11. "Empire Air Routes", Spectator, CXLVIII (February 27, 1932), 228-29.
  12. The Times, March 9, 1932, p. 8. Brittain, a director of D. Napier & Sons, the aero-engine manufacturers, was a popular critic and observer of the air scene. See his By Air (London, 1933) and Wings of Speed (London, 1934).
  13. The Times, March 9, 1932, p. 8.

three possible sources of added financial support upon which Imperial Airways could draw: (a) increased subsidies for all services, (b) an increase in authorized capital, and (c) increased revenues from traffic. (a) was an unlikely possibility given the ever obdurate mood of the treasury and government hopes for eventual 'commercial self-sufficiency'. (b) was similarly a remote possibility. As yet, Imperial Airways shares already on the market were not competitive with more profitable investments. <sup>14</sup> (c) offered the best opportunity, especially the prospect of increased revenues from the mail traffic. While passenger and freight traffic could be encouraged, they could not be guaranteed, nor would any reasonable estimate of future increases in these loads produce sufficient revenue to meet company needs. Air mail traffic, on the other hand, could be guaranteed by the government. If the responsibility of carrying all first class external mails in the empire was assigned to Imperial Airways, the anticipated revenues from such services promised to be at least adequate to place the airline on a near-commercial footing. Moreover, if the costs to the public for air mail services were reduced to an inexpensive level, comparable to existing land and sea mail services, Imperials could then provide the benefits of swifter communications to all peoples in all parts of the empire.

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14. From 1924-1932, the amount paid in dividends to shareholders amounted to only 3% paid up capital. AVIA 2/636, I.A. memorandum, 'Future of Civil Air Communications of the Empire', p. 7.

Thus, the air mails were seen as the key to the future operation of imperial air services, and in the genesis of this idea lay the evolution of the Empire Air Mail Scheme (hereinafter, E.A.M.S.), seen by Imperials' Burchall as "the most important development since flight itself was achieved".<sup>15</sup> The E.A.M.S. was indeed an important development, particularly for British Africa where the first 'all-up' mails service were put into operation. Nonetheless, a number of difficulties had to be overcome before the idea was accepted, not the least of which was the need to win GPO approval for the project.

According to the GPO's historian, "the story is one of insistent demand for improvement",<sup>16</sup> yet the GPO was markedly reluctant to take full advantage of air mail opportunities. From the beginnings of air services in 1919, GPO contracts with commercial air carriers had provided the rights to air mail carriage but only for mail surcharged above the existing surface postage rates.<sup>17</sup> The

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15. H. Burchall, "The Immediate Problems of Commercial Aviation", in J. Mayers and B. Spiers, eds., Where Do We Go From Here (London, 1938), p. 43.
16. Howard Robinson, The British Post Office. A History (London, 1948), p. vii. See also his Britain's Post Office (London, 1953) and Carrying British Mails Overseas (London, 1964) for background and general history of GPO operations.
17. For a general discussion of postal services and GPO attitudes to air mail services, see Sir Frederick Williamson, "The Postal Services", Journal of the Royal United Services Institution, LXXXII (August, 1937), 501-19.

discrimination between air and other mail services was obvious, but in 1933, the GPO remained quite content with their existing arrangements with Imperial Airways.<sup>18</sup> For Imperial Airways, the arrangements were less than satisfactory. Beginning in 1932, Imperials began to press for changes aimed at persuading the GPO to revise its air mail policies. Pointing out that the air mail traffic on the Indian and African services had "not anything like approached the estimates on which the Air Ministry/Imperial Airways agreements were based", Imperials' secretary, S. A. Dismore, continued, "that this is largely attributed to, if not caused by, certain working policies of the General Post Office".<sup>19</sup> In a 13 page memorandum submitted to the GPO, the airline took strong exception to the idea that "the aircraft is the only transport vehicle singled out for special treatment". If air mail loads were low, the memorandum noted, it was because customers were reluctant to pay the surcharge.<sup>20</sup>

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18. Sir Frederick Williamson, lecture given to the Post Office Telephone and Telegraph Society of London, November 20, 1933, published as The Air Mail Service, Post Office Green Paper No. 1 (London, 1933). In general, works on British Air Mail services attract the philatelist, not the historian. See N. C. Baldwin, The Air Mails of British Africa, 1925-1932 (Sutton Coldfield, 1932) and Francis J. Field, British Air Mails (Sutton Coldfield, 1935). For a romantic survey of services, see F. V. Monk and H. T. Winter, Air Mail (London, 1936).
19. AVIA 2/1897, Dismore to Bullock, May 3, 1932. Pudney attributes the conception of the E.A.M.S. to Dismore in his The Seven Skies, p. 78, but see chapter IV, footnote 139.
20. AVIA 2/1897, enclosure memorandum submitted to the Postmaster-General's Committee, p. 5. In 1936, only 15% of British letter mail to South Africa went by air

Imperials took similar exception to the GPO idea that the air mails must show a 'profit', a feature not demanded of other services, an argument echoed in the House by the South African diamond magnate, Sir Alfred Beit. He urged

greater generosity on the part of the Post Office in the matter of air mail contracts. I am afraid the Post Office is inclined to snuff out at its start this infant service by demanding a profit.... 21

By March 1933, Imperial Airways collected its concerns in an important 26 page memorandum submitted to the Secretary of State for Air.<sup>22</sup> Surveying Imperials' history to 1933, the memorandum insisted that the airline had achieved all that was asked of it to date, and the company had "made steady and remarkable progress towards becoming self-supporting".<sup>23</sup> Still, the problems were many. There was concern that the company fleet would be reaching "complete obsolescence" at the same time as the existing agreements expired in the period 1937-1939. Imperials could not plan beyond that period, it was explained, until "the views and

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20. (continued) (16% to India and Ceylon). D. O. Lumley (GPO), "La Poste Aérienne Anglaise", Revue Générale des Transports par Air, Eau, Terre, IV (December 15, 1939), 575.

21. Hansard, CCLXXV, March 14, 1933, col. 1889.

22. AVIA 2/636, enclosure, 'Future of Civil Air Communications of the Empire', a memorandum submitted by the Board of Directors of Imperial Airways to His Majesty's Government, March 28, 1933. Also in CAB 24/240.

23. Ibid., p. 6.

intentions of H.M. Government as to at and after 1938 are known in sufficient detail and with sufficient certainty".<sup>24</sup>

The gist of this point was that it required about 3½ years to translate a new aircraft conception to on-line service, and thus decisions could not await the agreement expiry dates. As it was, there was no suitable British aircraft of "standard" design in production, and the company had had to take the risk of ordering whole new series (e.g., 'Hannibal', 'Atalanta') without prior testing. "While within prudent limits", the memorandum continued,

the Board will look forward to renewing its oldest aircraft within the remaining years of the agreements, it is obvious that progress cannot be fully maintained and prudence must necessarily rule....<sup>25</sup>

The memorandum complained, as had Dismore the year before, of the disappointing amount of traffic, indicating special concern that the air mail and mail revenue had not grown at rates anticipated by the Colonial Office and the Air Ministry.<sup>26</sup> Because of this, the company was able to do no more than 'break even' on its operations as the

24. Ibid., p. 4.

25. Ibid., p. 3.

26. Ibid., pp. 6-7. At the same time, air mail returns on the African route had increased 54.8% vs. 33% for the empire and European routes as a whole. The African service carried 3,530 lbs. of letters in the second quarter of 1932, and 5,363 lbs. during the same period in 1933. The Times, July 27, 1933, p. 12.

subsidies agreed upon were premissed on greater operating revenues. It had also been unable to create adequate financial reserves or pay generously in dividends to shareholders. <sup>27</sup>

The memorandum pointed to special problems on the African route, arguing that the still small time-saving on the London-Cape Town service vis-a-vis sea transport had "retarded traffic development". <sup>28</sup> While traffic returns were expected to improve with the introduction of the larger and faster 'Atalanta' aircraft, this change in itself was anticipated to create further problems. As the African route lay well inland from the seaboard, Imperials was already paying some £50,000 p.a. for the transport of fuels and supplies from the coast to interior stations. These costs, the memorandum warned, would "increase pro rata for larger and more powerful aircraft and for a more frequent service....". <sup>29</sup> Fundamental to this concern was the question of just how large and powerful an aircraft could be used in African conditions. To Imperials, "it appears that land aircraft may well be approaching the maximum size which will be economically possible". <sup>30</sup>

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27. AVIA 2/636, I.A. memorandum, p. 7.

28. Ibid., p. 12.

29. Ibid., p. 11.

30. Ibid., p. 12. See Appendix I for aircraft weights.

Aircraft design development had brought about larger and heavier aircraft which demanded stronger and longer runways for landing and take-off runs. In Africa, generally, a great deal of capital expenditure would be required to upgrade existing airports or build new ones, and all would have the special problems of African weather, topography and soil features to overcome.<sup>31</sup> The problem, as Imperial Airways saw it, was that larger aircraft were indeed required on the route if Africa's full traffic potential was to be exploited. The answer appeared to lie in a re-equipment of the company fleet with marine aircraft or 'flying boats'.<sup>32</sup> With this equipment, fuel and supply transport costs would be lowered as the flying boats would make use of coastal stations. By using the waters of bays, lakes and rivers, the costs of landing facilities would be much less. And, marine aircraft could be of large size, meaning that as much traffic as possible could be invited, especially air mail traffic.<sup>33</sup>

Coupled to the marine aircraft idea was the proposal basic to the formulation of the E.A.M.S. In several pages of closely argued criticism of the GPO, the company complained

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31. Ibid.

32. Ibid., p. 14.

33. There were structural and other technical limits to flying boat size, and the size, lay-out and depth of water landing areas had to be considered. There were costly facilities to be organized as well, but in all respects, the flying boat operation promised to provide greater capacity at lower costs.

that they did the work and took the risks while the GPO took the profits. <sup>34</sup> The remedy called for was an 'all-up' scheme whereby Imperial Airways would carry all first class mail between points served by the empire services on an unsurcharged basis. The idea was to "link the empire" as never before. <sup>35</sup> With the mail scheme as the core of its plans for the future, Imperial Airways called for a thorough study to be made of the scheme and its implications, arguing that "this Memorandum deals with one of the most important factors in binding the Empire together". <sup>36</sup>

Imperial Airways' proposals were of a far-reaching character indeed, calling for a fundamental change in imperial air policy. Lord Londonderry circulated the memorandum to the cabinet in April with an accompanying note of surprisingly favourable comment. <sup>37</sup> Londonderry appears to be one of the first to accept the notion that Imperial Airways might not be able to carry on in the future without a subsidy, noting, nonetheless, that "a steady advance towards economic operation has been accomplished; and Imperial Airways are markedly nearer this ultimate goal

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34. AVIA 2/636, I.A. memorandum, pp. 16-17.

35. Ibid., p. 20.

36. Ibid.

37. CAB 24/240, C.P. 110 (33), 'Future of Civil Air Communications of the Empire', Note by the Secretary of State for Air, April 13, 1933. Londonderry was in office from 1931-1935.

than their continental competitors".<sup>38</sup> Generally, Londonderry endorsed Imperials' proposals, pointing out that

civil air transport, properly hand ed, is destined to be a factor of steadily increasing importance to the British Commonwealth of Nations, not merely commercially as a means of stimulating the flow of inter-Imperial trade, but also politically, as a means of promoting and maintaining those close and continuous contacts between the constituent members of the Commonwealth which are so essential to our Imperial well-being.<sup>39</sup>

Londonderry's enthusiasm was the image of Hoare's a few years before. Here was the reminder of the 'imperial mission' dimension to Imperial Airways' mandate in Africa and elsewhere in the empire. As well, the company memorandum had struck at a most propitious moment, despite the continued depression and the renaissance of a militant Nazi Germany on the continent. The French were re-organising their commercial aviation and supporting it with large subsidies.<sup>40</sup> In the United States, the first 'modern' aircraft were coming off the assembly lines, a development which would surely hasten the rate of

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38. Ibid., para. 3. The note pointed out that French, German and American subsidies represented 88%, 63% and 65% of airline revenues, compared to Imperials' 35%.
39. Ibid., para. 5. See also CAB 23/76, 48(33)8, Cabinet conclusions, July 26, 1933. *Italics in original.*
40. Air France was being formed from Air Union, La Ligne Farman, C.I.D.N.A., Air Orient and Aéro-Postale with a subsidy in 1933 of £1,456,000. The Times, June 1, 1933, p. 13.

British aircraft obsolescence.<sup>41</sup> The Americans were also pressing forward with air mail services, and much of the criticism directed at Imperial Airways and the Air Ministry was based on the facts and fancies of American postal progress.<sup>42</sup> Speed on the routes was yet another matter, as was punctuality of service, Imperial Airways lagging behind traditional rivals in both respects.<sup>43</sup> By the end of 1934, a critical Parliamentary deputation was demanding that "this country must lead, and not be second or third in civil aviation".<sup>44</sup> The airline memorandum was thus

41. The first 'modern' monoplane transports were the Douglas DC-1 (first flown, July 1, 1933) and the Boeing 247 (first flown February 8, 1933). They were characterised by stressed metal wings, stressed skin rounded section monocoque fuselages, lower power loadings, higher wing loadings, wing flaps, variable pitch propellers, retractable undercarriages and cowlings on radial engines. Peter W. Brooks, The Modern Airliner: Its Origins and Development (London, 1961), pp. 19, 67. See also his "The Development of the Aeroplane", Journal of the Royal Society of Arts, CVII (January, 1959), 97-114.
42. For a contemporary view of the American air mail scene, P. T. David, The Economics of Air Mail Transportation (Washington, 1934).
43. In early 1936, the Air Ministry was moved to compare Imperials' performance with Air France, K.L.M. and Ala Littoria. Imperial Airways was indeed slightly behind all. AVIA 2/1966, Punctuality of Certain Foreign Air Services in Comparison with Imperial Airways, 18.4.36-.
44. PREMIER 1/147, Brief on British civil aviation presented to Macdonald, Londonderry and Sassoon (Under-secretary of State for Air), November 27, 1934. The parliamentary group included Admiral Murray Sueter, Oliver Simmonds, B.N.H. Whiteside, F. E. Guest, the former Air Minister, and Commander O. Locker-Lampson.

supported by a wealth of evidence which suggested that Great Britain was falling behind in matters of civil aviation development. Sweeping changes were called for, or whatever pretensions Great Britain had to imperial air supremacy might well be abandoned. Londonderry, for one, was not prepared to accept such a fate, nor, as it turned out, was the British cabinet.

Londonderry's note did not demand immediate action, the Air Minister preferring to wait until after the summer recess.<sup>45</sup> By late fall, however, he had prepared a more comprehensive statement to place before the cabinet, outlining four main issues that had arisen out of the Imperial Airways memorandum:

- (1) When the existing agreements with Imperial Airways run out in 1937 to 1939, are we prepared to continue to subsidise the development of commercial air transport?
- (2) If so, what are to be the future relations between the Government and Imperial Airways, i.e., do we intend to use the Company as our chosen instrument for the development of Imperial trunk air routes?
- (3) If the answers to (1) and (2) are in the affirmative, is there to be any attempt to establish the Company on a broader Imperial basis by endeavouring to evolve a scheme of closer co-operation and mutual partnership between the United Kingdom and the Dominions and Colonies?

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45. CAB 24/240, C.P. 110 (33), para. 5.

- (4) Is it possible by a greatly extended use of aircraft for the carriage of mails to accelerate the development of a system of civil air communications and advance the date by when air transport will become commercially self-supporting? 46

Again, Londonderry praised Imperial Airways' record to date, but warned of the need to take action in the face of aggressive foreign competition, especially the Americans, who were "sparing no effort to get ahead of us with this newest form of transport, for which they clearly believe there is a great future". 47 Londonderry complained,

I have to contend with a growing volume of criticism, which holds strongly that the United Kingdom has not to date pursued, and is not to-day pursuing, a sufficiently forward policy;... 48

As regards (4), the Air Minister admitted it raised a great many issues, but believed, as did Imperials, that

this is much nearer being an immediate practical proposition than is generally realised, and, secondly, that if a workable scheme can be devised, it seems to me that a bold experiment in the carriage of all first-class mail matter on some selected route, e.g., the African route, would be well worth essaying, and might capture the public imagination as a real constructive achievement. 49

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46. CAB 24/243, C.P. 249 (33), 'The Future of British Commercial Air Transport', Note by the Secretary of State for Air, November 29, 1933, para. 2.

47. Ibid., para. 4.

48. Ibid.

49. Ibid., para. 6.

In an important aside, Londonderry claimed Pirow, the South African Minister of Defence and Posts, was attracted to the idea.<sup>50</sup> As with the establishment of the Cape route, the success or failure of any proposed scheme in Africa would depend upon the degree of South African co-operation, and this, in turn, depended to a large extent on the responsiveness of Mr. Pirow.<sup>51</sup>

Finally, Londonderry asked the cabinet to appoint a sub-committee

To review the present position of British commercial air transport in the light of the memorandum recently prepared by the Board of Imperial Airways, with special reference to the further development of Imperial air routes; and to make recommendations as to future policy, and in particular as to the relations between His Majesty's Government and Imperial Airways.<sup>52</sup>

Although the Postmaster-General, Kingsley Wood, was doubtful that Imperial Airways' idea was workable "until the wide gap between the costs of air and surface transport is greatly narrowed,...", he had no objections to a closer study being made,<sup>53</sup> and on December 6, 1933, the cabinet

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50. Ibid. Pirow had visited London in the summer of 1933 for discussions with British Government officials.
51. But see below and chapter XI for a fuller discussion of South African attitudes.
52. Ibid., para. 7.
53. CAB 24/245, C.P. 286 (33), 'Future of Civil Air Communications of the Empire', memorandum by the Postmaster-General, December 1, 1933, p. 4.

authorised a sub-committee to report on the matter along the lines suggested by Londonderry. <sup>54</sup>

Through the first months of 1934, the sub-committee addressed itself to the many aspects of the company proposals, all of which raised problems of financing, dominion and colonial co-operation, and operational feasibility. But, in July, the sub-committee's final report generally accepted the Imperial Airways proposals in toto. <sup>55</sup> Of the several questions requiring decision, the sub-committee singled out the air mail idea as "by far the most important", considering

the scheme will represent an epoch-making advance in our system of Imperial communications and feel that, if properly presented to them it should make a strong imaginative appeal to the Dominions, India and the Colonies.... <sup>56</sup>

The report set out the details of the proposed scheme. There were to be seven services a week to Egypt, three of which would continue on to Kisumu, and two of those to carry on to South Africa. <sup>57</sup> Coupled to this "remarkable multiplication of existing services", the speed along the routes was to be accelerated with schedules based on

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54. CAB 23/77, Cabinet 68 (33), Conclusion 6, December 6, 1933. The sub-committee was chaired by Walter Runciman, President of the Board of Trade. Other members were Sir Samuel Hoare, J. H. Thomas, Sir P. Cunliffe-Lister, Lord Londonderry, Sir Kingsley Wood, and L. Hore-Belisha.
55. CAB 27/558, C.P. 190 (34), Committee on Commercial Air Transport. Report, July 21, 1934. See also CAB 24/250.
56. CAB 27/558, C.P. 190 (34), 'Report', paras. 3-4.
57. Ibid., para. 5.

the use of new aircraft with a cruising speed of 130 m.p.h. Thus, Kisumu and Cape Town would be brought within 2½ and 4½ days of London respectively. <sup>58</sup> In the sub-committee's view,

the combined improvement in speed and frequency,... taken in conjunction with the bold innovation of the carriage of all first-class mail by air, should in our judgment put this country in the forefront of long-distance air and postal development. It will, moreover, we consider, be of the utmost value to the Empire as a whole, alike from the political, the commercial and the strategic points of view. Its achievement would, in our opinion, be worth a very substantial additional expenditure.... <sup>59</sup>

As the financial side of the scheme was premised on substantial contributions forthcoming from the dominions and the colonies, the sub-committee recommended that negotiations be initiated at an early date to obtain "their agreement to the scheme in principle". <sup>60</sup> It was hoped as well that West Africa and Hong Kong could be brought into the scheme, these colonies being as yet without air services. <sup>61</sup> In its 'Summary of Conclusions', the report agreed with the need for continued subsidisation of British commercial air

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58. Ibid. Existing services used aircraft with a cruising speed of 100 m.p.h., requiring 6¼ and 10¼ days to Kisumu and Cape Town. The proposals counted on the introduction of night flying to accelerate the services in addition to faster aircraft.

59. Ibid.

60. Ibid., para. 6.

61. Ibid., para. 7.

transport, and recommended that Imperial Airways should continue to be the 'chosen instrument', with the "maximum of commercial freedom" accorded its operations. To this end, and in order to exploit the air mail scheme fully, the company should be given a new 15 year contract. <sup>62</sup>

This report, the first comprehensive study of the air mail question since 1922, <sup>63</sup> was approved by the cabinet on July 25, 1934. <sup>64</sup> With the air mail scheme now the declared policy of the British government, the next years were to be taken up in the working out of the details and the difficult negotiations which would finally appear as the Empire Air Mail Scheme. The difficulties, especially those turning on the financing of the scheme, were not easy to overcome, and the protracted negotiations with the British African governments were not unlike those which had preceded the establishment of the London-Cape Town route before 1932. <sup>65</sup>

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62. Ibid., para. 12.

63. A.M., Civil Aviation Advisory Board, Report on Imperial Air Mail Services, Cmd. 1739 (1922).

64. CAB 23/79, Cabinet 30 (34) 5, July 25, 1934.

65. See above, chapter IV.

PART II: THE EXECUTION

By October, 1934, the Air Ministry had prepared a first draft of the proposed scheme for distribution to the interested dominion and colonial governments.<sup>66</sup> It was an appeal for greater subsidy and other financial support, pointing to "the outstanding advantages offered".<sup>67</sup> In outline, the scheme was to commence in 1937 with all first-class mail to be carried by Imperial Airways, for the most part in large flying boats with a payload of roughly 3½ tons.<sup>68</sup> The use of flying boats, it was explained, was dictated by several considerations, not the least of which was the need to meet the demands of the Union government to see Imperial Airways operate a coastal service to Durban instead of a land service south of Kisumu to Johannesburg or Cape Town.<sup>69</sup> Higher speeds could be obtained with

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66. AVIA 2/1911, Empire Air Mail Scheme. Final Draft of Telegrams and Explanatory Memoranda for Empire Governments, enclosure, 'Empire Air Mail Scheme (A Scheme for the Carriage of all First Class Empire Mail by Air on Existing Empire Air Routes)', October, 1934.

67. Ibid., p. 2.

68. Ibid. 1937 was considered to be the earliest date by which new aircraft could be off the drawing boards and in service.

69. See above, pp. 412-17, and below, chapter XI, for more on South African plans to reduce Imperial Airways presence in South Africa. Imperials' 'Cape' route terminated at Johannesburg as of March 24, 1936, and a final service left Johannesburg June 7, 1937 with the change to the coastal Durban service. Stroud, Annals, pp. 131, 146.

landplanes, but they also meant higher aircraft purchase and other costs, and would involve "an unjustifiable increase in the subsidy payments".<sup>70</sup> The introduction of flying boat services meant too an abandonment of the Imperial Airways trunk route south of Kisumu, but the plan visualised the maintenance of adequate 'feeder' or 'light trunk' services by Wilson Airways and RANA to be arranged by Imperial Airways so that Uganda, Kenya, Tanganyika, Northern and Southern Rhodesia and Nyasaland could be integral partners to the scheme.<sup>71</sup>

As with existing agreements, the scheme called upon the participating governments to accept the responsibility for the necessary ground facilities and organisation, and, hopefully, local governments would exempt Imperial Airways from taxes on fuel and oil, and fees for landing and 'housing'.<sup>72</sup>

The most important features to be promoted were the postal arrangements and the general financing of the plan.

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70. AVIA 2/1911, encl., 'Empire Air Mail Scheme', p. 3. The Air Ministry estimated that a cruise speed of 150 m.p.h. would cost an additional £250,000 p.a., 175 m.p.h., £600,000 p.a. CAB 24/250, C.P. 204 (34), 'Report of the Committee on Commercial Air Transport', memorandum by the Secretary of State for Air, July 23, 1934.

71. AVIA 2/1911, encl., 'Empire Air Mail Scheme', pp. 3-4.

72. Ibid., pp. 5-6.

The basis of the postal arrangements proposed was that each participating government would be assessed for an annual lump sum payment "proportionate to the estimated volume of their first class mail likely to be conveyed under the scheme".<sup>73</sup> The Air Ministry calculated that total annual payments would amount to £900,000, of which the dominions and colonies would provide £300,000, the United Kingdom the remainder.<sup>74</sup> It could be assumed that much of this amount would be recovered by postal charges, at the letter rate of 1½d. per half ounce.<sup>75</sup> An important dimension of these arrangements was that the annual assessment and the postal rates were to be common throughout the empire, irrespective of distances involved from one point to another. It was also clear that Great Britain was prepared at this point to accept an added liability because of the wide margin between the volume of outward and inward mails from and to Great Britain.<sup>76</sup> In effect, Great Britain was subsidising the scheme for a difficulty "directly attributable to unused inward capacity in homeward bound aircraft".<sup>77</sup> As the goal of 'commercial

73. Ibid., p. 6.

74. Ibid.

75. Ibid. The current empire preferential rate was 1½d. for the first ounce and 1d. for each subsequent ounce. The first 'flat rate' for air mail on selected empire routes was introduced November 17, 1934, with rates of 3d. per half ounce to the Near East and 6d. to East and South Africa. Stroud, Annals, p. 115.

76. AVIA 2/1911, 'Empire Air Mail Scheme', p. 1. The ratio of outward to inward mails was 16:9.

77. Ibid.

self-sufficiency' for Imperial Airways could only be realised if aircraft were loaded to near capacity, the imbalance between outward and inward traffic, unlikely to be resolved in the foreseeable future, implied continued subsidy support. A further concern indicated by the Air Ministry was that existing mail contract payments to the shipping companies would not be affected by the transfer of first class mail to Imperial Airways. In the case of Great Britain, no changes were planned in their contracts with the shipping concerns, which in the case of the Union Castle service to the Cape involved an annually payment of £170,000. <sup>78</sup>

The full costs of the E.A.M.S. were expected to approximate £2,650,000 p.a., and it would be necessary for Imperial Airways to raise £2,000,000 of new capital, much of which would go for the purchase of new aircraft, to cost roughly £1,500,000. <sup>79</sup> Total company revenue would be derived from passenger and freight traffic, mail payments and subsidy contributions. The scheme proposed an annual average payment of £1,500,000 in respect of the last two categories. As post office payments would provide £900,000 p.a., the balance was to be derived from subsidies. Since company expenditures would be higher in the first years of

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78. Ibid., pp. 7-8. The President of the Board of Trade had expressed this concern as early as May. CAB 24/249, C.P. 142 (34), 'Scheme for the Carriage of First-Class Mails by Air', note by the President of the Board of Trade, May 30, 1934.

79. AVIA 2/1911, 'Empire Air Mail Scheme', p. 8.

the new contract, Great Britain proposed that the 15 year period be divided into five three-year periods with payments to the company on a descending scale beginning at £1,650,000 p.a. for the first period, falling by four triennial reductions of £75,000 to £1,350,000 p.a. Thus, initially, a subsidy of £750,000 p.a. would be required, being reduced to £450,000 p.a. in the last period to complement the £900,000 p.a. mail payments.<sup>80</sup> Accepting the responsibility for providing more than half the total subsidy required, Great Britain called upon the dominion and colonial administrations to pay collectively £287,000 p.a.<sup>81</sup>

The scheme was going to cost dominion and colonial governments more than under existing arrangements, the draft paper admitting that "the financial aspect of this scheme is ultimately the dominating problem,...".<sup>82</sup> Nonetheless, it urged "the most sympathetic consideration of all Governments concerned".<sup>83</sup>

The proposed E.A.M.S. was dispatched to the British African governments on October 23, 1934.<sup>84</sup> Most responded with some enthusiasm. Tanganyika "strongly" supported the

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80. Ibid.

81. Ibid., p. 9.

82. Ibid., p. 10.

83. Ibid.

84. AVIA 2/1915, 'Empire Air Mail Scheme - the Colonies, 1934', encl. 4a, October 23, 1934.

idea in principle, <sup>85</sup> Kenya "unhesitatingly" agreed "in principle", <sup>86</sup> as did Uganda, although the latter expressed concern about the amount of subsidy and the fact that apparently no provision had been made for inter-territorial mails between Uganda, Kenya and Tanganyika. <sup>87</sup> Both Nyasaland and Northern Rhodesia indicated concurrence. <sup>88</sup> Southern Rhodesia, whose share of the costs would be £16,000 p.a., likewise agreed 'in principle' to the proposals. <sup>89</sup> The West African colonies being excluded from consideration for the moment, there remained only South Africa to indicate its general support, but problems with the Union were anticipated from the start.

In conversation with Pirow, Stanley reported Pirow

could not say how far his views might be shared by his other colleagues but that he had discussed [the E.A.M.S.] with Havenga and felt certain that the Treasury would offer strong opposition to the renewal in any form of the present subsidy scheme [my italics] and that he himself could foresee little prospect of overcoming such opposition if the proposals could be recommended and justified merely as providing a mail and passenger service. In his view the commercial value to the Union of such a service was quite negligible and as far as he was concerned the sentimental Imperial aspect could be eliminated as I would be aware. <sup>90</sup>

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85. Ibid., Governor to CO, November 8, 1934.

86. Ibid., Governor to CO, November 8, 1934.

87. Ibid., Governor to CO, November 28, 1934.

88. Ibid., Governors to CO, November 16 and 29, 1934.

89. AVIA 2/1916, Empire Air Mail Scheme - Southern Rhodesia, 1934, Acting Governor To CO, December 24, 1934.

90. AVIA 2/1911, Stanley to DO, November 10, 1934.

For Pirow, the scheme was unattractive because "it possessed no actual or potential military value"; what was needed was the use of much faster aircraft which could be modified to "night bombers" if the need arose.<sup>91</sup> Thus, in Pirow's view, the whole idea of attempting to develop a "commercially payable service" was premature. Pirow's idea was that the Union might co-operate in the scheme and agree to give financial assistance on military rather than commercial grounds,

if the military value could be demonstrated to exist and one method of giving financial assistance might perhaps be for the Union to provide fast planes for the service Germiston [Johannesburg] - Nairobi and to permit Imperial Airways to operate that service [coastal route] with assistance from the Union. 92

Here was indicated the thin edge of the wedge of South African air imperialism which threatened to upset all the calculations upon which the E.A.M.S. had been based. Pirow's 'military' emphasis was ludicrous but serious. His keenness to fly South African Airways northward to Nairobi, at the expense of Imperial Airways, Wilson Airways and RANA, introduced the most troublesome argument into the lengthy negotiations between British African governments and Great Britain. It was all the more critical because without South Africa, the scheme would collapse in Africa. In Stanley's

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91. Ibid.

92. Ibid.

view, "the outlook is unpromising" unless Smuts, visiting in England at the time, could "intervene effectively".<sup>93</sup> In conversations with Smuts, Londonderry found him "greatly attracted by the idea", and received an indication that Smuts would indeed help the E.A.M.S. cause in his remark that the British Empire "must be first in the air as she is on the sea".<sup>94</sup> Smuts returned to South Africa with the E.A.M.S. document in hand, and British hopes rested in part upon the degree to which he could 'intervene effectively'.

Despite the doubts thrown up by the South African situation, the British government proceeded with some confidence to make public the scheme in December, Sassoon, the Under-Secretary of State for Air, announcing proposals "of a far-reaching character....".<sup>95</sup>

While South Africa's attitudes caused the most concern, other African administrations raised a wide range of questions concerning the proposed scheme, especially about subsidy arrangements and the re-routing of the imperial service via the coast. Kenya, for one, pointing to the "commercial success" which Imperials had thus far made of the African service, had hoped to be relieved of its £15,000 p.a. subsidy

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93. Ibid., Stanley to DO, November 12, 1934.

94. Ibid., DO to Stanley, November 15, 1934.

95. Hansard, CCXCVI, December 20, 1934, cols. 1328-30.  
The Times, December 21, 1934, p. 5.

after the expiration of its existing agreements.<sup>96</sup> It questioned the length of contract to be offered Imperial Airways, the need to provide further ground facilities, the provisions for the continuance of the landplane service southward to South Africa, and the new routing which ignored Nairobi. "From both an Imperial and from a political standpoint", the Governor's despatch noted, "it would be unfortunate if the Empire Air Mail Service omitted to call at the capital of a major British settlement".<sup>97</sup> There was the question too of what was to happen if existing agreements expired before the E.A.M.S. was put into effect.<sup>98</sup>

During the first few months of 1935, it was clear that many issues had to be resolved in Africa before any final shape could be given to the scheme. South Africa and Kenya had voiced their special positions, while it was certain that the Rhodesias had cause to complain of a scheme that was to remove them from the main imperial trunk service.<sup>99</sup> On the

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96. AVIA 2/1915, Kenya No. 24, Governor to CO, February 14, 1935. Also AVIA 2/1929, Empire Air Mail Scheme - East African Colonies, Ground Organisation, 1935, documents relating to the Empire Air Mail Scheme, Appendix I.

97. AVIA 2/1929, Governor to CO, February 14, 1935.

98. Ibid. Under the existing agreement, Kenya contributed £15,000 p.a. in subsidy to Imperials in addition to an annual charge of £750 on wireless facilities. The agreement expired in January, 1937.

99. By June, the press was expressing concern about a scheme which "may well leave both Rhodesias out in the cold so far as a direct service from London is concerned". Bulawayo Chronicle, June 13, 1935.

sidelines, Imperial Airways expressed its growing concern "over the time that is slipping by whilst we are proceeding with no practical preparations for the new Empire Mail scheme".<sup>100</sup> Imperials' was impatient to get on with new fleet construction, but reluctant to order with the company's future beyond the existing agreements still apparently in doubt.<sup>101</sup> As the company pointed out to the Air Ministry, there was no longer time to wait until "so-called prototypes" were flying before more fleet was ordered. In such a case, the scheme could not be started before 1939.<sup>102</sup> The company was also becoming increasingly worried about the "rapid changes" in aircraft speeds which had taken place in the short time since the empire scheme was first planned, noting especially the French and Dutch emphasis on air transport speed. Fears were expressed that Imperials' fleet would be obsolete even before it went into operation, and mails traffic would be lost to foreign competition in Africa and elsewhere.<sup>103</sup> The Air Ministry response to the company's concerns was partly reassuring. Bullock admitted

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100. AVIA 2/1910, Empire Air Mail Scheme. Financial Arrangements respecting Prototype Experimental Aircraft, Woods Humphrey to Bullock, March 21, 1935.
101. Ibid. Only two flying boats were on order at this time.
102. Ibid.
103. AVIA 2/1918, Empire Air Mail Scheme. Rough Draft of Heads of Agreement, Geddes to Londonderry, March 1, 1935.

the future of the big scheme is still to some extent uncertain, particularly in view of the lack of progress to date with South Africa, but we certainly anticipate that, whatever the upshot in the case of South Africa, a substantial portion of the scheme is likely in due course to be brought into being. 104

With that reply, the company elected to go ahead with the construction of 12 flying boats and three more landplanes, even without the desired formal assurances that it would continue to be the 'chosen instrument' after 1937. 105

In May, 1935, Londonderry assigned Bullock, the Permanent Secretary to the Air Ministry, the difficult task of winning British Africa to the particulars of the E.A.M.S. The special assignment was to meet with Pirow at Lusaka, but additional meetings were scheduled with East African officials in Nairobi, the Governor-General of the Sudan at Khartoum, and Egyptian aviation officials in Cairo. 106 Bullock's report on his mission remains one of the most important documents dealing with the establishment of the E.A.M.S. in Africa. 107

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104. AVIA 2/1910, Bullock to Woods Humphrey, April 8, 1935.
105. Ibid., Woods Humphrey to Bullock, April 30, 1935. The flying boats ordered were the Short Empire S.23s. See Appendix I. Confirmation of a long-term 'chosen instrument' role was received in July. Ibid., Bullock to Geddes, July 23, 1935.
106. The Sudan and Egypt were non-empire African states invited to participate in the scheme.
107. AIR 19/142, Empire Air Mail Scheme, 1934-35 (Christopher Bullock correspondence and papers), enclosure, secret, 'Report by Sir Christopher Bullock on the Results of his Mission to Africa, May 19th - June 13th, 1935' (hereinafter Bullock Report).

At the start, the possibilities of negotiating successfully with Pirow were doubtful, given what Bullock described as Pirow's "obstructive and stone-walling attitude".<sup>108</sup> The British Treasury was insisting that the South African subsidy contribution to the E.A.M.S. must be at least £50,000 p.a., despite Bullock's reminder that Pirow's "present offer is NIL....".<sup>109</sup> Pirow's argument was that the proposed service had little 'commercial value' to the Union, and as the £400,000 subsidy contribution to the establishing of the Cairo-Cape Town was intended to be the South Africa's "first and final contribution", there was little hope that the Union Treasury would agree to any new proposals.<sup>110</sup> Pirow emphasised that the current contribution had been "politically most damaging to General Hertzog and Mr. Havenga", a further preclusive obstacle to renewed subsidy support for Imperial Airways.<sup>111</sup> Pirow did think, however, that the Union would be prepared to operate the land service northward to Nairobi, thus relieving Great Britain of the costs of this service.<sup>112</sup>

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108. FO 371/19617, Political (Western) General, 1935, W4726, Bullock to Londonderry, May 13, 1935.

109. Ibid. The formal British request was for £90,000 in subsidy and £58,000 postal payments p.a.

110. AIR 19/142, Bullock Report, appendix A.

111. Ibid., p. 1. Havenga had sponsored the original agreement in the Union.

112. Ibid., p. 2.

Pirow's position was totally unacceptable to Great Britain as Bullock pointed out, and it was surely to the credit of Bullock that he was able in a few days to bring Pirow to a more accommodating frame of mind. The Union's reluctance to make any financial contribution to the scheme produced the greatest difficulties, Bullock noting the "rather wearying stages of our arguments on this point".<sup>113</sup> But in the end, Bullock's persuasiveness triumphed over Pirow's obstinacy. Pirow was prepared to recommend to the Union government an annual payment of £98,000, a sum considerably less than the Air Ministry had called for, but surprisingly generous all the same.<sup>114</sup> Unquestionably, Pirow's turnaround was obtained by Bullock's agreement to South African Airways operating a service from Johannesburg to Bulawayo and Lusaka, subject to Northern and Southern Rhodesia approval, and the right of those administrations to operate a reciprocal service with RANA.<sup>115</sup> For Pirow, the opportunity to thrust northward was well worth the price

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113. Ibid., p. 4.

114. Ibid., appendix B, 'Summary of Discussions in regard to the Empire Air Mail Scheme between the Honourable Mr. Pirow and Sir Christopher Bullock at Lusaka, May 28th to 30th, 1935', Bullock to Pirow, May 31, 1935. £20,000 was to be in the form of a direct subsidy, with an additional £20,000 in subsidy disguised in the postal payments for 'political reasons'.

115. Ibid.

of imperial cooperation and additional costs. <sup>116</sup> In addition, Pirow hoped to dissuade his cabinet colleagues from reducing in any way the amounts payable in existing contracts with Union Castle. <sup>117</sup>

The Bullock-Pirow discussions did not end the long and difficult negotiations between Great Britain and the Union on air transport matters in the 1930's, for a number of points remained outstanding as Bullock proceeded north to open discussions with East African officials. <sup>118</sup> Nonetheless, for Bullock, it was a signal triumph, and the highwater mark of a brilliant career at the Air Ministry. In 1936, a Board of Inquiry found his use of office to further ambitions with Imperial Airways "at variance with the tenor and spirit" of the civil service code. The Prime Minister directed his dismissal from the service. <sup>119</sup>

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116. The annual costs for a weekly Johannesburg-Lusaka service was estimated at £30,000.

117. AIR 19/142, Bullock Report, appendix B.

118. Ibid., appendix C, Pirow to Bullock, May 31, 1935. Points included the exact scheduling of the imperial service to Durban, and the extent to which the Union could 'extend' its Lusaka service.

119. The evidence held that Bullock had approached Geddes and Woods Humphrey on several occasions about possible positions, including chairman, with Imperial Airways. See, Cabinet, Report of the Board of Inquiry Appointed by the Prime Minister to Investigate Certain Discussions Engaged in by the Permanent Secretary to the Air Ministry, Cmd. 5254 (1936), and Minutes by the Prime Minister on the Report of the Board of Inquiry, Cmd. 5255 (1936). See also the leader in The Times, August 6, 1936, and his obituary, The Times, May 19, 1972, p. 18.

Having obtained informal agreement with the Rhodesias and Nyasaland for Pirow's expansionist proposals,<sup>120</sup> Bullock and his staff flew north for more amicable discussions with East African officials at Nairobi. In a week-long set of meetings, Bullock was able to satisfy the East African delegations that the subsidy and postal payment assessments of their E.A.M.S. contribution were justified and necessary. Kenya, in particular, had complained the charges were "excessive".<sup>121</sup> Together, the East African colonies were being asked to provide £21,000 p.a. in subsidies, and £11,000 p.a. in postal payments, figures which represented 7.32% and 3.66% respectively of the total anticipated costs of the E.A.M.S.<sup>122</sup> Kenya challenged these figures, arguing with some justification that they appeared to be high in relation to the contributions of certain other empire countries.<sup>123</sup> Kenya added the argument that the major contribution made by

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120. AIR 19/142, Bullock Report, p. 6. Bullock had discussions with Sir Hubert Young, Sir Herbert Stanley and Sir Harold Kittermaster, the three concerned governors, along with Fynn, the acting prime minister of Southern Rhodesia, Chapman of Rhodesia Railways, and Sir James Macdonald of the Beit Trust.
121. Ibid., p. 7.
122. Ibid., p. 8. Full details on the East African situation are found in AVIA 2/1929, 'Documents Relating to the Empire Air Mail Scheme', Kenya note of May 17, 1935, p. 11.
123. AIR 19/142, Bullock Report, p. 7. While the ratio of subsidy to postal payment was 2:1 in the case of East Africa, Malaya, for example, contributed less with a ratio of 1:1.

East Africa in establishing the Cairo-Cape Town route should merit "special consideration", in light of the "substantial revenue earned by Imperial Airways" on this most remunerative section of the route. <sup>124</sup> Kenya also complained about the neglect of Nairobi on the main route, and expressed concern as to the future of the inland trunk and feeder services. <sup>125</sup>

Bullock was able to meet most of these arguments with good sense and charm. In agreeing to support a three times weekly Nairobi-Kisumu service, thus assuring Nairobi of a direct connection with the flying boat service at Kisumu, he resolved the most troublesome Kenyan complaint. <sup>126</sup>

Bullock was able to report that Uganda and Tanganyika were "broadly satisfied", but he worried that "Kenya may return to the charge". <sup>127</sup> Kenya, ever suspicious of Imperial Airways and ready to guard jealously its own 'chosen instrument', Wilson Airways, did, in fact, continue to press the Air Ministry for changes in the E.A.M.S. which would serve its own as well as imperial interests right to 1939. <sup>128</sup>

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124. Ibid.

125. Ibid., pp. 7-8.

126. Ibid., p. 8. The Imperial Exchequer had agreed to pay the costs of the inland route south to Lusaka.

127. Ibid., p. 7.

128. On Wilson Airways, see above, chapter V.

In addition to subsidy and postal payment contributions, East Africa was being called upon to provide substantial amounts for the improvement and maintenance of ground facilities, much of which would go toward the installation of new marine equipment to handle the flying boats. In all, capital costs to the three East African colonies were calculated at £87,200, with recurrent annual maintenance charges of £22,500.<sup>129</sup> Bullock agreed that such a heavy burden was somewhat unfair for what were "primarily Imperial purposes".<sup>130</sup> He promised Air Ministry support for applications to the Colonial Development Fund.<sup>131</sup>

Bullock's 'mission' ended with brief discussions with the Governor-General of the Sudan at Khartoum, and the Director-General of Civil Aviation in Egypt at Cairo. Sir Stewart Symes in Khartoum was persuaded of the justice of a £3,000 p.a. subsidy from the Sudan,<sup>132</sup> but the questions

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129. AVIA 2/1929, 'Draft note of a meeting held at Government House, Nairobi on Thursday the 6th June 1935', pp. 2-3.

130. AIR 19/142, Bullock Report, p. 8.

131. Ibid. The fund did provide assistance for the E.A.M.S.

132. Ibid. Symes pointed out that the service was of no value to the 'native population' and felt that "there would be no real need for air communications in the Sudan on the scale envisaged for another 25 years". Nonetheless, by the end of 1935, the Sudan had an impressive 111 government landing fields and 38 "alighting reaches for float planes" along the Nile. Foreign Office, Sudan No. 1 (1936), Report on the Administration, Finances and Condition of the Sudan in 1935, Cmd. 5281 (1936), p. 50.

of ground organisation financing were quite another matter. A capital expenditure of at least £80,000 and recurrent maintenance charges of £27,000 p.a., were, in Symes' view, "impossible for the Sudan to contemplate".<sup>133</sup> Bullock could only agree that a large portion of these expenditures would have to come from the Imperial Exchequer.<sup>134</sup>

In Egypt, officialdom, more often than not intransigent on air matters, was being attracted to the novelty and practicability of the scheme. British counsel and persuasion now hoped to convince the government that the communications benefits to be obtained far outweighed fears of the imperial connection. At the time of Bullock's visit, the prospects of a satisfactory agreement were thus "promising". Egypt was prepared to provide all the necessary ground organisation, a postal payment of £22,500 p.a., exemptions from fuel and oil taxation, and a subsidy equivalent to the estimated payments for landing and housing fees.<sup>135</sup>

Bullock submitted the report of his mission June 18th, and from that point onward the Air Ministry and Imperial Airways could begin to plan with some confidence the commencement of the E.A.M.S. in Africa, a date tentatively

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133. AIR 19/142, Bullock Report, p. 9.

134. Ibid. The Sudan was not eligible for assistance from the Colonial Development Fund, but £750,000 p.a. was being received in subsidy from Egypt.

135. Ibid., p. 10.

set for January 1, 1937, an optimistic 18 months away. The Air Ministry viewed the results of Bullock's mission as "very satisfactory".<sup>136</sup> The Foreign Office, concerned with possible problems arranging financing and ground organisation in the Sudan and Egypt, found Bullock's efforts "surprisingly successful".<sup>137</sup> On the specifics of the 'Lusaka Agreement' between Bullock and Pirow, Southern Rhodesia, the colony most affected by the concessions granted to the Union, concurred generally, although reluctant to see South African Airways run beyond Bulawayo to Salisbury.<sup>138</sup> By August, Kenya had formalised its expression of agreement to the scheme as discussed with Bullock at Nairobi.<sup>139</sup>

Outside official circles, the E.A.M.S. awakened a favourable response in most quarters throughout 1935. The Round Table was particularly eulogistic:

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136. FO 371/19617, W6235, Cunliffe-Lister to FO, July 12, 1935. Cunliffe-Lister (later Lord Swinton) was appointed Secretary of State for Air in June, 1935.
137. Ibid., FO minute, July 18, 1935. Also, ibid., W7052, Bullock to FO, August 7, 1935 on problems in Egypt and Sudan. FO 371/19617, W6235, holds a copy of the Bullock Report.
138. AIR 19/142, Huggins to Bullock, June 28 and August 2, 1935. See too Rand Daily Mail, August 19, 1935.
139. AIR 19/142, CO/Kenya correspondence, August 9 and 26, 1935.

Those responsible for pushing forward these air mail developments have at the back of their minds the vision of an Empire effectively reduced to the size of these islands. It is not the distance on the map but the distance in the mind that counts, not the thousands of miles that divide the countries of the Empire but the few hours that will separate them if aerial progress continues at the present pace for only a few years more. 140

Only the irascible C. G. Grey of the Aeroplane held to his first-expressed concern about who was to provide the capital for the "big plans". Grey did not want the government involved, preferring the large shipping interests to take the lead, unless "we want to go socialist". 141 For the most part, the shipping companies confined their air interests to the proposed Atlantic route. 142

For Imperial Airways, the expressed support for the E.A.M.S. and other favourable developments brightened prospects for the years ahead. Traffic on the existing African services had increased 41% over the previous year, 143 and by 1936, the company could report that 73% of load capacity

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140. Round Table, XXV (June, 1935), 472-73. See also "Africa Air Service Speed Up", Great Britain and the East, XLV (November 21, 1935), 666.

141. Aeroplane, March 27, 1935, p. 344.

142. AVIA 2/1965 for correspondence and discussions.

143. Imperial Airways, Report of the Annual General Meeting, 1935, October 31, 1935, p. 10. The Times, November 1, 1935, p. 24.

was being utilised on the London-Johannesburg through service.<sup>144</sup> By the fall of 1935, 29 flying boats and 17 landplanes were on order.<sup>145</sup>

Nonetheless, while a certain optimism characterised Imperials' preparations for the introduction of the E.A.M.S. in Africa, it was ever tempered with a sense of urgency, much of which was brought about by the bold steps being taken by imperial rivals. Prestige and traffic were at stake in the race for air paramountcy on the continent.<sup>146</sup> In Egypt, as ever the most troublesome sector on the imperial routes, the Germans were showing a renewed interest by early 1936. The British ambassador in Addis Ababa believed them to be

investigating on behalf of Lufthansa [sic] possibility of an air service via Sudan to Addis Ababa with the idea of subsequent extension to Tanganyika.<sup>147</sup>

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144. Imperial Airways, Report of the Annual General Meeting, 1936, November 10, 1936, p. 11. The Times, November 11, 1936, p. 23.
145. "Imperial Airways' New Fleet", Great Britain and the East, XLV (November 7, 1935), 607. In all, by 1936, Imperial Airways had 76 aircraft on hand and on order, against 42 the year before. Imperial Airways, Report of the Directors and Statement of Accounts for the Year Ended 31 March, 1936.
146. See survey of planned services in "Opening up Africa", Flight, October 31, 1935, p. 471.
147. FO 371/20188, Political (Egyptian) Ethiopia, 1936, J1642, S. Barton to FO, February 22, 1936.

By late 1936, Deutsches Luft Hansa had formally applied to the Egyptian authorities for a Berlin-Cairo service "for facilitating intellectual and commercial relations between Germany and Egypt".<sup>148</sup> The agent of German aims was in fact the Horus company, a Deutsches Luft Hansa subsidiary, already active in Greece and anxious to initiate an Athens-Cairo service. The British thus saw the German efforts as posing a double danger, and called upon Imperial Airways to compete for the service 'desired' by both countries in question.<sup>149</sup> The intention was to establish an 'Anglo-Egyptian Air Transport Company' with Imperial Airways and Misr Airwork participation, "to enable the Egyptian Government to refuse terminal facilities to foreign air lines....".<sup>150</sup> The war ended discussions of this idea, and it was doubtful, in any case, that the air line would have been formed. Misr Airwork had already established close links with the Horus company,<sup>151</sup> and feared any association

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148. FO 371/21207, Political (Western) Commercial Aviation, 1937, W727, British embassy Cairo to FO, December 24, 1936 (translation from German aide-memoire).

149. AVIA 2/1996, Egypt-Misr Airwork. Question of British Financial Participation, part I, C.P. 155 (36), Joint memorandum by the secretaries of State for Foreign Affairs and Air, June, 1936.

150. Ibid., part IV, encl. 180a, minute 1, June 12, 1939.

151. Mohammed Taher Pasha, vice-chairman of Misr, was a director of Horus. Ibid., part I, Woods Humphrey to Shelmerdine (A.M.), June 16, 1936.

with the Imperial Airways giant.<sup>152</sup> Until the beginning of the war, Great Britain was able to dissuade the Egyptians from coming to any agreement with Germany, yet appreciated that the move could not be obstructed indefinitely.<sup>153</sup>

As the Egyptian Director-General of Civil Aviation, Group Captain Bone, pointed out, the problem was not simply Egypt, but if Germany was granted permission to operate there, it would become increasingly difficult to say no in the Sudan "or further south".<sup>154</sup>

The Egyptian situation was confused by Italian interests in operating through Egypt and the Sudan to their colonies in East Africa.<sup>155</sup> From the start, Great Britain supported the Italian request to operate through Egypt, while discouraging any idea of an Italian/Egyptian agreement.<sup>156</sup> By the summer

152. FO 371/20892, Political (Egyptian) Egypt and Sudan, 1937, J3689, note by Woods Humphrey, August 18, 1937.
153. Ibid., J4836, Standing Committee on International Air Communications Paper 386 (hereinafter I.A.C. and paper number), 'Facilities for German Air Service through Egypt', November 29, 1937.
154. Ibid., Ambassador Lampson (Cairo) to FO, November 13, 1937.
155. AVIA 2/1935, Italian Air Service to Italian East Africa, 1935-1949, E. Drummond (Rome) to FO, February 18, 1935, February 26, 1935. See also, Luigi Gallo, "Per La Linea Est Africa", Rivista Aeronautica, X (1934), 40-58; Umberto Klinger, "Italian East African Airlines", Great Britain and the East (Italian Colonial Empire Supplement) XL (July 15, 1937), 6-8.
156. AVIA 2/1935, FO to Lampson, August 22, 1935. See also correspondence FO 371/19534, Political (Southern) Italy, 1935, R1564, R2717, R3701.

of 1935, Ala Littoria had commenced a Khartoum-Asmara twice weekly air service, and by September, the Benghazi-Alexandria sector was opened.<sup>157</sup> In December, 1935, a full Rome-Asmara service was established, and by 1937, Addis Ababa was linked to Rome with a four times weekly operation.<sup>158</sup> Suspicion of Italian influence and "sabotage" in the Sudan in 1936 prompted a Foreign Office intention to bar Ala Littoria from the Sudan.<sup>159</sup> The Air Ministry promptly objected because of possible Italian reprisals on the imperial route through Italy.<sup>160</sup> Unlike the German case, Great Britain found itself with hands tied in dealing with the Italians in Africa. In a quid pro quo arrangement, the Anglo-Italian air convention of 1934 had formalised this inter-dependency for the operation of the two imperial air systems.<sup>161</sup> Thus, the Air Ministry viewed the relationship with different priorities than the Foreign Office and with some cause. On the one occasion when permission to use Rosieres in the Sudan was denied the Italians, Lake Bracciano in Italy was promptly closed to Imperial Airways flying boats.<sup>162</sup>

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157. Cmd. 5281 (1936), p. 50.

158. AVIA 2/1935, I.A.C. paper 323, n.d.

159. Ibid., FO to A.M., May 8, 1936.

160. Ibid., minute by Lord Swinton, May 21, 1936.

161. Foreign Office, Treaty Series No. 2 (1935), Convention between His Majesty in Respect of the United Kingdom and of India and His Majesty the King of Italy Relating to the Establishment of Air Transport Lines, Cmd. 4808.

162. AVIA 2/1935, I.A.C. paper 323.

To the beginning of the war, Egypt was thus living up to its image as the 'Clapham Junction' of imperial air routes. With France, Holland, Italy, Germany, and even Poland, <sup>163</sup> all anxious to make use of Egypt's unique location, the pressure was ever on Imperial Airways and the British Air Ministry to win an increasingly competitive struggle.

The Belgian Congo was another focal point of rivalry. Concern about future traffic for the E.A.M.S. prompted British plans to extend 'feeder' services into the Congo in 1935, the object being

to keep the eastern and south eastern Belgian Congo traffic for the British Africa trunk route and prevent it being drawn away to the west by the French and Belgian Trans-Saharan service. <sup>164</sup>

The idea was attractive to the Belgians as well. They were prepared to entertain the British proposal providing SABENA could obtain reciprocal rights to operate to Entebbe, and the Belgian trans-Saharan service could operate through Kano. <sup>165</sup> Belgium was prepared to allow the British Cape

163. FO 371/20893, Political (Egyptian) Egypt and Sudan, 1937, J5353, Lampson to FO, December 16, 1937. The Polish airline LOT (Polskie Linie Lotnicze) wanted to extend their Palestine service.
164. AVIA 2/804, Imperial Airways Proposed Feeder Services to the Congo, 1935-1949, Burchall to Shelmerdine, February 15, 1935. The intention was for Wilson Airways to act for Imperials. See also "Changes in the Congo", Aeroplane, August 26, 1936, pp. 273-74.
165. AVIA 2/804, Shelmerdine to Burchall, February 20, 1935; encl. 12b, I.A. memorandum, July 2, 1935.

service to carry some Congo mail and passenger traffic, but only in the event that similar rights were accorded to SABENA in Nigeria. <sup>166</sup> British attempts to separate the Congo and Kano issues were to of no avail. The main British fears were that the faster Belgian service to Europe would woo potential E.A.M.S. and passenger traffic from the imperial Khartoum-Kano-Iagos service. <sup>167</sup> In the end, no formal agreement was reached, in part because the Belgians were slow to develop adequate ground facilities, in part because Wilson Airways failed to win an exclusive contract to transport Congo gold traffic and so withdrew its application. <sup>168</sup> An informal agreement gave over-flight rights Zinder-Fort Lamy and Kisumu-Lusaka for SABENA and Wilson Airways flights respectively. <sup>169</sup> British efforts were thus thwarted in the attempt to win much-needed traffic for the African service.

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166. Ibid., Burchall to Shelmerdine, July 5, 1935. SABENA at this point operated a car service to connect with its trans-Saharan service at Zinder. Belgium was complaining that the British GPO was not taking advantage of this service.
167. Ibid., Burchall to Shelmerdine, July 19, 1935. There was also concern about Belgian proposals to extend their route southward through Angola and to the Union. Correspondence in AVIA 2/1995, Belgian Proposals for an Air Service to South Africa, 1937-1939. See discussion, chapter XI.
168. AVIA 2/804, Shelmerdine to FO, July 29, 1938.
169. Ibid. SABENA commenced operating to Entebbe September 22, 1940. B. W. Galpin (I.A.) to A.M., September 25, 1940.

The most challenging rival to British air aims in Africa was France. By late 1935, the French had established a nine day service between Madagascar and Paris,<sup>170</sup> and, like the Belgians, were casting covetous eyes on the lucrative South African market. A greater problem for the British and the institution of the E.A.M.S. was French intransigence on the matter of British flights through France, and until this was overcome, the idea of an all-air service from Great Britain to the empire could not be realized. From 1934 onwards, Air Ministry efforts were directed to overcoming this "obstructive attitude", Londonderry pointing out that as Great Britain could block French routes to the Far East and in parts of Africa, "we hold these strong cards".<sup>171</sup> This fact, he went on, "will bring the French, who are realists, to a more accommodating frame of mind...".<sup>172</sup> Early in 1934, the French had requested permission to overfly Nigeria on their proposed Algiers-Congo service, and clearance to link Madagascar with the Imperial Airways trunk service at Broken Hill, 'legitimate' requests based on the Thomson-Eynac 'gentlemens' agreement' on reciprocal air rights made in 1929.<sup>173</sup> Nonetheless, the French request provided Great

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170. Aeroplane, January 8, 1936, p. 49. See P. Ichac, "Itinéraire Aérien de Paris à Madagascar", L'Illustration, CCIII (June 3, 10, 1939), 185-92, 253-59.

171. CAB 24/250, C.P. 204 (34), memorandum by Londonderry, July 23, 1934.

172. Ibid.

173. AVIA 2/676, Brigstooke (A.M.) to FO, February 15, 1934; encl. on French trans-Nigerian request of May 17, 1934.

Britain with an opportunity to argue for a more formal agreement, one which would include concessions in Europe for Imperial Airways. Although some concern was expressed that the French would pursue the idea of obtaining traffic rights in northern Nigeria, to the detriment of British services still in the planning stage at this point, the French request was acceptable providing it was tied to a wider agreement. <sup>174</sup> Here again, as with the Italians, the British could only negotiate on a quid pro quo basis, giving concessions but obtaining necessary reciprocal rights to enable the fullest development of imperial services. By 1936, Anglo-French discussions were well advanced. <sup>175</sup> In 1937 and early 1938, two exchanges of notes expressed agreement; <sup>176</sup> Great Britain was granted "unrestricted" commercial air rights over France and Corsica, the use of public airports in France, and "landing rights" in Chad on the Khartoum-Kano route. In return, France obtained the right to overfly Nigeria, and "commercial rights" along the British West African coast on their Dakar-Leopoldville service until such time as a British service was established. <sup>177</sup>

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174. Ibid., Shelmerdine to A.M., July 13, 1934.

175. FO 371/20440, Political (Western) Commercial Aviation, 1936, W1268, I.A.C. paper 107, 'Concessions for French and British Air Services Respectively', February 12, 1936.

176. FO 371/20698, Political (Central) France, 1937, C5983, August 20, 1937; AVIA 2/676, encl. 49a.

177. FO 371/20698, C5983, I.A.C. paper 361, September 10, 1937; C8502, FO to A.M., December 9, 1937; AVIA 2/676, encl. 49a.

There remained only one other European power, Portugal, with which to negotiate prior to the establishment of the E.A.M.S. in Africa. Although not a major imperial rival, Portugal did control the long Mozambique coastline astride the proposed imperial service from Dar-es-Salaam south to Durban. In 1933, Imperial Airways had carried out a preliminary survey of the route,<sup>178</sup> and found it practicable, if commercially disappointing.<sup>179</sup> In April 1934, Great Britain formally requested permission to operate air services along the Mozambique coast, in addition to obtaining permission for RANA to operate from Beira to Salisbury and Blantyre.<sup>180</sup> The Portuguese were quick to respond. While operating no services in Africa at this time, they sought in return reciprocal rights across the Gambia, across the Rhodesias to link Angola and Mozambique,

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178. BOAC, I.A. files. Three reports were made on the 1933 'East African Coast Survey Flight': the Air Superintendent's Report, a Commercial Report by J.W.S. Brancker, and a Report on Arrangements by Major Brackley.
179. Ibid., Commercial Report, p. 129. In an interesting note, Brancker expected considerable Indian traffic from Durban and anticipated "unfavourable comment" from white South Africans called upon to share cabin accommodation. Ibid., p. 100. There is no record to indicate these fears were realised.
180. FO 371/18499, Political (Western) General, 1934, W4438, 'Memorandum for Submission to Portuguese Government in regard to an Air Service Passing along the Coast of Portuguese East Africa', April 25, 1934.

and a Lourenco Marques-Johannesburg concession.<sup>181</sup> The Portuguese response was not unexpected, but nor was it totally acceptable. While concessions in Africa granted to Portugal meant little per se, the British had to be cautious not to grant all that Portugal wanted. Something had to be left for future bargaining on the Atlantic route where the Portuguese Azores made a ready stepping stone for the lengthy crossing.<sup>182</sup> By late 1935, negotiations were concluded successfully with an exchange of notes which gave Great Britain rights along the Mozambique coast and the routes from Beira to Salisbury and Blantyre, in return for Portuguese rights across Northern Rhodesia and the Gambia.<sup>183</sup> The agreement remained in force until the war.

Throughout the protracted discussions with European interests in Africa, Imperial Airways and the Air Ministry worked to initiate the E.A.M.S. on the African route by January 1, 1937. This was not to be the case. Under the general headings of ground organisation, aircraft delivery, and South Africa, the problems remained many, and delays

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181. Ibid., W4439, Portuguese Ministry of Foreign Affairs to British Ambassador, Lisbon, April 28, 1934.

182. AVIA 2/1952. Negotiations on the Azores were kept separate from the main African discussions. I.A.C. paper 63, n.d., for details.

183. Foreign Office, Treaty Series No. 41 (1935), Exchange of Notes between Portugal and the United Kingdom Regarding the Operation of Air Services over Territories in Africa, Cmd. 5047 (1935). The agreement also provided for British rights to overfly Portuguese Guinea.

certain. All were related to the important decision to carry the mails in large marine aircraft, the Short Brothers S. 23 Empire Flying Boats. <sup>184</sup> Some difficulties were technical, some political, and all were tied to the questions of financing the imaginative scheme.

In Egypt, problems of cooperation had slowed the improvement of existing facilities and the transfer of the Imperial Airways' base from Heliopolis to Dakhaila. <sup>185</sup> As Sir Quinten Brand, the Egyptian Director of Civil Aviation, pointed out, many of the problems could be attributed to the "attitude of obstruction" of the new Wafd government. <sup>186</sup> By mid-1936, a more cooperative atmosphere was developing with discussions on the new Anglo-Egyptian treaty nearing successful conclusion, and the Egyptian Minister of Communications, Nokrashi, could promise that "everything will be rushed through". <sup>187</sup> Although Imperial Airways continued to complain and insisted on "considerable improvements" in existing facilities before the E.A.M.S.

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184. On the flying boats and ground organisation problems in Africa, see John Maffey, "Air Transport over Africa", paper delivered in Rome, October, 1938, to the Reale Accademia d'Italia. Typescript in BOAC archives.

185. AVIA 2/856, Egypt - Empire Air Mail Scheme - Ground Organisation, Tour notes, Wing Commander Allen (A.M.), June 21, 1935.

186. Ibid., Brand to Bertram (A.M.), August 12, 1935.

187. Ibid.

could be introduced in early 1937,<sup>188</sup> the Egyptian situation was well in hand by the time the service was started.

Problems of ground organisation in the Sudan were never fully resolved before the war, and only detailed negotiations won a reasonable financial contribution from the Sudanese authorities. In April-May, 1936, the Air Ministry's F.G.L. Bertram and M. Banks toured the Sudan to study the Nile route to Uganda and meet with local officials.<sup>189</sup> Sudan agreed to a maximum recurrent liability of £20,000 p.a., a generous sum for a service which to date had carried little mail and few passengers.<sup>190</sup> More difficult to resolve were the questions of operating the large flying boats on the Nile. An Air Ministry study in June, 1936, suggested the 'Empire' flying boats would exceed the "limit of practicability".<sup>191</sup> Although 'Calcutta' flying boats had been used on the route with success, the much heavier 'Empire' (fully loaded,

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188. AVIA 2/1106, Unsuitability of Alighting Area at Juba - Application by Imperial Airways to Use Site at Laropi in Uganda, encl. 12a, G. T. Meller (I.A.) to A.M., February 15, 1937.
189. AVIA 2/983, encl., unpublished 'Record of Tour in Egypt, the Sudan and Palestine by Mr. F.G.L. Bertram and Mr. M. Banks, 14th April-26th May, 1936'. Also in FO 371/20438, Political (Western) Arms Traffic, 1936, W5450.
190. AVIA 2/983, 'Record of Tour', appendices V and IX.
191. A.M., unpublished 'Report on the Operation of Empire Short Flying Boats on the River Nile from Cairo to Juba' submitted by M. Marks, June 5, 1936, p. 5.

39,000 lbs.) had a draught of over four feet and required a take-off run of 600 yds. <sup>192</sup> Given the seasonable fluctuations in river elevations, the continual changes in the deep water channel, and shifting sand shoal locations, Marks was most pessimistic about any landing and mooring site being found suitable and safe. <sup>193</sup> Several Imperial Airways surveys in 1936 were more optimistic, <sup>194</sup> although the company appeal to move the Juba stop in the Sudan to Laropi in Uganda was rejected by the respective governments and the Air Ministry. <sup>195</sup> On the upper Nile, control of the sudd, the great masses of soil and vegetation which sweep down the river from June to November, remained a problem at least until the war. <sup>196</sup> In summary, next to South Africa, the Sudan proved to be the most difficult of areas to organise adequately to meet the operational and financial demands of the E.A.M.S. <sup>197</sup>

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192. Ibid., p. 1.

193. Ibid., appendix, p. 1. Marks noted other problems: river current, river width, and wind direction. Together they raised the question of whether night flying would be feasible.

194. BOAC, I.A. files (a) 'Sudan Report - Survey, 1936', (b) 'Survey of White Nile Sudan and Upper Egypt with Special Regard to Choice of Seaplane Bases', submitted by B.C.H. Cross, April, 1936, (c) reports on Nimule and Laropi in October, 1936.

195. Correspondence in AVIA 2/1106. After October, 1938, Rejaf was substituted for Juba.

196. AVIA 2/1271, Experiments in Sudd Control on the Nile, 1938-1940.

197. Correspondence in AVIA 2/1246, Empire Air Mail Scheme - Arrangements with Sudan Government, 1937-1941, and AVIA 2/1989, Empire Air Mail Scheme - Sudan - Responsibility as between Imperial Airways and Local Government for Ground Organisation.

Ground organisation in British East Africa was developed more smoothly, although the lake level at Kisumu was expected to lower in the years ahead, and progress at Entebbe was slow. <sup>198</sup> In Tanganyika, concern was expressed as to the "peculiarly heavy liabilities in connection with wireless", but generally, the East African section of the route was "the best organised on the route to Durban". <sup>199</sup> Unlike the Sudan, cooperation and a certain enthusiasm for the big scheme characterised local efforts to accommodate the needs of the Air Ministry and Imperial Airways.

In Portuguese East Africa, the route south of Lindi called for regular stops to be made at Mozambique, Beira and Lourenco Marques, with optional use to be made of Quelimane and Inhambane. All required considerable work to be done in the preparation of marine facilities, and the effort was delayed in endless discussions with the local Portuguese authorities on the precise terms of the agreement, accepted in principle in December, 1935. <sup>200</sup> In addition,

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198. A.M., unpublished 'Tour of Inspection of Empire Air Mail Route Southampton - Lourenco Marques, June 18th - August 19th, 1938', pp. 7, 10. The report was prepared by W. L. Lang.
199. Ibid., p. 10. See too, BOAC, I.A. file, 'Near East Area Manager's Report on the Survey Conducted by 'Satyrus' of the Flying Boat Route from Alexandria to Lindi, March, 1937'. The manager was B. W. Galpin.
200. AVIA 2/1106, G. T. Meller to A.M., February 15, 1937.

Beira aerodrome had to be improved to handle the increased traffic on the RANA services to Blantyre and Salisbury. A second 500 meter runway was not completed until October, 1938. 201

Delays in organising ground facilities along the Cairo-Durban route were aggravated by the slow delivery of new aircraft for Imperials' fleet, the two factors combining to preclude the possibility of commencing the E.A.M.S. on schedule. As Sir George Beharrell, Imperial Airways chairman, noted, aircraft delivery delays were affecting all services and were due to "reasons quite outside our control". 202

The reasons for this were several, but they reflected official British policy of insisting upon the use of British aircraft and engines even while demanding of British manufacturers that priority be given to the R.A.F. 203

Imperial Airways thus could not turn elsewhere to purchase their aircraft requirements, and no alternative British aircraft were readily available. 204

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201. AVIA 2/1069, Empire Air Mail Scheme - Unsuitability of Beira Aerodrome, B. W. Galpin to A.M., November 10, 1937.

202. I.A., Report of the Annual General Meeting, 1937, November 10, 1937, p. 8.

203. See correspondence in AVIA 2/1077, Purchase of Foreign Aircraft by British Subsidised Air Transport Companies. Also, A.M., Note on the Policy of His Majesty's Government in Relation to the Production of Aero-Engines, Cmd. 5295 (1936).

204. Despite an Air Ministry offer of £25,000 for a "fast but economically medium-sized commercial" aeroplane. The Times, March 20, 1935, p. 15. British Airways, on the other hand, the second 'chosen instrument' after 1936, purchased Fokker, Junkers and Lockheed aircraft. See Higham, Britain's Imperial Air Routes, pp. 247-48.

The implications of a general delay in the commencement of the E.A.M.S. were serious, especially in the way they were seized upon by Pirow and the Union government. Pirow was all too ready and willing to exploit Imperial Airways difficulties, and use 'concessions' on the part of South Africa to argue his case for a Union service northward to Kisumu.

During 1936, it had become apparent that aircraft delivery schedules would not allow a January 1st start to the E.A.M.S. in 1937, and April 1st was set as the new opening date to coincide with the expiration of existing contracts with the African governments. By December, 1936, Imperial Airways had to inform the Air Ministry that it was unlikely, "almost to the point of certainty" that there would be a further postponement, and suggested June 1st as a commencement date.<sup>205</sup> Incredibly, the Air Ministry failed to pass this information on to interested parties in Africa until late in February.<sup>206</sup> At this late date, discussions were already well underway to ready the new arrangements on the inland route from Johannesburg to Kisumu.<sup>207</sup>

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205. AVIA 2/1972, Empire Air Mail Scheme - Arrangements between RANA, Wilson Airways and South African Airways for Operation of Internal Services in Africa, G. T. Meller to A.M., December 30, 1936.

206. AVIA 2/1916, Resumé of discussions of a meeting at Bulawayo, March 3-4, 1937, attended by representatives of RANA, Wilson Airways, Imperials, South African Airways and interested government officials, encl. 35b, p. 3.

207. Ibid. The Bulawayo conference was held with the expectation that the E.A.M.S. would begin on April 1st.

Southern Rhodesia was particularly critical of Imperial Airways in that "no communication at all received from them and Ministers had always been led to believe to the last moment that flying boat service would start in April".<sup>208</sup> Imperials could only point out that they had kept the Air Ministry informed, and that "notification to the Governments concerned was clearly the duty of the Government here....".<sup>209</sup> Whatever the reasons for the new delay and the late notification, it raised major problems in arranging the 'inland trunk' service. For Pirow, the postponement 'broke' the Bullock-Pirow agreement at Lusaka in 1935 and thus called for a new round of negotiations. He was not concerned to dispute the basic principles of the E.A.M.S. nor the Imperial Airways proposed flying boat service to Durban. It was the land route to the north that mattered, as part of his greater vision of South African Airways' services to Bathurst, Lagos and the Congo in the west, Cairo to the north, and Madagascar in the east.<sup>210</sup>

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208. Ibid., Governor to DO, March 20, 1937.

209. Ibid., Woods Humphrey to Governor Stanley, May 3, 1937.

210. AVIA 2/2119, Mr. Pirow's Proposals for Air Services from South Africa, 1936, I.A.C. paper 191, encl. 3, extracts from the Sunday Express (Johannesburg), July 19, 1936.

Pirow insisted that Imperial Airways abandon the service to Johannesburg as of April 1st, 1937, regardless of the starting date for the alternate Durban service. This meant that Imperials would have to terminate at Salisbury or Lusaka after March 31st, and leave Pirow "to make his own arrangements to take his mail and passengers into the Union after that".<sup>211</sup> Having extended Imperial Airways' contract once to April 1st, Pirow was not prepared to extend it again, unless some reciprocal advantage could be obtained for South African Airways.<sup>212</sup> This insistence created an awkward situation for both Imperial Airways and the Air Ministry. Imperials' overhaul and maintenance facilities at Germiston were already being transferred to Durban, and neither Lusaka nor Salisbury were equipped to operate as a repair terminal even on a temporary basis.<sup>213</sup> A more important consideration, of which Pirow was fully aware, was that matters of equipment, routing and services on the inland trunk service were far

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211. AVIA 2/1916, Resumé of Bulawayo conference, p. 3.

212. AVIA 2/1972, A.M. brief and history of negotiations, August 12, 1937, p. 2. The Union government had agreed to a three month extension of Imperials' contract to April 1st at existing subsidy rates.

213. AVIA 2/2119, I.A.C. paper 324, April 2, 1937, Memorandum by the Director General of Civil Aviation (Shelmerdine), p. 3.

from settled. <sup>214</sup> With only 9 days remaining before his April 1st deadline, Pirow proposed his 'solution' to the problems; Imperials could use Germiston after April 1st if South African Airways were cleared to operate a weekly service to Kisumu to link with the empire service. <sup>215</sup>

Under the terms of the Bullock/Pirow agreement, Wilson Airways was to operate a twice weekly service Kisumu-Lusaka, RANA was to operate Lusaka-Salisbury and Salisbury-Johannesburg weekly, or as required, and South African Airways was confined to a weekly Johannesburg-Bulawayo-Lusaka flight. Pirow's new proposals placed South African Airways in direct competition with Wilson Airways on the northern sector of the route, and aggravated the Rhodesian governments and RANA, already fearful and somewhat dissatisfied with the existing arrangements for the E.A.M.S. <sup>216</sup> Of particular concern was Pirow's determination

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214. Pirow wanted RANA and South African Airways to employ common aircraft on the Lusaka service, "readily convertible to military use", Cape Argus, April 22, 1936. Northern Rhodesia was complaining that 'all-up' mails would have to travel the long way round from Lusaka through Livingstone, Bulawayo, Salisbury and Beira, instead of the direct route north to Kisumu. AVIA 2/1916, Governor Young to CO, September 25, 1935.
215. AVIA 2/1973, Egypt - South Africa Air Service. Proposed Extension of Agreement with Imperial Airways, Notes of Air Ministry meeting, March 26, 1937, p. 1.
216. Southern Rhodesia especially wanted to keep South African Airways away from Salisbury and generally protect RANA interests. See AVIA 2/1916, Chapman (RANA) to Huggins, September 9, 1935; encl. 28b, note by Governor Young of Northern Rhodesia, February 15, 1936.

to employ large modern aircraft, such as the Junkers JU 52/3m with its maximum 17 passenger capacity.<sup>217</sup> In the Air Ministry view, it was clear that

as Mr. Pirow is establishing his commercial air transport services partly as a measure of defence, he is prepared to equip them on a scale of expense which cannot be imitated by economically run lines such as Wilsons and RANA. 218

Moreover, the British feared that Pirow's inland service would detract from the empire route along the coast, even though 'all-up' mails were confined by the agreement to the Durban route.<sup>219</sup>

The initial British response was to reject Pirow's plans, Shelmerdine at the Air Ministry arguing that a concession at this point would only lead to further demands, and Woods Humphrey preferring the difficulties of terminating Imperials service at Salisbury.<sup>220</sup> But, as Shelmerdine pointed out a few days later, resistance to Pirow's ambitions involved "continual pressure by the United Kingdom Government to keep the Union within bounds", and

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217. The original intent was to use British Airspeed Envoys, although consideration was given to the Douglas DC2. Bulawayo Chronicle, June 13, 1935. The Envoys "disappointed" Pirow and Junkers aircraft were chosen. AVIA 2/1972, Stanley to CO, October 26, 1936.
218. AVIA 2/1972, A.M. Brief, August 12, 1937, pp. 1-2. RANA and Wilsons would operate at best with Dragon Rapides.
219. Ibid., p. 3.
220. AVIA 2/1973, Notes of A.M. meeting, March 26, 1937, p. 4.

Concession at this juncture may in the long run prove to be a more satisfactory basis for co-operation, even though it means abandoning part of the Lusaka Agreement and facing further expenditure in supporting the Durban route pending the growth of sufficient traffic.... 221

In part, the more accommodating Air Ministry attitude was brought about by Colonial Office reluctance to apply continued pressure on the Union, reflecting Northern Rhodesian and East African willingness to partake of Pirow's 'modern' service to the south. 222 In early May, a Colonial Office dispatch advised;

Conclusion has been reached here that on general political grounds it is desirable to meet, as far as possible, desire of Union Government to operate air services in other parts of Africa.... 223

To meet the problem of Wilsons and RANA operating small aircraft in competition with Pirow's airliners, the Air Ministry advanced a counter proposal that the Kisumu-Johannesburg inland services should be operated on a 'pooling basis', and it called upon the Union government to share with Great Britain any additional liability

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221. AVIA 2/2119, I.A.C. paper 324, April 2, 1937, Shelmerdine memorandum, pp. 4, 5.
222. The CO could see "no political objections to South African Airways operating to Kisumu". AVIA 2/1973, Notes of A.M. meeting, March 26, 1937, p. 2.
223. AVIA 2/1972, CO to Secretary, Conference of East African Governors, May 7, 1937.

"attributable to the adverse effect of the new line on the Empire route to Durban". <sup>224</sup>

Pirow accepted the 'pool' idea, but countered the suggested Durban arrangement with a willingness to waive charges to be made against Imperial Airways for the use of landing and housing facilities, concessions previously refused, although requested in the preliminary E.A.M.S. proposals. The Pirow idea was remarkably generous. It promised a saving of some £6,600 p.a. for Imperial Airways, and the Union was thus accepting the full costs of providing the operational facilities. <sup>225</sup> Imperial Airways would continue to pay 'commercial charges' (rental of workshop, passenger, office and other space), but Pirow was prepared to increase the Union subsidy by £5,000 p.a. "to repay Imperial Airways for their disbursements to the Durban authorities". <sup>226</sup> All Pirow asked in return for this extra 'concession' and additional subsidy was certain "nominal facilities" along the land route. <sup>227</sup>

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224. Ibid., A.M. Brief, August 12, 1937, pp. 3-4. It was feared that Imperials might lose as much as £15,000 p.a. on coastal route receipts from the inland competition.

225. Ibid., pp. 5-6. Capital expenditures at Durban were estimated at £63,000 - £100,000. See correspondence in AVIA 2/1023, Empire Air Mail Scheme - Durban, Imperial Airways Requirements.

226. AVIA 2/1972, A.M. Brief, August 12, 1937, p. 8.

227. Ibid., British High Commissioner in South Africa to DO, May 31, 1937.

The integration of the Johannesburg-Kisumu route and Durban questions provided the background for a conference held at Nairobi May 31 and June 1, 1937. Requested by Pirow, the conference brought together representatives from the Union, the East African governments, Wilson Airways and Imperial Airways. Its conclusions, noted the Air Ministry summary, represented "a very fair compromise".<sup>228</sup> The so-called 'Nairobi Resolutions' confirmed the acceptance of South African Airways on the Kisumu route, generally rejected the Union's request for the free use of facilities at intermediate stations on the Lusaka-Kisumu sector, and agreed that receipts were to be pooled between Wilsons and South African Airways on a 70/30 basis.<sup>229</sup> While noting general East African "misgivings" about Pirow's route into the area, "all parties to the discussions [were] reasonably satisfied".<sup>230</sup> In effect, the main lines of British policy had been preserved. Pirow had been granted "a reasonable sphere of operations for his air line", the continued existence of Wilson Airways and RANA had been preserved "by providing a sufficiency of operation and opportunity of local expansion", and, most important, the essential features of the E.A.M.S. in the

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228. Ibid., A.M., Brief, August 12, 1937, p. 9.

229. Ibid., pp. 9-10.

230. Ibid., p. 11.

area had been retained, namely, "that the all-up Empire mails travel on the Durban route".<sup>231</sup> If detailed matters remained to trouble the operation of the E.A.M.S. in Africa, they were not sufficient to disrupt the implementation of the scheme. Pirow's aims had not been blunted, as at first considered, but rather accommodated to meet the needs of the mail scheme, and, in the process, the E.A.M.S. operation in Africa was assured.

In the meantime, Imperial Airways and the Air Ministry proceeded with plans to commence the E.A.M.S., the object as ever "to provide improved, accelerated and more frequent services on Empire routes".<sup>232</sup> The Air Ministry estimates in 1937 provided for civil aviation expenditures of £2,315,000, a net increase of £1,555,000 over 1936, much of which was attributable to the planned E.A.M.S.<sup>233</sup> Imperial Airways operated the first 'all air' Southampton-Alexandria Empire flying boat service in February; by May, the flying boats

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231. Ibid., p. 12.

232. AVIA 2/1987, Empire Air Transport Scheme - Preparation of White Paper on Proposed Agreement with Imperial Airways, Ltd., 1937, A.M. précis, May 25, 1937. See too correspondence in AVIA 2/1911.

233. A.M., Memorandum by the Secretary of State for Air to Accompany the Air Estimates, 1937, Cmd. 5388 (1937). Increases in subsidy support were provided in the Air Navigation Act, 1936, 26 Geo 5 & 1 Edw 8, c. 44, and subsequently, the Air Navigation (Financial Provisions) Act, 1938, 1 & 2 Geo 6, c. 33.

were on service as far south as Kisumu, and on June 2nd, the first Durban service left Southampton.<sup>234</sup> Meanwhile, one flying boat, the 'Cambria', was completing a final 20,000 mile survey of the African route.<sup>235</sup> On June 7, the last Imperial Airways flight left Johannesburg with the northbound mail.<sup>236</sup> Throughout, the Air Ministry and Imperial Airways were negotiating the final arrangements and agreements to be embodied in the contracts for the new services.<sup>237</sup>

On June 29, 1937, the E.A.M.S. was inaugurated. Imperials' Empire flying boat, 'Centurion', piloted by Captain F. J. Bailey, left Southampton with 3,500 lbs. of unsurcharged mail.<sup>238</sup> The bi-weekly service covered a lengthy route: Southampton-Macon-Marseilles-Bracciano-Brindisi-Athens-Mirabella-Alexandria-Cairo-Luxor-Wadi Halfa-Kareima-Khartoum-Kosti-Malakal-Bor-Rejaf-Port Bell-Kisumu-Naivasha-Mombasa-Dar es Salaam-Lindi-Mozambique-Quelimane-Beira-Inhambane-Lourenco Marques-Durban. The first flight

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234. Imperial Airways, Annual Report 1937.

235. BOAC, I.A. file, 'African Flying Boat Route Surveys, 1937', Notes on 'Cambria' with Captain Eggesfield.

236. Aeroplane, June 16, 1937, p. 738.

237. Correspondence in AVIA 2/1987. The agreements were published under the general title Empire Air Mail Scheme as Cmds. 5414 (1937), 5497 (1937), 5501 (1937), 5523 (1937), 5616 (1937), and 5769 (1938). See too correspondence in AVIA 2/1165, Empire Air Mail Scheme. South Africa Introductory Period - Payment of Subsidy (13.7.37-).

238. Stroud, Annals, p. 146.

marked the beginnings of the short-lived 'romance' of the flying boat era in British imperial aviation.<sup>239</sup>

Public response to the E.A.M.S. in its slightly over two years of operation reflected the general success of the service. As early as September, 1937, reports from South Africa indicated that internal air mail operations were being taxed to the limit.<sup>240</sup> By December, the London Chamber of Commerce was urging a third service to Durban to handle the mails, complaining that some had to be held over in Kisumu on southbound flights.<sup>241</sup> Prior to the E.A.M.S., revenue loads (passengers, freight and mails) on the South African route had averaged slightly over one ton, or about 160 tons p.a. in 1936.<sup>242</sup> By 1939, 45 tons of mail alone were being carried each month, with total loads at a rate of over 1,000 tons p.a.<sup>243</sup> In 1938, the only full year of E.A.M.S. operation, the Egypt-South Africa

239. See V. Sommerfield, Flying Boat (London, 1938); a more sober technical analysis is provided by B. S. Shenstone, "Transport Flying Boats: Life and Death", Aeronautical Journal, LXXIII (December, 1969), 1038-40.

240. Aeroplane, September 29, 1937, pp. 398-99.

241. AVIA 2/1254, Empire Air Mail Scheme. Request by London Chamber of Commerce for third service to Durban, A. de V. Leigh to GPO, December 20, 1937. A third weekly service was instituted in 1938.

242. Hansard, CCCL, July 24, 1939, cols. 1012-13.

243. Detailed breakdowns of loads are provided in AVIA 2/1396, Imperial Airways Limited: Traffic Returns in Respect of Empire Services, 1938-1940.

service (including the West Africa feeder route) recorded 3,133,857 ton miles flown, as compared to 1,437,200 in 1935, and the bulk of this increase was drawn from increased mail loads. <sup>244</sup>

The pressure on Imperials was thus considerable, given the continued slow rate of aircraft delivery, the Air Ministry preoccupation with preparations for the impending war, and operating problems along the route. <sup>245</sup> There were grumblings from Africa too. Rhodesians complained, for example, of the poor connections arranged at Beira where passengers to and from Salisbury had to spend the night before continuing on. Criticism was also voiced about the Salisbury-Johannesburg connections which, in some instances, led to the incongruity of routing Salisbury-Randmail via Beira and Durban. <sup>246</sup>

By the summer of 1939, Imperials had to make the stunning announcement that passenger accommodation on the empire routes would have to be reduced. <sup>247</sup> The company

244. Ibid., and for 1935, The Air Annual of the British Empire, 1938 (London, 1938), p. 611.

245. Details on flight delays, accidents and the like are found in AVIA 2/1165. Engine problems and weather caused the most frequent difficulties.

246. Rhodesia Herald, July 15, 1937. AVIA 2/1916, Stanley to DO, July 15, 1937; B. W. Galpin to A.M., October 8, 1937.

247. AVIA 2/1581, Announcement by Imperial Airways Ltd. of Reduction of Passenger Accommodation on Empire Services, press release, August 8, 1939.

explained the problem in terms of a fleet shortage, lack of trained personnel, Air Ministry preoccupation with defense problems, a marked increase in the amount of mail, and the desirability of carrying greater reserves of fuel. As the whole basis of the E.A.M.S. was the carriage of mails, passenger traffic was to be sacrificed accordingly. <sup>248</sup>

It was an embarrassing moment, and as The Times pointed out, "the poorest possible advertisement for the corporation BOAC which is about to take over....". <sup>249</sup> The strongest criticism came from South Africa. The Star stated that Imperials' excuses "seem to give lie to previous statements of close preparation and dependability accounted for the delay in opening some services". <sup>250</sup> Die Burger accused Imperials of using equipment which has not kept pace with traffic demands. <sup>251</sup> There could be little reply to these charges for they had the ring of truth if not of understanding. At this point, there was no time left to remedy the situation, for in less than a month, Great Britain was at war and the E.A.M.S. operation suspended. <sup>252</sup>

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248. Ibid. With a full complement of passengers, the Empire flying boats could carry 2,205 lbs. of mail; with no passengers, 5,512 lbs.

249. The Times, August 9, 1938. Clipping in AVIA 2/1581.

250. The Star (Johannesburg), August 9, 1939.

251. Die Burger, August 10, 1939.

252. Correspondence in AVIA 2/1276, Empire Air Mail Scheme - Question of Postal Penalties under Empire Agreements with Imperial Airways, 1937-1941, and AVIA 2/2079, Empire Air Mail Scheme - Revision of Confidential Estimates, 1939-1949.

More pressing matters thus swept aside the most imaginative experiment in the development of British imperial air policy. The E.A.M.S. was "one of the boldest and most interesting steps" <sup>253</sup> of the many taken by air transport between the wars, and a milestone along the path which led British air transport into Africa. More had been accomplished in the development of British African aviation in a few short years than in the two decades before. In bringing Kisumu within three days and South Africa 4½ days from Great Britain, the promise of swift imperial communications had been kept. The achievement was all the more remarkable given the difficult circumstances within which Imperials operated in the last few years before the war. Under sharp attack from critics at home and abroad, the company saw first its European monopoly invaded by the rival British Airways, and subsequently suffered the indignity of being critically examined by the famous Cadman Committee. It had to face the planned surrender of its identity in the government decision to merge British Airways and Imperials into the British Overseas Airways Corporation. <sup>254</sup> Company leadership

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253. H. Self, "The Status of Civil Aviation in 1946", Journal of the Royal Aeronautical Society, I (September, 1946), 726.

254. For background, see Higham, Britain's Imperial Air Routes, pp. 242-309. See too below, chapter XII.

had suffered as well, with the death of its chairman, Sir Eric Geddes in 1937, and the 'forced' resignation of the popular managing director, George Woods Humphrey in 1938.<sup>255</sup> Moreover, the success of Imperial Airways and Air Ministry plans in Africa was only one measure of the formidable task of bringing modern air transport to a whole empire.

Although of short life, the E.A.M.S. was especially important to Africa. It introduced difficult problems, but it brought new vigour to air transport development in East, Central and South Africa.<sup>256</sup> For the first time in imperial air policy, Africa was given first consideration, a factor of some consequence in hastening Africa's entry into the modern air age.<sup>257</sup>

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255. Geddes died on the eve of the inauguration of the E.A.M.S. Aeroplane, June 30, 1937, p. 789. On Woods Humphrey, see ibid., June 22, 1938, p. 763, and June 29, 1938, pp. 798-800; Flight, June 23, 1938, p. 605.
256. West Africa was also involved. See below, chapter X.
257. It can be noted here that two Air Ministry files dealing with the E.A.M.S. in Africa remain closed to public scrutiny until 1983: AVIA 2/1938, Empire Air Mail Scheme, Southern Rhodesia, 1935-1952, and AVIA 2/1953, Empire Air Mail Scheme - Programme for Introduction in South Africa, 1935-1952.

CHAPTER X  
BRITISH WEST AFRICA: PROGRESS  
AND PLANS, 1935-1939

We think it in principle undesirable that British possessions should be dependent on a system of air communications under foreign control where this can be avoided.

Walter Runciman, 1934. <sup>1</sup>

As noted previously, British plans to provide air services to and within West Africa were slow to mature. <sup>2</sup> In part, this was due to the prevailing British view that "conditions obtaining in the West African Colonies are not, generally speaking, the most advantageous for aviation,..." <sup>3</sup> The reference was to the West African coastal climate and the generally sorry state of existing ground communications, but there were other factors as well. Unlike other parts of British Africa, the non-African population was small and scattered, and while it was the group to whom more rapid England-Africa and inter-colonial communications would appeal,

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1. CAB 24/250, C.P. 190(34), Committee on Commercial Air Transport, 'Report', July 21, 1934.
  2. See above, chapter VIII.
  3. AVIA 2/1836, part I, C.I.D. paper 241C, 'Present Position with regard to the Reconnaissance for Air Bases in the West African Colonies', p. 2.

its voice was, for the most part, quiet on matters of air transport.<sup>4</sup> The colonial administrations were likewise indifferent, or, at best, interested only so long as any scheme would be financed from other than colonial revenues.<sup>5</sup>

In contrast with other British African colonies, this overriding concern for economy in British West Africa brought the colonies into the 1930's almost totally unprepared to accommodate air transport development.

There was a scattering of rudimentary 'airfields', but no radio or meteorological facilities adequate to handle air traffic.<sup>6</sup>

There is little doubt, too, that the British focus on the establishment of the Cape Town route, and the implementation of the E.A.M.S. after 1933, kept West Africa on the periphery of

4. BOAC, 'Report by the Committee Appointed by the Resident Minister, West Africa, on the Organisation of Air Transport in West Africa, 1943-44', Africa No. 1172, April, 1944, p. 37. Chairman of the committee was F. H. Sandford, thus the report hereinafter referred to as the Sandford Report. Pre-war non-African populations were given as: Nigeria, 6,387; Gold Coast, 4,975; Sierra Leone, 1,381; Gambia, 408.
5. The depression aggravated already difficult economic circumstances. Nonetheless, critics were ready to blame the colonial governments for West Africa's late arrival on the air scene. West African Review, VI (July, 1935), 5.
6. What progress had been made took place mainly after the 1930 Air Ministry survey. By late 1934, Nigeria had 10 'airfields': Lagos (Apapa), Ilorin, Minna, Jos, Kaduna, Kano, Katsina, Bauchi, Yola and Maiduguri. In addition, there were seaplane sites at Lagos, Forcados, Calabar, Port Harcourt, Onitsha, Lokoja, Makurdi and Jebba. In the Gold Coast, only Accra and Tamale had landing grounds.

imperial African air interests, even as it was hoped to bring Nigeria and the Gold Coast into the 'all-up' mail scheme when feasible. <sup>7</sup>

A final inhibitory factor in determining the pace of West African air development was a medical one. With the coming of air transport and the relatively swift carriage of people from one part of the globe to another, a major concern developed over the possibility of diseases endemic to one area being spread into other areas. <sup>8</sup> Whereas surface transport had hitherto allowed a reasonable incubation period on lengthy journeys, disease carriers were now being transported across great distances in days, if not hours. The problem was especially acute in parts of Africa where limited medical facilities were inadequate to contain potential epidemics of non-endemic diseases. In 1926 and again in 1933, Great Britain had endorsed international agreements aimed at preventing the spread of the plague, typhus, smallpox, cholera and yellow fever, and these agreements applied to the empire as well. <sup>9</sup> In West Africa, the main concern was that cholera would be brought in from the Sudan, East Africa and India, and that yellow fever, endemic in West Africa, would be carried out. Thus, there

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7. Nigeria, Sessional Paper No. 5 of 1936, Air Services in West Africa (Lagos, 1936), pp. 1-3. Also correspondence in AVIA 2/1915.

8. West African Review, IV (April, 1933), 28.

9. FO, International Sanitary Convention, Cmd. 3207 (1926), and International Sanitary Convention for Aerial Navigation, Cmd. 4938 (1935). The latter convention was agreed upon in April, 1933, and ratified by Great Britain in September, 1934. See discussion in West African Review, V (August, 1934), 11.

was a need for government action and the establishment of controls and regulations dealing with flight into and out of West Africa. In effect, this meant the provision of special medical facilities, screened passenger accommodation at all aerodromes designated as ports of entry, and equipment for the disinfection or fumigation of incoming aircraft.<sup>10</sup> The preparation of these requirements was both time-consuming and costly, and for Imperial Airways, it meant delays were inevitable in establishing the Khartoum-West Africa service.<sup>11</sup>

Nonetheless, while the problems of air transport operation in West Africa were many, they were in the process of being overcome. By 1935, there was an air transport 'scramble' in West Africa, with France, Germany, Belgium and Great Britain all beginning to eye the area with awakening interest.<sup>12</sup> On the British side, there was a flood of proposals and plans

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10. Aerodromes so equipped were designated as 'anti-amaryl'. Spraying or 'flitting' of the aircraft and its contents, including passengers, at times went to extremes on the Kano-Khartoum service. Higham points out that procedures were only modified when a senior Nigerian official received a full blast in the face. Robin Higham, 'Pioneer British Air Services to West Africa' unpublished typescript in BOAC archives, n.d., p. 5.
  11. Imperials were prepared to operate the service in the summer of 1935 but had to await preparations in Nigeria. In addition, as the Sudan would not allow the re-entry of any aircraft which had proceeded west of Kano, the Kano-Lagos sector had to be flown by a separate aircraft.
  12. Reviewed in Shell Aviation News, December, 1935, pp. 11-14.

put forward by Imperial Airways and a host of others. <sup>13</sup>  
Basically, British ideas turned on the development of four possible services, which, although separate in emphasis, were related in the effort to plan for the integration of British West Africa into the full compass of imperial air transport operations. In order of priority, air service proposals included: (1) a West Africa link with Europe and England, either along the African coast to Bathurst, across the Sahara from Marseilles or Malta to Nigeria, or a Nigeria-Khartoum connection with the African trunk service; (2) an inter-colonial route along the coast, with initial focus on Nigeria-Gold Coast and Sierra Leone-Gambia services; (3) an England-South America service via Bathurst and/or Freetown; and (4) an alternative England-South Africa service via the Sahara, Nigeria and the Congo. <sup>14</sup>

All these proposals were studied in depth by the British government's Inter-departmental Standing Committee on International Air Communications (I.C.I.A.C.), chaired by the Treasury's Sir Warren Fisher. This important committee grew out of a proposal by Neville Chamberlain in April, 1935, and

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13. See above, chapter VIII. Additional correspondence in AVIA 2/982, Mrs. H. B. Tate, M.P., Proposals for Air Service to South America (British Air Lines Syndicate Ltd.), AVIA 2/1025, British Air Services to South America - Tenders for, and AVIA 2/1970, Proposals for London-South Africa Air Service via Europe and West Coast of Africa - Mr. M. G. de B. Epstein.
14. On the England-South Africa services, see below, Chapter XI.

despite Londonderry's preference for the traditional ad hoc approach of the Air Ministry, the committee was formed

to consider questions of international air communications which affect more than one department, and to report them to the Secretary of State for Air. 15

The Fisher committee is noted here because it played an especially important role in determining British air activities in West Africa. In 67 meetings of the full committee between 1935 and 1939, and in the production of over 500 I.A.C. papers during the same period, the committee's work was a reflection of the growing complexity of air transport planning and operation. <sup>16</sup> The West African situation posed a great many international complications and problems which lay well outside the limited references of the Air Ministry and Imperial Airways. The committee's appointment also suggested a late but sure awareness in Great Britain of the importance of civil aviation in terms of imperial and strategic policy. For the first time since the beginnings of British air

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15. AVIA 2/872, Constitution of Standing Committee on International Air Communications, 1935, Chamberlain to Londonderry, April 1, 1935. Chamberlain was concerned that there be "adequate and timely consultation". In addition to Fisher, the original I.C.I.A.C. committee included Sir Donald Banks, J.A.N. Barlow, Sir Harry Batterbee, Sir Henry Fountain, Rear Admiral C. E. Kennedy-Purvis, Sir Cecil Kisch, Sir George Mounsey, A. H. Self, Lt.-Col. Shelmerdine, Sir John Shuckburgh, and the A.M.'s W. W. Burkett as secretary.
16. A complete collection of the I.C.I.A.C. committee meeting minutes and the I.A.C. papers may be found in the Board of Trade, Civil Aviation Library, London.

transport, all the problems were brought into sharp focus, and the prestigious committee did much to shape the pace and direction of British civil air transport policy until world war II. <sup>17</sup>

In the meantime, Imperial Airways was active in exploring the possibilities of moving into West Africa. First hopes were that a route could be developed along the Atlantic coast with flying boats via Portugal. This idea had to be set aside for the moment as no British aircraft was in service which could fly the first lengthy England-Lisbon leg of the route. <sup>18</sup> Imperials pursued an interest in a trans-Saharan service right until the war, but the high anticipated costs of operation with suitable equipment along a subsidiary French route precluded development. <sup>19</sup> Ultimately, attention was drawn to the longer but more feasible route through Khartoum, thus linking West Africa with the existing imperial service to South Africa. In this plan, adopted by Imperial Airways in 1934, a service could be provided that would run Khartoum-El Obeid-El Fasher-Geneina-Abesher-Fort Lamy-Maiduguri-Kano-Kaduna-Minna-Oshogbo-Lagos-Accra-Takoradi, and eventually along the coast to Freetown. <sup>20</sup>

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17. In May, 1939, Sir Horace Wilson replaced Fisher as chairman. The last recorded meeting was held July 28, 1939.
  18. Spanish cooperation would have helped but British aircraft were not allowed to land or overfly until 1940. See "British Air Transport, 1919-1944", British Survey, V (April, 1944), 63-66.
  19. Provisional proposals were forwarded to the Air Ministry in 1936. I.A.C. papers 232, October 19, 1936, and 259, December 7, 1936. See also AVIA 2/1025, encl. 53a.
  20. The 843 mile gap between Takoradi and Freetown was not bridged by British aircraft until the war.

The proposed service promised several advantages over other possible routes. It could be put into operation in a reasonably short time. As the R.A.F. had flown much of the route regularly since 1925, there was no need for an extensive survey to be made.<sup>21</sup> The route would also allow the early inclusion of Nigeria and the Gold Coast in the E.A.M.S. Transit time for mail and passengers between Great Britain and West Africa would be reduced from the 14-16 days required by sea to 7-8 days by air. Mail service could be provided on a weekly basis instead of the fortnightly service provided by Elder Dempster.<sup>22</sup> Finally, the proposed route offered rapid communications between Nigeria and the Gold Coast, the first step in the establishment of an inter-colonial service in British West Africa.

There were, of course, obvious disadvantages to be faced. It was a circuitous route. The London-Kano sector via Khartoum totalled 5,264 miles, compared with 3,774 miles along the Sabena/Air Afrique route across the Sahara. There was the medical problem, already noted. There was competition forthcoming from the French line, Aéro-maritime, planning a coastal service linking Pointe Noire (Leopoldville) with

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21. AVIA 2/1937, West Africa Air Route (Khartoum-Takoradi) - Proposed Ground Organisation, 1935, Notes of Meeting held on 31st July, 1935, p. 4.
  22. Elder Dempster received an annual subsidy of £15,705 for mail services to and from the British West African colonies. In 1935, Nigeria contributed £2,350, Gold Coast, £1,115, Sierra Leone, £840 (including arrears), and Gambia, £81. Great Britain provided the balance. Blue Books for the colonies, 1935. In addition, Gambia had an air mail contract with Deutches Luft Hansa.

Dakar and the connecting French service to Europe. Finally, the commercial prospects were less than promising. Coupled to the fact of a small non-African community in West Africa was the absence of any industries of consequence having a speed requirement for their products or correspondence. There was, as a result, a lack of demand for communications with other parts of the empire, excepting Great Britain, and to a minor extent, South Africa. <sup>23</sup> Potential air mail traffic, upon which the commercial viability of the feeder service would be determined, was difficult to calculate, although a substantial and increasing flow of mail was being carried by sea between Great Britain and the West African colonies. <sup>24</sup> If but 20% of this traffic could be diverted to the swifter but costlier air service, the success of the route could probably be assured. <sup>25</sup>

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23. Prospects for the route are summarised in Reichman, Air Transport in West Africa, vol. I, pp. 13-14. For background, see also his "B.O.A.C. and Associates in West Africa, 1936-1957", unpublished typescript in BOAC reference department.
24. In the Gold Coast, for example, the post office handled 7,822,316 pieces of mail in 1934, 14,346,098 in 1938, almost a 100% increase. Gold Coast, Blue Book for the years 1934 and 1938, pp. 182 and 179.
25. Such hopes were not realised. In 1938-39, excluding inter-colonial mail, the air mail carried a total of 13,753 kilos to and from British West Africa. Sea mail carried a total of 67,984 kilos of first class mail. Sandford Report, p. 37.

Weighing the advantages and disadvantages of developing a route to West Africa via Khartoum, it was clear that the service was to pose as many problems as it hoped to resolve. Fortunately for West Africa, political, not commercial, considerations were to dictate the pace of development. "It was essential", noted Shelmerdine, the British Director-General of Civil Aviation, early in 1935, "to embark on a scheme for a British air service to West Africa as soon as possible....", and, if Nigeria and the Gold Coast were to be brought into the E.A.M.S., "preliminary operational experience" would be invaluable. <sup>26</sup> An Air Ministry memorandum in February, 1935, expressed concern about the number of air transport operators, British and foreign, "interesting themselves in the establishment of air services to and in West Africa", and pointed to problems if "a number of ill-considered and uncoordinated services may be started in competition with each other". <sup>27</sup> Attention was drawn to the threat of Belgian and French plans in the area, and if these operations were to be forestalled, "early steps will have to be taken". <sup>28</sup> The Air Ministry thus sounded a note of urgency. With this political support, and the promise of

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26. AVIA 2/1937, Notes of a meeting, 7th January, 1935, p. 1.

27. AVIA 2/968, West Africa Air Service - Incidence of Cost of Ground Organisation - Extension to the Gold Coast, 1936, A.M. memorandum, p. 1.

28. Ibid.

an adequate subsidy, Imperial Airways was able to proceed with plans to inaugurate the service, the poor commercial prospects notwithstanding.

Sometime in 1934, Elder Dempster Lines Limited entered into negotiations with Imperial Airways in the matter of establishing a local air service between Nigeria and the Gold Coast.<sup>29</sup> Elder Dempster had shown an interest in commercial aviation as early as 1930, reflecting, perhaps, a progressive spirit in the company's management, and an awareness of the potential of air transport development in West Africa.<sup>30</sup> Whatever the reasons, and they are nowhere made clear, Elder Dempster was prepared to devote at least a part of its energies to the exploitation of West African air transport, and sought Imperial Airways assistance. For Imperials, the shipping line's interest arrived at a most opportune moment. Already hard-pressed to staff its African empire, the air line was quite prepared to take advantage of the ready organisation offered by Elder Dempster in Nigeria and the Gold Coast.

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29. P. N. Davies, The Trade Makers. Elder Dempster in West Africa 1852-1972 (London, 1973), p. 289. I am grateful to Dr. Davies for the opportunity of having read his manuscript on Elders Colonial Airways and his rare copy of the Webb Report (see below) at the University of Liverpool in 1970.

30. Ibid. A Mr. A. C. Wyness spent a month with Imperial Airways in 1930.

The result of the first negotiations was the sending of Imperials' L. E. Webb to West Africa in October, 1934, with the object of (1) obtaining first hand the general attitudes of the official and commercial communities to air transport; (2) examining the possibilities of air traffic; and (3) determining the ground organisation required. Webb prepared a sound 100 page report which was submitted to Elder Dempster in early 1935. <sup>31</sup>

The Webb Report was not an encouraging document. <sup>32</sup> Elder Dempster's intentions were to improve and accelerate "mail, passenger and freight connections between these colonies" with a service linking Takoradi, Accra and Lagos. <sup>33</sup> There was the possibility too of extending the service to Kumasi and Tamale. <sup>34</sup> The main idea was that flights would be coordinated with the arrival and departure of Elder Dempster express ships at Takoradi. Southbound passengers in a hurry and mail could leave the ship at Takoradi and proceed by air to Accra and Lagos, saving 6-7 and 36-40 hours respectively

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31. Imperial Airways, 'A Report to Elder Dempster Lines Limited on the Operation and Commercial Possibilities of an Air Service in British West Africa', March, 1935 (hereinafter, the Webb Report). Webb was later Resident Manager B.O.A.C., West Africa, until 1940.
32. See discussion in Jones, The Time Shrinkers, pp. 223-26, and Davies, The Trade Makers, 290-91.
33. Webb Report, p. 42, H. S. Feggetter (Elder Dempster Nigerian Manager) to Chief Secretary, Lagos, November 8, 1934.
34. FO 371/18499, W10947, T. Whitfield (Elder Dempster) to Governor Hodgson, Accra, October 27, 1934.

on the journeys. Similar savings would be brought about on the northbound service.<sup>35</sup> With respect to the participation expected of the Nigerian and Gold Coast governments, no subsidy was called for, but a mail contract was necessary and the colonies would have to provide the ground facilities.<sup>36</sup> Imperial Airways was to handle the operational side of the service, including the provision of multi-engined landplanes for the service.<sup>37</sup>

Webb found little support for the idea in the colony, although he noted, "it is thought that the service will be popular with the better class or professional class of native, i.e., barristers, lawyers, doctors, etc., etc."<sup>38</sup> The official community was clearly more interested in a service to Great Britain, and saw little use for a purely local service.<sup>39</sup> Thus, Webb recommended that "this local service should be regarded simply as 'staking the claim' for the company running it", and should become part of the proposed Khartoum extension into West Africa.<sup>40</sup> "A statement to this effect", Webb argued,

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35. Davies, The Trade Makers, p. 290.

36. AVIA 2/968, A.M. memorandum, p. 2.

37. Webb Report, p. 4.

38. Ibid., p. 66.

39. Ibid., p. 5.

40. Ibid., p. 9.

would be likely to arouse more interest and assistance than a proposal to start a purely intercolonial service without any idea of a through service, when ground organisation permits. 41

The Webb Report was accepted by Elder Dempster and Imperial Airways in the spring of 1935, and it helped considerably in the completion of discussions on the formation of a new company, Elders Colonial Airways Limited. 42 By July, the parent firms had come to a general agreement on the operation and management of the new company, and it was formally incorporated in November with a capital of £25,000 in shares of £1 each, Elder Dempster and Imperial Airways each taking a 50% interest. 43 The first directors of the company were Gerald F. Torrey and Picton Hughes Jones from Elder Dempster, and Woods Humphrey and Burchall from Imperial Airways. The company hoped to operate in every phase of civil aviation activity, but its main object was

to establish, maintain and work lines of aerial conveyances for the conveyance of mails, passengers and/or goods within and between countries and any place or places from time to time selected by the Company and in particular on the West Coast of Africa and to undertake all kinds of aerial transport. 44

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41. Ibid., p. 10.

42. Davies suggests that after the Webb Report was accepted in March, "it was then decided" to form Elders Colonial Airways (Trade akers, p. 291). The Air inistry was talking about the company in January. See AVIA 2/1937, Notes of a meeting, 7th January, 1935, p. 2.

43. BOAC, I.A. file No. 93, Elders Colonial Airways Limited, - Company Matters, 1935-1939, and I.A. file No. 92, Elders Colonial Airways Ltd. - Articles of Association, 1935. Imperial Airways (Nigeria & Gold Coast) Ltd. was formed in August, 1935.

44. I.A. file No. 92, p. 3(a).

The formation of Elders Colonial Airways signalled an important moment in West African air transport development. Great Britain's 'chosen instrument' of air imperialism had at last reached West Africa, albeit in disguised fashion. From this point onwards there was to be no turning back, either on the part of Imperial Airways, or its successor, B.O.A.C. Of significance too was the entry of Elder Dempster into aviation, wedding this innovative thrust to its long history of association with British West Africa. <sup>45</sup>

In the meanwhile, Imperial Airways continued their efforts to establish the Khartoum-Kano section of the route in cooperation with the Air Ministry. In March, 1935, Nigeria and the Gold Coast were informed officially of British intentions to establish a link with Khartoum as a prelude to participation in the E.A.M.S. <sup>46</sup> While some objections were raised about the circuitous route, <sup>47</sup> by July, both colonies had indicated their willingness to participate in the scheme. <sup>48</sup> With the British treasury prepared to provide full subsidy support until the inauguration of the E.A.M.S. in West Africa, neither Nigeria nor the Gold Coast were called

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45. Davies, The Trade Makers is an excellent account.

46. Nigeria, Air Services in West Africa, p. 1.

47. West African Review, VI (March, 1935), 4. Five months later, in a remarkable turnabout, the same journal waxed enthusiastic about the proposed service. Ibid., VI (August, 1935), 7-8.

48. AVIA 2/1937, Notes of a meeting, 31st July, 1935, p. 1.

upon for an immediate financial contribution.<sup>49</sup> But they agreed to assume responsibility for the provision of adequate landing grounds, medical, meteorological and wireless services, and direction-finding (DF) equipment at some locations. In the case of Nigeria alone, estimated ground organisation costs were to be a heavy burden; £113,683 in capital costs with annual recurrent charges of £18,994.<sup>50</sup>

By the end of July, 1935, the problems of organising the ground facilities remained largely unresolved, and, in some cases, the exact nature of the required facilities had yet to be determined. Thus, despite the Air Ministry view that "for political reasons, it was most desirable that the projected service should commence operating as soon as possible",<sup>51</sup> and Imperial Airways declared readiness "to commence the service almost immediately",<sup>52</sup> the slowness in bringing route facilities to even barely adequate standards

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49. FO 371/19617, Political (Western) General (1935), W8373, Treasury to A.M., September 24, 1935. The Khartoum-Lagos subsidy was set at a maximum of £25,000 or roughly £250 per single trip. See A.M., Memorandum by the Secretary of State for Air to Accompany Air Estimates, 1936, Cmd. 5111 (1936), p. 6, and A.M., England-South Africa. Civil Air Transport Service, Cmd. 5325 (1936).

50. Nigeria, Air Services in West Africa, p. 2.

51. AVIA 2/1937, Notes of a meeting, 31st July, 1935, p. 1.

52. Ibid. The aircraft for the service were available; the De Havilland DH86 'Diana' class, originally designed for Australian service. See "New Aircraft and Aero Engines: the DH86 Express Air Liner", Shell Aviation News, March, 1934, pp. 22-24.

dictated a similarly slow step by step introduction of the service. <sup>53</sup> While the hope had been expressed that the route would be in operation by October, 1935, it was not until February, 1936, that the first through London-Khartoum-Kano service commenced operations. <sup>54</sup> In October, it was extended to Lagos, and in December, the route was opened to passenger traffic. <sup>55</sup> Elders Colonial Airways was able to open the Lagos-Accra sector in October, 1937, but slow progress in readying Takoradi delayed the extension of the route to that point until May, 1939. <sup>56</sup>

In all, the establishment of the West African service was a creditable performance, given the special difficulties to be overcome. <sup>57</sup> For the most part, the service was run

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53. The Air Ministry sent Wing Commander Allen to West Africa in October, 1935, to study and assist local authorities and to expedite matters. A.M., unpublished account, 'Tour Notes. West Africa Tour, October-December, 1935'.
54. The Times, February 17, 1936, p. 11; Aeroplane, February 5, 1936, p. 153. Captain O. P. Jones piloted the first flight from Khartoum on February 13, bringing Kano within 5 days of London. A spectacular reception greeted the flight at Kano. Ibid., March 11, 1936, p. 332; "White Wings over West Africa", BOAC Air News, August 16, 1950, p. 21.
55. Higham, "Pioneer British Air Services to West Africa", p. 6.
56. Gold Coast, Blue Book for the Year 1939 (Accra, 1940), p. 187.
57. Most of which were 'operational'. In addition to AVIA 2/968 and AVIA 2/1937, already cited, see AVIA 2/866, Western Africa Route Meteorological Arrangements, 1935-1937, and AVIA 2/874, Provision of Buildings and Power Supply for Air Mail W/T Stations in Nigeria, 1935-.

on what was described as a "pioneering basis",<sup>58</sup> and the recollections of former Imperial Airways and Elder Dempster staff bear this out.<sup>59</sup> Nonetheless, the service quickly became popular, and with the acceptance of passengers in December, 1936, it was soon "booked up for months ahead".<sup>60</sup> Syrian and Egyptian traders and school-teachers took full advantage of the quicker and cheaper route home to the Middle East,<sup>61</sup> and many passengers were "Moslems from Nigeria who now found it possible to make the pilgrimage to Mecca in comfort...", at least as far as Khartoum.<sup>62</sup> In 1938, Nigeria alone recorded 510 passengers as being carried on the service during the year, suggesting capacity loads on every DH86 flight.<sup>63</sup> The air mail showed a corresponding growth, Nigerian airports handling over 10,000 kilos in

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58. AVIA 2/968, G. Temple Meller to A.M., July 28, 1937.
59. See J. Stanton, "Trans-Africa. The Story of Pioneering an Air Line across the African Continent", Intava World, V (July, 1943), 2-6; BOAC, "The Great Skyway across Africa: How British Merchant Airmen Pioneered the Route that is now our Near East Armies Air Life Line", press release, February, 1944.
60. Higham, "Pioneer British Air Services to West Africa", p. 6.
61. Ibid.
62. K. M. Cass to D.M.V. Jones (The Time Shrinkers), January 5, 1963. Cass was a First Officer on the first flight and later a Captain on the route. I am grateful to Mr. Jones for access to this correspondence.
63. CO, Annual Report on the Social and Economic Progress of the People of Nigeria, 1938 (London, 1939), p. 72. It should be pointed out, however, that the DH86 capacity on the service was limited to 5 passengers, instead of a 'normal' 10.

1938. <sup>64</sup> Ironically, the large amount of air mail traffic prevented West African participation in the E.A.M.S. By the fall of 1937, Nigeria and the Gold Coast were advised that

further investigation has indicated that an air service capable of carrying all first class mail to and from the West African Colonies on the existing route via Khartoum and Kano may prove to be much more expensive than was originally anticipated. <sup>65</sup>

As early as February, 1937, the Air Ministry had calculated a probable need of £120,000 p.a. in subsidy as well as additional expenditures on ground facilities if the E.A.M.S. was to be introduced into West Africa via Khartoum. <sup>66</sup> These figures were well in excess of the £20,000 p.a. subsidy plus annual mail payments of £10,500 and £7,500 asked of Nigeria and the Gold Coast for participation in the scheme. <sup>67</sup> In the meantime, Imperial Airways was estimating a £10,000 p.a. loss on the service under the existing subsidy of £25,000 p.a., pointing out that the combined effects of poor aerodromes, yellow fever restrictions and inadequate accommodation and ground services for passenger traffic had "militated against the successful

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64. Nigeria, Blue Book for the Year 1938 (Lagos, 1939), pp. li4 & 5.
65. AVIA 2/1915, Ormsby Gore to Governors Nigeria and Gold Coast, September 13, 1937.
66. CAB 24/268, C.P. 76(37), 'Civil Aviation: Proposed South Atlantic Air Service'. Memorandum by the Secretary of State for Air, February 27, 1937.
67. Nigeria, 'Air Services in West Africa', p. 2. Also I.A.C. paper 275, January 14, 1937, p. 2.

financial operation of the service".<sup>68</sup> New agreements in 1938 and 1939 raised the subsidy to £47,000 and £44,000 p.a., support which did much to ameliorate the financial picture.<sup>69</sup> Still, the company continued to operate at a handicap in that the service continued to be regarded by the Air Ministry as provisional, precluding the long term planning and development which would have been possible with some security of tenure on the route.

Difficulties aside, by 1939, the West African route had brought Takoradi within 4½ days of London.<sup>70</sup> The collective efforts of Imperial Airways, Elder Dempster and the Shell Company,<sup>71</sup> combined with official support, had brought international air transport to British West Africa. Taken over by B.O.A.C. in 1940, this 'pioneer' route was maintained throughout the war as an integral part of a British 'reserve' route supplying the Allied war effort in the Mediterranean and Middle East.<sup>72</sup>

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68. AVIA 2/1262, Imperial Airways Limited - Extension of Agreement for Khartoum-West Africa Service, 1938, G. Temple Meller to A.M., February 8, 1938.
69. A.M., Civil Air Transport Services, Cmds. 5770(1938) and 6052(1939).
70. Stroud, Annals, p. 561.
71. On Shell activities, see sources noted above, chapter VIII, f.n. 116. Also, Shell Company of Egypt Limited, Mr. W. K. Brett's Report on West African Tour, June, 1936, privately published, 1936, and correspondence in AVIA 2/891.
72. B.O.A.C. gave up the service in June, 1946. Stroud, Annals, p. 563.

A second British air service in West Africa was operated in 1938-1939 between the Gambia and Sierra Leone by Elders Colonial Airways. Interest in the route had first appeared in 1935 when Deutsches Luft Hansa proposed a Freetown service to link with their highly successful Germany-South America service at Bathurst. <sup>73</sup> The German service operated a landplane from Berlin to the Canary Islands, a seaplane flight from there to Bathurst, and catapult aircraft across the Atlantic to Natal. It was the intention that the seaplane "should fly on to Freetown with mails from Europe returning to the Canary Islands with mails from West Africa in time to connect with the northbound service to Berlin". <sup>74</sup> In the view of Major Wronsky, D.L.H. Managing Director;

Our representative at Bathurst and also our crews on the South Atlantic route are often asked by members of the British Colony of Gambia as well as by British travellers coming from Sierra Leone, whether we did not intend to expand our service beyond Bathurst to the South, in order to establish also a connection with the Southern British possessions. There seems to be a great interest for a regular and reliable air mail service and it is asserted again and again that such an air line would be much frequented. <sup>75</sup>

The German proposal posed several problems, not the least of which was a growing British distrust of German air transport ambitions and activities "in the many fields

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73. I.A.C. paper 73, November 11, 1935.

74. Ibid.

75. FO 371/19637, Political (Western) General (1935), W9819, enclosure.

which offer favourable opportunities for the expansion of German influence and commerce" in Africa as elsewhere. <sup>76</sup>

In West Africa, British concern reached near panic proportions by 1938, as rumours held that the Germans had purchased an island off Portuguese Guinea, <sup>77</sup> or had established themselves on the Bissagos Islands, 160 miles south of the Gambia, "with secret hideouts for submarines, and immense harbour fortifications". <sup>78</sup> There was little evidence to justify these suspicions, <sup>79</sup> but they underlined the political considerations dictating British air policy in West Africa. In itself, the German proposed air service had merit, the Colonial Office pointing out that

existing means of communication between Bathurst and Freetown are,.... very poor, there being, apart from occasional cargo boats, a steamer connection between the two ports only once every four weeks. <sup>80</sup>

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76. AVIA 2/1980, Germany - Effect on her Commercial Aviation of Lack of Colonies, I.A.C. paper 330A, April 22, 1937, p. 1.
77. FO 371/22600, Political (Western) Portugal (1938), W10644, W12550. The island was rumoured to be 'Como Island', but it could not be identified.
78. Sunday Graphic and Sunday News, November 6, 1938, p. 3. Correspondence in FO 371/21706, Political (Central) Germany (1938), C1112, W. T. Southern (Governor, Gambia) to CO, January 13, 1938.
79. FO 371/21706, C1362, FO report, November 14, 1938. A German company dealing in palm oil was in the islands, the Companhia Agricola e Fabril.
80. I.A.C. 241, Memorandum by Colonial Office, November 9, 1936.

In the Gambia, Great Britain was already embarrassed by the German presence. D.L.H. was under contract to handle all Gambian air mail, while both German and French services were carrying British mails to and from South America. An added factor was that the GPO was incurring an annual loss of £20,000 on the South American mails, even with exorbitant postal rates --- e.g., 4s/½ oz. to Argentina. <sup>81</sup>

The German proposal thus was welcomed by the Colonial Office, and the Gambian government urged acceptance of the offer, <sup>82</sup> but the Air Ministry considered it "unattractive".<sup>83</sup> The Gambia might well become another 'Clapham Junction' of international airways, <sup>84</sup> but the Air Ministry was determined that the major role in this development should be played by British not foreign interests. British plans continued to call for an extension of the Khartoum-Takoradi route to Freetown and Bathurst, while if the idea of a British service to South America matured, via Bathurst, an interim feeder service from Freetown might be instituted at the same time.<sup>85</sup> Great Britain had already to compete with the French

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81. AVIA 2/1259, Policy Regarding Development of Services to West Africa for the Carriage of All Up Mail, 1938, I.A.C. paper 250, Memorandum by the Post Office, November 17, 1938.

82. I.C.I.A.C. Minutes, 14th meeting, January 8, 1936.

83. FO 371/19637, W9819, I.A.C. paper 73, A.M. note.

84. "Facts and Figures from the Gambia", West African Review, VIII (October, 1937), p. 14.

85. I.A.C. paper 73.

Aéromaritime coastal service from Dakar, which could draw Sierra Leone traffic to Europe through Cotonou and the trans-Saharan service or north through Dakar.<sup>86</sup> It is clear, then, that the Elders Colonial Airways proposal appeared at a most opportune moment.

The scheme was intended to provide a weekly seaplane service between the two colonies, connecting with the German service at Bathurst until a British operation was established, "thus giving Freetown a complete mail connection by air with Great Britain".<sup>87</sup> One Short Scion Junior seaplane was to be employed. Capital expenditure was estimated at £4,500, while net annual costs were calculated at £4,300, assuming no landing and housing fees were charged and fuel, oil and spares could be brought into the colonies duty-free.<sup>88</sup> Carrying 20 lbs. of mail per flight would assure a revenue of £520 p.a., with additional revenue anticipated from passenger and freight traffic.<sup>89</sup> The service was expected to start in 1937, but a major problem appeared right from the start. The aircraft proposed for the service failed two flight tests in September and December, 1937, and

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86. Ibid.

87. BOAC, Elders Colonial Airways, Board Papers, No. 2, December 18, 1936, Memorandum 'Freetown-Bathurst Service'.

88. Ibid.,

89. Ibid.

modifications reduced the payload.<sup>90</sup> To salvage the whole idea, there being no other 'suitable' aircraft available, Woods Humphrey persuaded Shorts to sell a four-engined 8 passenger Scion Senior at a reduced price.<sup>91</sup> While running costs would be some £2,000 p.a. more, both the boards of Imperial Airways and Elder Dempster accepted the additional liability, hoping the larger capacity would attract more traffic.<sup>92</sup> As no subsidy had been requested, it is apparent that Elders Colonial Airways was prepared to operate with a modest deficit in order to 'stake its claim' to the area. Imperial Airways proposals early in 1938 clearly intended the subsidiary company to operate a complete coastal service, Bathurst-Freetown weekly with the Scion Senior, and once or twice weekly between Freetown and Lagos with DH86 aircraft.<sup>93</sup>

The weekly service began on June 24, 1938 from Freetown where the seaplane had been shipped in April for re-assembly and tests.<sup>94</sup> Throughout its one year of operation, the service was dogged with problems. Proper facilities and skilled staff were lacking at both ports of call. There was little support from the commercial community. Discussions

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90. Ibid., Board Papers Nos. 6 & 7, Memoranda, October 1, December 29, 1937.

91. Ibid., Board Paper No. 7.

92. Ibid.

93. Ibid., Board Paper No. 9, February 4, 1938.

94. Higham, "Pioneer British Air Services to West Africa", pp. 7-8.

with the five major mining companies in Sierra Leone found only one, Gold and Base Metal Mines of Nigeria, Limited, prepared to "take full advantage" of the service for the shipment of gold, but the company did not expect to be in full operation for another 18 months.<sup>95</sup> Problems with the aircraft too often forced a cancellation of the service, in one case, for over a month with corrosion problems.<sup>96</sup>

Curiously, in a colony which had thus far done little to inspire the success of the service, reactions in Sierra Leone to the problems being experienced by Elders Colonial Airways expressed disappointment and frustration. On the occasion of the aircraft being unserviceable in November, 1938, Governor Jardine pointed to the "widespread regret in the Colony".<sup>97</sup> The Sierra Leone Chamber of Commerce registered its concern over the "periodic breakdowns", noting

it is essential that some action should be taken to ensure that a weekly air service by some route functions regularly otherwise such a service is more of an inconvenience than a convenience to the public.<sup>98</sup>

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95. BOAC, Elders Colonial Airways, Board Papers, No. 9, report by Mr. Picton Jones.
96. In December-January, 1938-39.
97. Sierra Leone Weekly News, November 26, 1938, p. 5.
98. CO 270/76, Sierra Leone, Sessional Paper No. 3 of 1939, Correspondence with the Sierra Leone Chamber of Commerce Regarding the Air Mail Service between Freetown and Bathurst (Freetown, 1939), C. J. Kempson (C. of C.) to Colonial Secretary, March 28, 1939.

The Sierra Leone government's response to the Chamber's complaints reflected official disinterest;

....this Government must disclaim all responsibility for the reliability or otherwise of Elders Colonial Airways air service. The service was not the outcome of any request from this Government. It originated in a decision taken in London; and it cannot be said that this Government did not make known the essential difficulties. 99

By the spring of 1939, Elders Colonial Airways had recognised the major difficulties of maintaining a regular service with one aircraft. The company complained that Sierra Leone had not yet "recognised the service", and the attitude in the Gambia "appears to be negative".<sup>100</sup> Losses on the service were now running at £8,500 p.a.<sup>101</sup> Although the passenger load factor had increased modestly from 31% in February to 36% in March, in April, only one passenger was carried on the Freetown-Bathurst flight, and he was carried as a special charter to Conakry.<sup>102</sup> Certainly, the service might have been carried on with subsidy support from either Great Britain or the colonies, and a company memorandum admitted the failure of the route was "attributable to the

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99. Ibid., J. S. Fenton to C. of C., April 20, 1939.
100. BOAC, Elders Colonial Airways, Board Paper No. 14, April 28, 1939, draft letter to D.G.C.A.
101. Ibid. Losses were being experienced on the Lagos-Accra route as well; £473 for the period April 1 - September 30, 1938.
102. Ibid., Board Paper No. 15, June 23, 1939, company to Colonial Secretary, Freetown, May 22, 1939.

absence of a subsidy and to the low level of passenger and mail revenue".<sup>103</sup> In May, an application was made to the Air Ministry for financial help, but none was ever received. There was not even a reply from the Air Ministry until September, 1939.<sup>104</sup> In June, Elders Colonial Airways discontinued the service, surrendering the traffic to Aéro-maritime, and its one aircraft was shipped back to Great Britain in September. While the company hoped that "the time will not be long before it can provide the necessary requirements of the West African Colonies", it did not operate again.<sup>105</sup> In West Africa, its small pioneer efforts were already overshadowed by ambitious schemes of larger consequence. Of major importance was the emergence of British Airways as Great Britain's second 'chosen instrument' and plans for a British air service to South America.<sup>106</sup>

From 1936-1939, the Fisher Committee devoted the bulk of its energies to the study of plans and proposals for a South American service. As Lord Swinton pointed out, the impetus given to this effort came from the growing concern

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103. Ibid., Board Paper No. 14, memorandum.
104. BOAC, I.A. file No. 93, J.J.W. Herbertson (Directorate of Overseas Civil Aviation) to Elders Colonial Airways, September 23, 1939.
105. Sierra Leone Weekly News, August 5, 1939, p. 11, letter from J. Makinson.
106. On the background and formation of British Airways, see Robin Higham, "British Airways, Ltd., 1935-40", Journal of Transport History, IV (November, 1959), 113-24.

over French and German successes in linking Europe with South America. <sup>107</sup> The GPO added its voice to the general demand for a British service, suggesting a London-Lisbon-Las Palmas-Bathurst-Rio de Janiero-Buenos Aires twice weekly flight "on the back of each of the foreign air services", and a spur service Bathurst-Freetown-Accra-Lagos. <sup>108</sup> While the air mail to South America would continue to be surcharged, although at rates considerably lower than existing rates, the GPO intended the feeder service to introduce the E.A.M.S. into West Africa. <sup>109</sup>

With Imperial Airways fully occupied elsewhere, tenders for the service were invited in May, 1936, for study by the Fisher Committee. <sup>110</sup> Proposals were received from Walford Lines Limited, the British Air Lines Syndicate, and the newly-formed British Airways. <sup>111</sup> None were acceptable as the basis of a full service to South America, but the Fisher Committee recommended, and the cabinet agreed, that British Airways should be urged to continue the development of their plans, and "to proceed by stages, instituting in the first instance

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107. CAB 24/268, C.P. 76(37), Memorandum by the Secretary of State for Air, February 27, 1937.

108. I.A.C. paper 250, Memorandum by the Post Office, November 17, 1936.

109. Ibid.

110. Correspondence in AVIA 2/1025, British Air Service to South America - Tenders For.

111. Ibid. Also I.A.C. paper 279, Report on Tenders, January 8, 1937.

a service to the West African colonies by way of the West Coast".<sup>112</sup> British Airways was selected

to operate that service and to act as the chosen instrument of the Government for the development of any future subsidised South American service.<sup>113</sup>

By the summer of 1937, agreement had been reached with British Airways

For the undertaking by the company of the control and management of surveys of the proposed air routes to West Africa and South America, and of experimental flights with a view to the development of regular services.<sup>114</sup>

With this mandate in hand, the company laid plans for a survey "to examine in situ the problems connected with the regular commercial operation of aircraft between Lisbon and West Africa".<sup>115</sup> In November, a survey party, led by W.D.L. Roberts, vice-chairman of British Airways, set out to visit Freetown, Bathurst, Port Etienne, Agadir, Casablanca and Lisbon. The report on the survey, submitted by Maurice Banks, the Air Ministry representative, left no doubt as to the major

112. CAB 23/87, 10(37)5, para. 5.

113. Ibid.

114. A.M., Civil Air Transport Services, Note by the Secretary of State for Air, Cmd. 5524 (1937), p. 2. Correspondence in AVIA 2/1179, British Airways Ltd. Agreement for Northern Europe Services and South Atlantic Survey, 1937, parts I & II.

115. AVIA 2/2012, Experimental Air Service to Lisbon and Bathurst - British Airways, Memorandum on Survey of Air Route Lisbon - West Africa, August 20, 1937, p. 2.

difficulties to be overcome.<sup>116</sup> Nonetheless, Banks urged an early start on two fronts in the face of French and German plans to introduce full passenger and mail services across the South Atlantic by 1939. Banks called for an immediate introduction of the London-Lisbon sector of the route, and called for Elders Colonial Airways to link their proposed Bathurst-Freetown service with the Gold Coast and Nigeria "simultaneously with the introduction of a service from England to Bathurst or Freetown via Lisbon".<sup>117</sup> Banks stressed the special difficulties to be resolved in Sierra Leone and the Gambia, especially those concerning local support. In Freetown, Governor Jardine expressed the view that as the whole scheme was the private enterprise of British Airways, "the colony was not concerned other than to give such information in the light of local knowledge as might be called for".<sup>118</sup> This led Banks to suggest it was necessary "to acquaint His Excellency of the Imperial Government's interest in the project".<sup>119</sup> The major problem in Sierra Leone remained, however, the absence of adequate landing facilities and the estimated costs

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116. AIR 20/457, Chapter 199, A.M., 'British Airways, Ltd. England-West Africa Air Route Survey, 17th November, 1937 - 27th January, 1938'. The 95 page report was submitted February 7, 1938.

117. Ibid., pp. 9, 12.

118. Ibid., p. 20.

119. Ibid.

of construction for an aerodrome near Freetown was £150,000, with recurrent costs of £20,000, figures well beyond the colony's means to entertain.<sup>120</sup> In the Gambia, aside from the disturbing German presence, the major problems were financial as well.<sup>121</sup>

The report reached no final conclusions as to whether a landplane or seaplane service should be operated, but the in-depth study was well received.<sup>122</sup> British Airways and the Air Ministry reached agreement on a five times weekly London-Lisbon service to be operated with Lockheed 14 aircraft and a subsidy of £116,000 p.a.<sup>123</sup> This was to be the first stage of the planned 2,900 route to West Africa.<sup>124</sup> In the end, no part of the service was ever operated before the outbreak of the war, and no British service reached South America until 1946. British Airways continued their study of the whole route in 1938,<sup>125</sup> and an

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120. Ibid., p. 23.

121. Banks had discussions with the local German representatives as to possible future conflicts between British and German aims in the Gambia. Ibid., pp. 50-60.

122. For general discussion, see Higham, Britain's Imperial Air Routes, pp. 255-58.

123. A.M., Civil Air Transport Service, Note by the Secretary of State for Air, Cmd. 5898 (1938).

124. 2,961 miles via Casablanca and Agadir, 2,893 miles via Las Palmas. The extension to Freetown would add 410 miles.

125. British Airways Limited, unpublished report, 'Report on South America Section and the Whole Route England-South America', November 15, 1938.

air survey was made as far as Bathurst with a Lockheed 14 aircraft.<sup>126</sup> But continuing difficulties with Spain on the Lisbon sector, British preoccupation with the merger of Imperial Airways and British Airways into a nationalised company, B.O.A.C., and the coming of war, all combined to delay implementation of the scheme.<sup>127</sup>

In the meantime, Imperial Airways remained active in efforts to develop more fully its West African operations. Much of the effort was carried out in cooperation with the Air Ministry's hopes to have the British Airways London-Bathurst service open by April, 1939.<sup>128</sup> Imperials and Elders Colonial Airways were thus charged to establish the Bathurst-Takoradi sector as soon as possible. Several surveys were made, focusing on an alternative land routing through French and Portuguese territory to by-pass Freetown until such time as adequate facilities could be readied there.<sup>129</sup> Two routes were suggested which could be operated by DH86 aircraft: Bathurst-Bolama-Conakry-Kankan-Bouake-Takoradi-Lagos, and Bathurst-Kayes-Bamako-Bouake-

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126. BOAC, 'British Airways Ltd. Operational Survey Flight Heston-Bathurst-Heston, 28th December, 1938 - 11th January, 1939'.

127. See Higham, Britain's Imperial Air Routes, pp. 257-58.

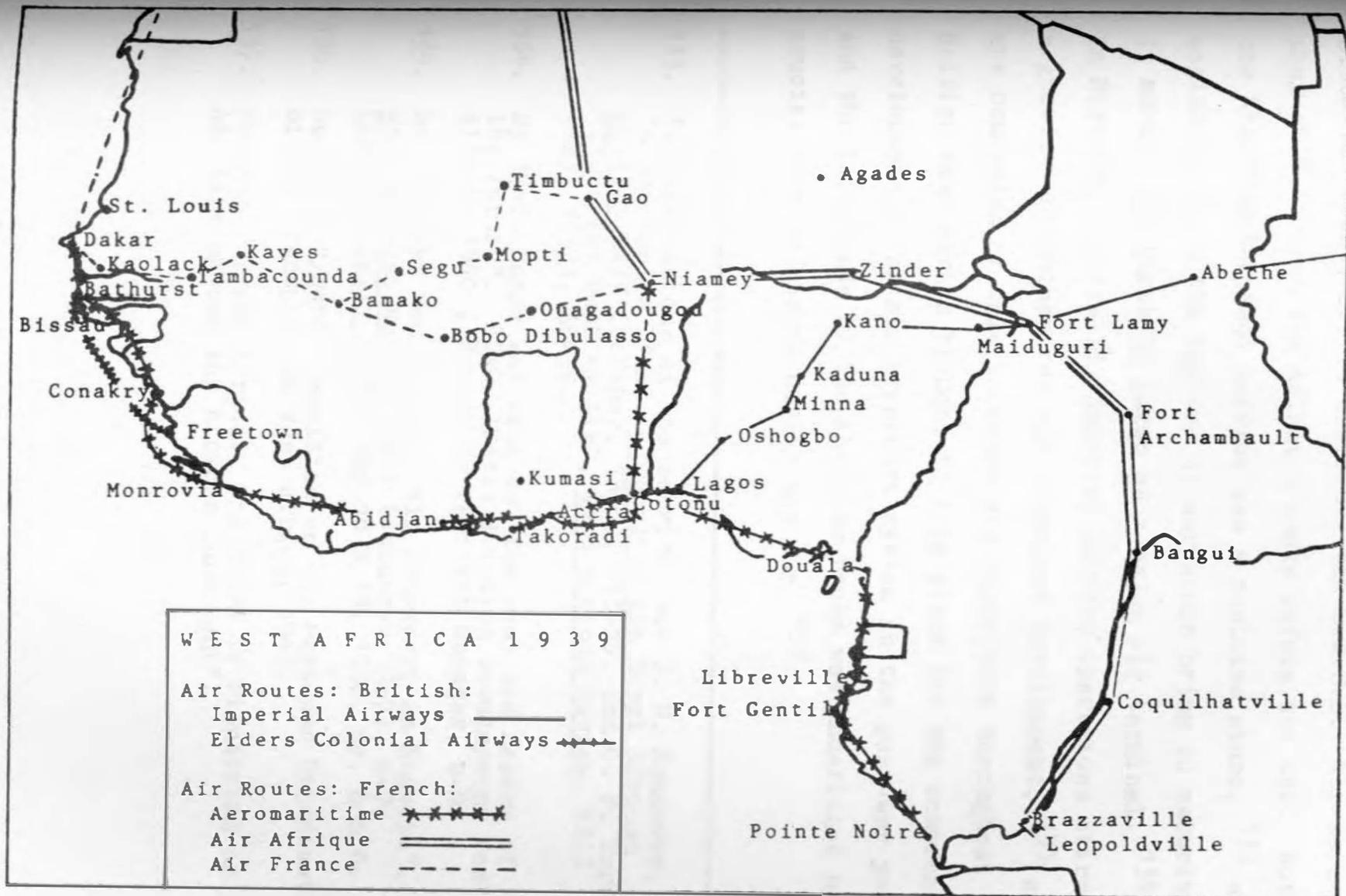
128. BOAC, 'West Africa Surveys 1938-39', Notes of a meeting, July 20, 1938, p. 2.

129. BOAC, 'Survey in West Africa', October 7, 1938; 'West African Survey', January 13, 1939. Both reports were prepared by Captain R.O.O. Taylor.

Accra-Lagos. <sup>130</sup> In both cases, Freetown would continue to be served by an Elders Colonial Airways Scion Senior connecting at Conakry or Bathurst with the main route. <sup>131</sup>

As with other British plans for West Africa in the last years before the war, this scheme never matured. West African air transport, at least until 1940, continued to be dominated by France, whose most successful Europe-West Africa and regional routes reflected the intensity of French ambitions to bring modern air transport to its African empire. <sup>132</sup> But it would be unjust to dismiss British efforts as failures. True, they did not succeed with plans to link the colonies

130. BOAC, 'Appreciation of Reports from Captain R.O.O. Taylor on Alternative Routes between Bathurst and Lagos', March 16, 1939. This report was submitted by W. L. Lang.
131. The siting of aerodrome or seadrome facilities was not fully resolved until the war. See BOAC, 'Report on Inspection of Sites for Landplane and Flying Boat Base in Sierra Leone and Gambia for United Kingdom-South America Service', prepared by Major Brackley, June, 1939. In a letter to his wife, Brackley noted, "I'm going to be very unpopular when I get home because I am not recommending the sites put up by the expensive survey party last year", suggesting the continuing difficulties with the Freetown facilities. Quoted in Freda Brackley, Brackles, p. 528.
132. For an assessment, see Reichman, Air Transport in West Africa, vol. I, pp. 12-16, and Rey, Le Role de l'Aviation dans le Développement Economique de l'Afrique Noire Française, pp. 20ff. For impressionistic accounts, see Gaston Bergery, Air Afrique. Voie Impériale (Paris, 1937), W.H.G. Blake, "From West Africa by Air", Aeroplane, January 19, 1938, pp. 74-78, P. Ichac, "Du Cameroun à Paris en Cinq Jours par la Côte d'Afrique", L'Illustration, CXCVIII (November 13, 1937), 299-304, and G.H.H. Tate, "From the Cameroons to the Ivory Coast by Air", Geographical Review, XXXII (1942), 150-53.



along the coast, nor to introduce the E.A.M.S. Nor were they able to open the Atlantic route before the war. But the Khartoum-Takoradi service was a positive start,<sup>133</sup> a beginning which the impetus of war would bring to maturity. It marked the birth of Lagos as a major air terminal.<sup>134</sup> In Nigeria, especially, Imperial Airways operations stirred a growing enthusiasm for air transport development,<sup>135</sup> and the contagion of this interest and experience throughout British West Africa brought to life plans for the comprehensive development of an air transport system in the post-war years.<sup>136</sup> And the importance of the Khartoum route was underlined by the crucial role it played during the war.<sup>137</sup>

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133. For impressions of the service, see D. H. Handover, "A New Empire Link", Journal of the Royal African Society, XXXV (October, 1936), 413-17, and G. F. Torry, "There and Back by Air", West African Review, VIII (May, 1937), 36-37.
134. By 1940, Lagos was seen as "the real air centre of the future". BOAC, 'Civil Aviation Development West Africa, 1940', Report by resident manager, n.d.
135. Sir Bernard Bourdillon, "Air Transport in Nigeria", West African Review, VIII (January, 1937), 6-7; Nigerian Daily Times, May 18 & 19, 1938, pp. 6 & 6.
136. See AVIA 2/2457, Committee on the Post-war Organisation of Air Transport in West Africa, 1943.
137. Stanton, "Trans-Africa. The Story of Pioneering an Air Line across the African Continent".

In all, the combined efforts of Great Britain, France and Germany, in their air transport 'scramble', produced considerable development in West Africa before the war. <sup>138</sup>

While these remained pioneer years, aviation had left its mark and a rich legacy upon which the future could build. <sup>139</sup>

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138. A 1960 report insisted that "no substantial development took place in air transport in West Africa until after the Second World War". United Nations. Economic and Social Council. Economic Commission for Africa, Transport Problems in Relation to Economic Development in West Africa, typescript, p. 62. Clearly, the case for 'substantial development' is unarguable.

139. Thus, the railways were not the only "major legacy of the economic policies of the colonial powers....", as a recent history argues. Crowder, West Africa under Colonial Rule, p. 273.

## CHAPTER XI

SOUTH AFRICA: OSWALD PIROW AND  
AFRIKANER IMPERIALISM, 1935-1939

We will be among the first six nations in the World in Civil Aviation. That, for a population of 2,000,000 Whites, is no mean achievement.

Oswald Pirow, 1938. <sup>1</sup>

In the latter years of the inter-war period, the most dramatic developments in the growth of air transport in Africa appeared in South Africa. From the time of the formation of South African Airways (SAA) in 1934 and the subsequent absorption of South-West African Airways in 1935, to the outbreak of world war II, the Union pursued an aggressive policy designed to thrust South Africa into the front ranks of commercial aviation. To a considerable extent, Union policy was a success. By 1939, SAA was the largest airline in Africa, operating a modern fleet of 29 Junkers multi-engined aircraft. <sup>2</sup> No airline in Africa even approached this size, while only four airlines in Europe were larger. <sup>3</sup>

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1. Quoted in Aeroplane, June 8, 1938, p. 726, from a speech at the Maritzburg air rally.
  2. 11 Ju 52/3m and 18 Ju 86 aircraft. South African Airways Comes of Age, 1934-1955, p. 5.
  3. These were Deutches Luft Hansa, Air France, Ala Littoria and Imperial Airways.

By every criteria, the pace of civil aviation development in the Union from 1935 to 1939 was rapid and remarkable, in marked contrast to the earlier years.<sup>4</sup> By 1939, SAA was operating over 30 services a week to the major cities of the Union and other ports of call in British and Portuguese Africa to the north as far as Kisumu.<sup>5</sup> In 1938, a route through Bechuanaland was established.<sup>6</sup> In 1939, SAA began operating to Angola,<sup>7</sup> and arrangements were in hand to operate similar services to Mozambique in cooperation with DETA, the Portuguese airline.<sup>8</sup> In all, SAA managed an impressive 7,206 miles of air routes by late 1938 with future plans to add considerably more.<sup>9</sup> In 1935, SAA had

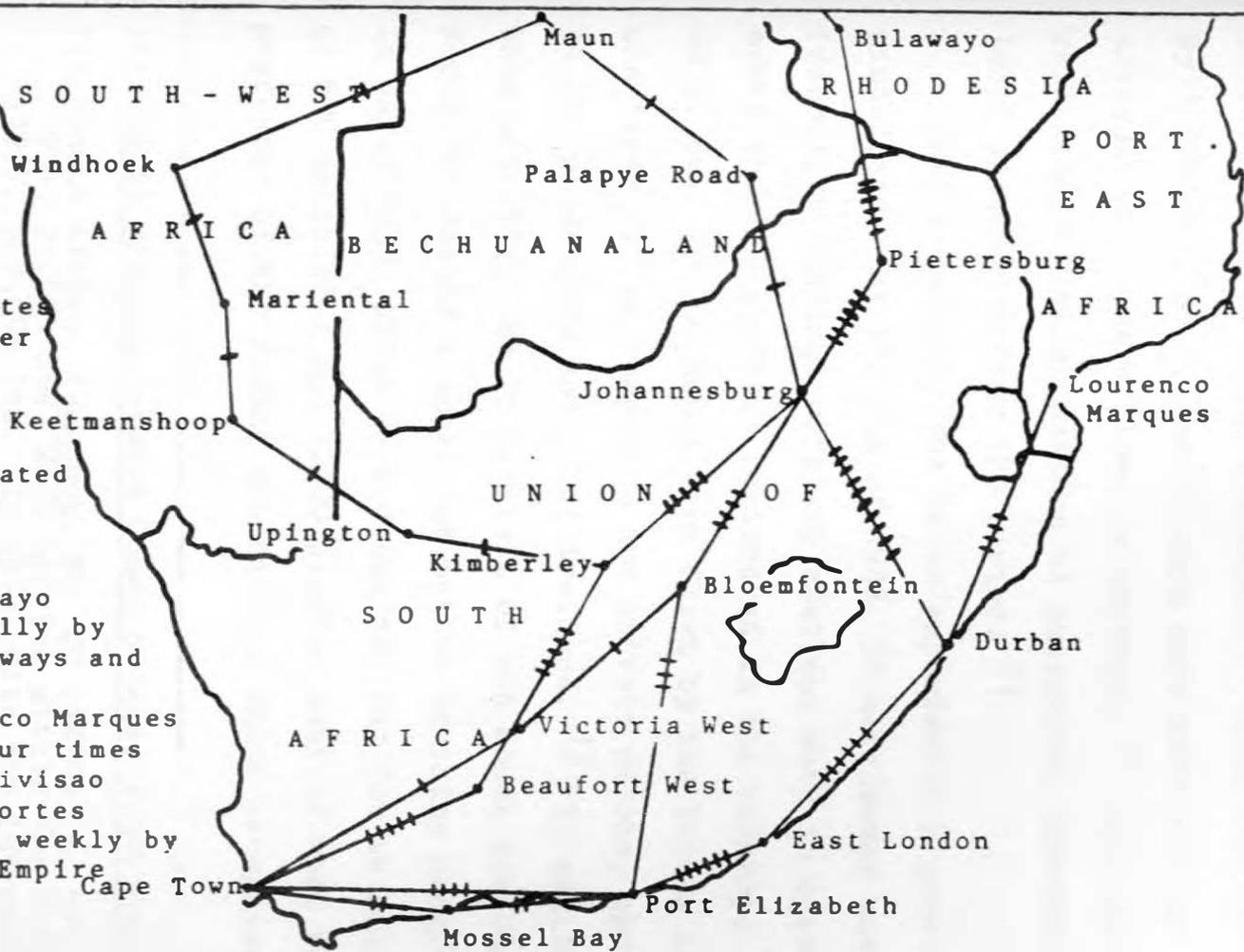
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4. See above, chapter VII. Also, "Air Services Expansion (South African Airways)", Engineer, CLXV (February, 1938), 176.
  5. South Africa, Yearbook, No. 20 (1939), p. 519.
  6. See Louis Kraft, "Kalahari Airmail Survey", Intava World, I (No. 6, 1938), 28-29. The route ran Johannesburg-Palapye Road-Maun-Windhoek.
  7. Reviewed in Ernest Persicaner, "Angola Air Express", The Fly Paper, III (September, 1939), 9-11. See FO, Treaty Series No. 24 (1940), Exchange of Notes between the Government of the Union of South Africa and the Portuguese Government relating to Air Services between the Union of South Africa and Angola. Lisbon, October 28, 1938. Cmd. 6231 (1940).
  8. FO, Treaty Series No. 25 (1938), Agreement between His Majesty's Government in the Union of South Africa and the Portuguese Government for Air Services between South Africa and Portuguese East Africa. Pretoria, June 18, 1937. Cmd. 5707 (1938).
  9. South Africa, Yearbook, No. 20 (1939), p. 518. See map, p. 569.

**SOUTH AFRICAN  
AIR SERVICES  
1939**

Number of  
crossmarks indicates  
return services per  
week.

All services operated  
by South African  
Airways except:  
(1) Johannesburg-  
Pietersburg-Bulawayo  
route shared equally by  
South African Airways and  
RANA.

(2) Durban-Lourenco Marques  
route operated four times  
weekly by DETA (Divisao  
Exploracao Transportes  
Aereos) and twice weekly by  
Imperial Airways Empire  
service.



carried a modest 8,938 passengers, flying 522,257 miles. By 1938-1939, 37,053 passengers were carried, and 1,862,195 aircraft miles were flown in service.<sup>10</sup> Air mail loads reflected a similar pattern of expansion, increasing at least fivefold during the period.<sup>11</sup>

More generally, the Union experienced a growing air-mindedness. By the end of 1938, 76 aerodromes and 13 D/F (direction finding) wireless stations were in operation to serve the 255 aircraft registered in the country.<sup>12</sup> In 1938, over 47,000 hours were flown by the flying clubs, the chartered flying companies and private pilots, carrying 34,646 passengers and pilot trainees.<sup>13</sup> In addition to this activity, the 75 aircraft of the South African Air Force maintained a small but active training programme. In early 1939, plans were drawn calling for an air force of 576 aeroplanes and 1,000 pilots, many of whom would be graduates of the flying schools for which subsidies had been

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10. South African Airways Comes of Age, 1934-1955, p. 5.

11. South Africa, Yearbook, No. 20 (1939), p. 519. In 1934, 20,561 lbs. were carried within the Union; in 1937, 105,099 lbs. In 1938, with the introduction of the E.A.M.S., a staggering 991,854 lbs. were carried.

12. Ibid., p. 517. On ground facilities, see Union of South Africa, Directorate of Civil Aviation, The Air Pilot for the Union of South Africa and South-West Africa (Pretoria, 1937), 1st ed. and supplements.

13. South Africa, Yearbook, No. 20 (1939), p. 517.

provided since 1936 under the government Pupil Pilots' Training Scheme. <sup>14</sup> In all, every dimension of aviation was being expanded during these last years before world war II, and the chief architect of this development was Oswald Pirow, Minister of Defence, and also of Railways and Harbours, in the Hertzog administration from 1933 to 1939. <sup>15</sup>

Pirow typified the restive Afrikaner nationalism which was becoming increasingly apparent during the 1930's. As minister responsible for defence and transportation matters during this crucial period, Pirow was prepared to use his office in the furtherance of nationalist aims, and, to a large extent, he was given a free hand by Hertzog. He was sympathetic to Nazi Germany and its aims and policies in Europe, and a racialist determined to advance the cause of white supremacy in the Union and throughout much of Africa. <sup>16</sup>

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14. Klein, Winged Courier, p. 111.

15. Oswald Pirow (1890-1959) was first elected in 1924 as M.P. for Soutpansburg. He was the Nationalist M.P. for Gezina after 1929, and Minister of Justice 1929-1933. No biography of Pirow has been published, but see notes in African Wild Life, XIII (December, 1959), 283-84, Cape Times, October 12, 1959, p. 2, and I. M. Goodman, Die nasionale boek: 'n geskiedenis van die ontstaan en groei van die Nasionale Party van Suid-Afrika (Johannesburg, 1932). I am grateful to Dr. A. M. Lewin Robinson of the South African Library for his help in researching Pirow's career.

16. On his views, see Pirow, "How Far is the Union Interested in the Continent of Africa", Journal of the Royal African Society, XXXVI (July, 1937), 317-20.

It may well have been, as Smuts believed, that his political ambition was to be South Africa's Fuehrer,<sup>17</sup> a hope which expired with his expulsion from office at South Africa's entry into the war on the British side. Nonetheless, Pirow enjoyed considerable political success in the six years before the war, and clearly, he saw aviation development as an integral component of Afrikaner aims in Africa. Under Pirow, the spirit which had fostered an earlier "pastoral imperialism of the frontier"<sup>18</sup> was now to spark a new air imperialism designed to thrust South Africa's first lines of defence outward and hasten the spread of Union influence throughout 'white' Africa.<sup>19</sup> Thus did Pirow dream and scheme in pursuit of these aims, often to the chagrin of the British government and Imperial Airways, for in the vanguard of Pirow's ambitions was the role to be played by SAA.<sup>20</sup>

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17. G. Heaton Nicholls, South Africa in my Time (London, 1961), p. 348. Pirow was active with the Ossawa Brandwag, a 'cultural association' with German sympathies, and, later, his own Nazi-inspired New Order.
18. Nicholas Mansergh, South Africa 1906-1961. The Price of Magnanimity (London, 1962), p. 99.
19. Pirow's aim was to build SAA into an establishment of "twelve flights of five twin-engined planes each, convertible, if the occasion arose, for military purposes,..." AVIA 2/1972, Stanley to Batterbee (DO), October 26, 1936.
20. "Nothing," noted Pirow, "did more for the prestige of a great Power than to show itself regularly and efficiently on the move in established air services". AVIA 2/2119, I.A.C. paper 191, minute by Sir John Maffey, June 23, 1936.

Pirow organised SAA in 1934 with the expressed intention of assuring a government monopoly on all air transport services in the Union. <sup>21</sup> This marked the first major setback to British hopes that all commercial aviation development in British Africa would remain in Imperial Airways or subsidiary hands. The equipment of SAA almost entirely with Junkers aircraft was a second blow to British aviation interests. The only African market for large commercial aircraft was thus lost, and the German triumph could only be regarded as a serious threat to British aviation prestige. <sup>22</sup> A more important question, never fully answered, was the extent to which German influence prodded Pirow to challenge Great Britain in the air outside the Union. <sup>23</sup> For Great Britain, a SAA-Imperial Airways rivalry in British Africa might be undesirable, but it was acceptable. On the other hand, any suggestion that Pirow, in his capacity as Minister of Defence, might shape his air defence plans to suit German interests, was totally unacceptable. The problem for British strategists was thus a difficult one. A South African role was essential

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21. See above, chapter VII.

22. 7 Airspeed Envoyes were ordered from Great Britain in 1935, four for SAA and three for the military. The Times, December 11, 1935, p. 10. However, Pirow expressed 'disappointment' with the British aircraft, and they were replaced in SAA by Junkers machines.

23. Of interest was Pirow's background. He was the son of a German missionary, he had studied in Germany, and was married to a German.

to imperial air strategy in Africa, and it was important to give encouragement to South African participation. At the same time, a watchful and suspicious eye had to be kept on Pirow, a leader in the ranks of the anti-British nationalist forces in the Union. Thus, to assure South African cooperation, and in the wider interests of imperial concern in Africa, Pirow's plans for SAA outside the Union had to be accommodated.<sup>24</sup> It was a situation the shrewd Pirow understood and was ready to exploit from the beginning.

The British Air Ministry and Imperial Airways were quite aware of South African nationalist feelings long before Pirow took office in 1933. But it was not until Pirow took command that a clear picture of South African air transport plans came into sharp focus. As noted in earlier discussion on the introduction of the E.A.M.S. in Africa, Great Britain had been compelled to concede a major role for SAA on the trunk route north to Kisumu, the ouster of Imperial Airways from Johannesburg, and an imperial presence confined to a twice weekly flying boat service to Durban.<sup>25</sup> While these concessions and the 'successful' outcome of the Bullock-Pirow discussions at Lusaka in May, 1935 assured the future

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24. By 1937, the British government reached the conclusion that "on general political grounds it is desirable to meet, as far as possible, desire of Union Government to operate air services in other parts of Africa...". AVIA 2/1972, CO to Secretary, Conference of East African Governors, May 7, 1937.

25. See above, chapter IX.

of the E.A.M.S., they also marked a major success for Pirow's expansionist air policy, and gave the first indications that Pirow would not be content to 'rule' South African air space, but had designs on all of Africa. Accordingly, from 1934 onwards, British interests anticipated a troubled future in dealing with the ambitions of Pirow and SAA which clashed head on with those of Great Britain. Indicative of British fears was a cabinet decision taken in early 1935. It was agreed,

That, with a view to clearing up the difficulty with the Government of the Union of South Africa on the question of Air Communications it would be convenient if it could be arranged for Mr. Pirow to visit London after the main Silver Jubilee Celebrations.... 26

Clearly, this was to be an attempt to explore more fully the extent to which Pirow was prepared to move SAA into Africa. British authorities were not to be disappointed. Pirow accepted the invitation, arriving in England in June, 1936,<sup>27</sup> and almost immediately it became apparent that Pirow's plans went well beyond the somewhat modest role assigned to SAA in the E.A.M.S. In discussions, Sir John Maffey noted:

Mr. Pirow spoke with great insistence on the desirability of building up an efficient air service to operate south of the Sahara, based on Cape Town and operating in a circle Cape Town - West Coast-Belgian Congo-East Coast-Cape Town and vice versa. 28

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26. CAB 23/81, 10(35)4(e), February 20, 1935.

27. Ostensibly to discuss aircraft purchases. Aeroplane, June 17, 1936, p. 774.

28. AVIA 2/2119, I.A.C. paper 191, June 23, 1936.

Pirow pointed out that he was prepared "to put money into the scheme", and while South Africa could "do it alone", or seek help elsewhere, he preferred British help.<sup>29</sup> In Maffey's view:

It is quite clear that Mr. Pirow regards this project as his main test for British and South African co-operation leading in the direction of co-operation in the wider field of Imperial defence and Imperial policy.... We have at least learned this much from Mr. Pirow, that if we are to advance towards Imperial understanding we shall be wise to move down the paths he indicates. He knows what a Dutch stomach can digest in South Africa and what it cannot.<sup>30</sup>

Pirow's visit thus brought to light the Union's interest in West Africa.<sup>31</sup> SAA's existing Johannesburg-Windhoek service was to be extended to Lagos as part of Pirow's 'circle route' idea, and the proposal prompted a great deal of anxious discussion in London. By 1936, West Africa had become the focal point of considerable air transport interest, and several proposals for a London trans-Saharan service to the Union were being promoted in Great Britain and South Africa.<sup>32</sup> In March, Pirow had indicated some interest in

29. Ibid.

30. Ibid.

31. However, C. G. Grey had suspected South Africa's interest almost a year before. Aeroplane, July 24, 1935, p. 130.

32. Proposals were advanced by three groups: one headed by a Dr. Cullen, another by Messrs. Epstein and Chamberlain, and a third by Colonel Jellicoe and Peter Falk. For summary see I.A.C. papers 126, 129, 144, 146, 157, and 173.

co-operating with Dr. Cullen's group, providing they could obtain the necessary permission to operate across French and Portuguese territory. <sup>33</sup> But his initial response was to suggest that Imperial Airways extend their Khartoum-Kano-Lagos service southward to Mossamedes or Windhoek. <sup>34</sup> While the Air Ministry appeared content to discourage private proposals for any West African services in light of plans for future Imperial Airways expansion in the area, neither the Air Ministry nor the Post Office were prepared to see Imperial Airways open up a third route to the Union. <sup>35</sup> In Pirow's view, however, a Lagos-South Africa service along the coast was "inevitable", and while he favoured a service run by Imperial Airways over "various independent concerns", he could not "long delay giving some reply to approaches at present being made to him". <sup>36</sup>

Sir Warren Fisher's interdepartmental committee (I.C.I.A.C.) had been given the task of reviewing the various proposals in question, and it was at this point that Pirow proposed his own Lagos-South African connection. This raised a number of difficult problems. Pirow was obviously attracted by the

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33. I.A.C. paper 126, British High Commissioner in South Africa to DO, March 10, 1936.

34. Ibid.

35. No subsidy could be provided for such a service, and its introduction was thought to be "inopportune.... on the eve of the introduction of the Empire Air Mail Scheme". I.A.C. paper 129, March 20, 1936.

36. I.A.C. paper 146, British High Commissioner in South Africa to DO, April 20, 1936.

idea of linking the Union to a shorter routing to Great Britain across the Sahara, and possibly along the coast to Bathurst and a connection with the proposed South American service. <sup>37</sup> In both cases, he threatened to upset existing agreements with Imperial Airways re the carriage of mails to South Africa, the introduction of the E.A.M.S. in West Africa, and the planned development of a coastal service Lagos-Bathurst. <sup>38</sup> The Fisher committee recommendation was to stall for time at this point, and in the meantime urge Imperial Airways to "speed up" estimates for a Malta-Lagos trans-Saharan service. <sup>39</sup>

Pirow returned from his first official visit to Great Britain in July, and was now prepared to make public his grand design for SAA in Africa. He proposed a wide range of services:

Cairo-Nairobi daily.  
 Khartoum-Nigeria twice weekly.  
 Windhoek-Lagos three times weekly.  
 Windhoek-Bathurst (possibly).  
 Nairobi-Johannesburg daily.  
 Johannesburg-Delagoa Bay daily.  
 Johannesburg-Durban twice daily.  
 Johannesburg-Cape Town daily.  
 Durban-Cape Town daily.  
 Johannesburg-Windhoek twice weekly.  
 Bloemfontein-East London-Port Elizabeth daily.  
 Kimberley-Windhoek twice weekly. <sup>40</sup>

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37. Discussion in I.C.I.A.C. minutes of 26th meeting, June 24, 1936. Also, Aeroplane, July 29, 1936, p. 164.

38. I.C.I.A.C. minutes, June 24, 1936.

39. I.C.I.A.C. minutes, July 29, and August 12, 1936.

40. AVIA 2/2119, I.A.C. paper 191, encl., "Ambitious Scheme of Mr. Pirow", Sunday Express (Johannesburg), July 19, 1936.

In all, it was a programme which called for a minimum of 81 flights a week with large multi-engined aircraft. By August, 1936, Pirow had added Madagascar as a target of future expansion. <sup>41</sup>

The range of these proposals was clearly disconcerting to British interests. The fundamental concern was that Pirow was offering British Africa a programme of air transport development which Great Britain was in no position to match. Pirow's plans called for the operation of large fast aircraft on all services, and neither Imperial Airways, Wilson Airways nor RANA could call upon sufficient resources to meet the challenge. Pirow was obviously prepared to accept whatever financial losses SAA would incur, perhaps as much as £500,000 p.a. <sup>42</sup> By the end of 1936, an Air Ministry memorandum noted Imperial Airways' concern that something should be done in Southern Rhodesia and elsewhere before "South African Airways will have run everyone else off the routes". <sup>43</sup>

Pirow had a further occasion to parade his ambitions at the South Africa Transport Conference held in Johannesburg in September, 1936. <sup>44</sup> His prestigious audience included the

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41. AVIA 2/2119, British High Commissioner in South Africa (M. E. Antrobus) to DO, August 6, 1936.

42. FO 371/21209, Political (Western) Commercial Aviation (1937), A.M. memorandum, December 28, 1936, quoting Colonel Holthouse, South African Airways Manager.

43. Ibid., A.M. memorandum.

44. Union of South Africa, Record of Proceedings of Southern Africa Transport Conference (Pretoria, 1937).

Governor-General of Mozambique, Dr. José Nunez d'Oliveira, the Governors of Uganda, Kenya, Tanganyika, Northern Rhodesia, Southern Rhodesia and Nyasaland, and representatives from the Belgian Congo, the High Commission Territories, Madagascar and Zanzibar. For Pirow, the territories represented covered

that portion of Africa south of the Sahara where conditions obtain which are not unfavourable to the building up of a permanent white population. For many years to come, communications, more particularly transportation, will be the basis of the white man's civilisation in South Africa.... 45

It was with the appeal for the strengthening and preservation of 'white civilisation' in Africa that Pirow invited co-operation "in all matters of common interest";

Such co-operation can only be obtained by constant contact with each other, and no better method of making contact over long distances exists than regular and frequent air services. The time will come, I hope, when all the territories represented here to-day will be linked by daily air services both up and down the African continent.... 46

The British government had awaited the conference discussions with some apprehension, fearful that Pirow would invite discussion with the British delegates on his troublesome 'circle route' proposal through Lagos. The British governors were cautioned to be non-committal, but to assure Pirow, if the question was raised, "that you

45. Ibid., p. 9.

46. Ibid., pp. 9-10. As Pirow was temporarily ill and absent from the conference opening, his address was read verbatim by P. Duncan, Union Minister of Mines.

understand it is being examined by His Majesty's Government in the United Kingdom in sympathetic spirit".<sup>47</sup> As to other Pirow proposals, such as daily services between Nairobi and Johannesburg, and Nairobi and Cairo, the British delegates were advised to enter into "full and friendly discussion", but to eschew commitment to any specific proposals.<sup>48</sup> Thus Pirow's conference was less a negotiating session than a forum for Pirow's ideas, and the record showed little accomplished other than a general commitment to co-operate in matters of transport development.<sup>49</sup>

In the meantime, Pirow raised additional problems with Great Britain, again pertaining to a West Coast service. Pirow had visited Amsterdam after his discussions in London, on invitation from K.L.M., the Dutch airline. To Pirow's dismay, A. Plesman, K.L.M. managing director, proposed a west coast service to be operated by K.L.M. on a four day schedule between Amsterdam and Johannesburg.<sup>50</sup> In subsequent correspondence, Plesman urged acceptance of his proposals and invited Union support in obtaining authorisations from the

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47. AVIA 2/1972, CO to Governors of Kenya, Uganda, Tanganyika, Northern Rhodesia and Nyasaland, August 18, 1936. Also I.A.C. paper 205, September 1, 1936.

48. Ibid.

49. Of interest was the fact that 40 of the delegates arrived by air, suggesting that a conference of this kind could only be held with air transport available. Aeroplane, September 16, 1936, p. 363.

50. AVIA 2/2119, Antrobus to DO, August 25, 1936.

French, Belgian, Spanish and Portuguese governments.<sup>51</sup> To Pirow, Plesman was a somewhat "slim" character, ready to "make political capital in the Union out of any refusal to give facilities to a Netherlands Company to operate a service to the Union".<sup>52</sup> When Plesman made public the Dutch proposal in September, indicating that the service would be inaugurated in May, 1937, "in co-operation with a British aviation company", presumably SAA, Pirow expressed his fears that this was the first step in a "campaign of blackmail".<sup>53</sup> As he pointed out to British authorities, Pirow felt he would "find it quite impossible politically" to refuse the Dutch if the service was to be operated by K.L.M./SAA on a reciprocal basis.<sup>54</sup> He insisted the matter had to be resolved by Great Britain, suggesting that Lord Swinton, the Air Minister, "was in a position to exert pressure on K.L.M.". <sup>55</sup>

Despite Pirow's professed concern, he readily recognised the added weight the K.L.M. proposal gave to his own west coast ambitions. Great Britain might well be able to persuade the Dutch to withhold a formal application to operate the

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51. I.A.C. paper 209, September 21, 1936, Antrobus, 'Note of interview with Minister of Railways on 25th August, 1936'. The proposed routing would follow the coast of Africa to Cape Town.

52. Ibid.

53. Ibid., Antrobus to DO, September 22, 1936.

54. Ibid.

55. Ibid.

service, but, in the absence of a British alternative, Pirow could argue that this could be interpreted in the Union as a British denial of an important new air link to South Africa, unless SAA was given the go-ahead to operate along the coast. Pirow was thus prepared to employ a little 'blackmail' of his own, capitalising on nationalist antipathy to Great Britain and Imperial Airways, and British reluctance to initiate a service which would upset existing plans for West Africa and the E.A.M.S. Pirow thus felt free to press for his own scheme to link the Union with West Africa, and although his earlier plans had been to operate via Windhoek to Lagos, he now looked to a SAA service running as far west as Bathurst. In late September, acting on Pirow's instructions, the South African Civil Aviation Board requested information "urgently in connection with preparation of scheme for service between Bathurst and Union".<sup>56</sup> In November, a more detailed request was forwarded to the Air Ministry,

to obtain particulars regarding the position, dimensions, and present condition of all aerodromes and landing grounds which have been established for the use of civil aircraft along the coast line of the continent from the borders of South West Africa north as far as Bathurst. 57

The British response was one of surprise and concern, for the Pirow idea clearly conflicted with plans for Elders

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56. AVIA 2/2119, Antrobus to DO, September 29, 1936.

57. Ibid., Emil Horn, acting political secretary, South African High Commission, London, to DO, November 5, 1936.

Colonial Airways and Imperial Airways along the coast. <sup>58</sup>

The Fisher Committee could find no grounds to refuse Pirow the information that he requested, but it hoped to "ascertain what degree of importance he attaches to operating his service beyond Lagos". <sup>59</sup> In the circumstances, it was probably the only answer possible to the South African challenge. The Union was provided with all the data available on the 3,930 mile route between Bathurst and Tsumed in South-West Africa. <sup>60</sup> What Pirow described as "our scheme for a West Coast Route", <sup>61</sup> was to be a once weekly return service on the 5,000 mile route between Johannesburg and Bathurst, flown by Junkers aircraft capable of at least 200 m.p.h., and it was estimated to cost £50,000 p.a. <sup>62</sup> It was a fine scheme, British reactions notwithstanding, although it is nowhere clear how anxious Pirow was to press the idea into operation. In light of his need to seek British cooperation elsewhere in Africa, it may be that Pirow was prepared to use the Bathurst service idea more as a bargaining counter than a serious proposal. In

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58. I.C.I.A.C. minutes, November 18, 1936. See also I.A.C. paper 249.

59. I.A.C. paper 262, 'Air Services in West Africa', December 10, 1936.

60. AVIA 2/2119, encl. 36c, 18 page report prepared from British data by J. Holthouse, Airways Manager (South African Railways and Harbours), November 6, 1936.

61. Ibid., Antrobus to DO, November 18, 1936.

62. Ibid., encl. 36c.

any case, by January, Pirow was admitting that "he would actually prefer to stop his projected service at Lagos....", as had been his first intention. <sup>63</sup> By June, 1937, he had abandoned the Bathurst idea completely, having awakened to the fact that in order to obtain concessions for South Africa in the Congo and French Africa, he would have to grant reciprocal privileges to French and Belgian interests in the Union. <sup>64</sup> While he would still have to deal with the Portuguese and the Belgians in any plans to move northward, Pirow feared most the French moving into South Africa. Thus, he returned to his earlier 'circle route' idea, but eliminated Lagos and French Equatorial Africa on a proposed route: Johannesburg-Windhoek-Luanda-Leopoldville-Stanleyville-Entebbe-Kisumu. <sup>65</sup> In the meantime, the focus of his concern turned once more to the trunk service running northward from the Union to Kenya.

Neither the Bullock-Pirow agreement in 1935 nor the 'Nairobi Resolutions' in 1937 had resolved fully the future operation of the inland air route south of Kisumu. <sup>66</sup>

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63. Ibid., W. Clark (United Kingdom High Commissioner, South Africa) to DO, January 9, 1937.

64. Ibid., Clark to DO, June 23, 1937.

65. Ibid. The Belgians had indicated an interest in a Congo-Union link in November, 1936, and while Pirow was not "keen" on the idea of allowing SABENA into the Union, his own proposals were almost certain to result in a Belgian insistence on reciprocal rights. AVIA 2/1995, Clark to DO, January 21, 1937, and A.M. to DO, April 5, 1937.

66. See above, chapter IX.

Initially, Pirow had asked for and obtained the right to operate a weekly Johannesburg-Kisumu service, even being prepared at one point to share with Imperial Airways a Lagos-Cape Town route in return.<sup>67</sup> Clearly, British East Africa was Pirow's prime target, at one point prompting a suggestion by Colonel Holthouse that SAA take over Imperials' shares in Wilson Airways.<sup>68</sup> But Pirow was not long content with a single SAA flight operating northward to Kisumu and a twice-weekly service Johannesburg-Pietersburg-Bulawayo.<sup>69</sup> Beginning in 1937, the Union was pressing the governments of Northern and Southern Rhodesia to allow SAA extensions to the Bulawayo service, and it was apparent that Pirow wanted at least three return flights a week along the whole route to Kisumu.<sup>70</sup> Furthermore, Pirow's insistence that SAA use aircraft of "uneconomic and unnecessary speed and size" which could readily be modified to military use, placed the existing and proposed Union services on an equipment basis which neither of its African competitors, RANA and Wilson Airways, could match.<sup>71</sup> Imperial Airways could only view Pirow's proposals with alarm. As Woods Humphrey noted,

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67. AVIA 2/2119, W. Clark to DO, January 11, 1937.

68. Ibid., Woods Humphrey to Shelmerdine (A.M.), March 19, 1937, reporting a Mrs. Wilson-Colonel Holthouse conversation in Nairobi.

69. Imperial Airways, 'Air Transport in the Rhodesias and Nyasaland', unpublished brief to the Rhodesia-Nyasaland Royal Commission, March, 1938, p. 3.

70. Ibid., p. 7.

71. Ibid.

We are feeling considerable concern over the continuous drive of South African Airways towards the north. Is it too fantastic to imagine that the exclusion of Imperial Airways from Africa altogether and the control of the local companies in the Rhodesias and Kenya may be a dream or even a target? - it is surely but a logical extension of the plans already accomplished. 72

Imperials' fears admitted of some exaggeration, but were not without substance. Pirow's aims were appearing at a time when the reputation of British aviation in the Union was at a low point. The much-heralded England to South Africa air race in 1936 had been a disaster for the British aircraft manufacturing industry, when only one of 9 British aircraft completed the race. 73 On this occasion the South African press, led by the Star, Die Burger and Die Volksblad, were scornful of the British effort, the latter paper suggesting that the purchase of British military aircraft would leave South Africa vulnerable to air attack, for example, from the Italians in Abyssinia. 74 Imperial Airways had been attacked from the beginning for the delays and confusion associated with the opening of the Cape route. 75 Similar delays in

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72. BOAC, I.A. file No. 37, RANA Company Matters, January-May, 1937, Woods Humphrey to Shelmerdine, January 24, 1937.

73. Correspondence in AVIA 2/1009, 'Proposed Air Race from England to Johannesburg' (29.6.36-). J. W. Schlesinger proposed the race to coincide with the Empire exhibition in the Union and put up £10,000 prize money. The only winners were C.W.A. Scott and Giles Guthrie in a Percival Vega Gull.

74. Ibid., Antrobus to DO, October 10, 1936, enclosed extracts from South African press.

75. See above, chapter IV.

establishing the flying boat service to Durban, and in the organisation of the E.A.M.S., added to Imperials' difficulties in the Union, difficulties Pirow was ready to exploit by pushing for his inland service. <sup>76</sup> By 1938, Imperials were being criticised for not providing a third flying boat service to Durban to accommodate the ever-increasing air mail loads. <sup>77</sup> And always, Imperial Airways in Africa was criticised for its lack of speed on the routes, suggestive of a failure to match other airlines in performance. <sup>78</sup>

Against this background, Pirow could act with some assurance that in any confrontation with Great Britain, he could rely on general support within the Union. Some South African advocates of an aggressive air transport policy were prepared to take the Union even further than Pirow, urging South Africa-South America and South Africa-Australia links, the latter via Madagascar and the Cocos Islands. <sup>79</sup> Pirow, however, remained content to pursue African objectives, at

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76. I.A.C. paper 324, Memorandum by the Director General of Civil Aviation, April 2, 1937.
77. The Natal Mercury pointed out that whereas India had five weekly services and Australia three, the Union had only two. The taking over of the Kisumu-Durban sector by SAA was "an easy and obvious remedy". Quoted in the Aeroplane, November 16, 1938, p. 627. See also discussion in AVIA 2/1254.
78. See "Ten Years After", African World, November 26, 1938, p. 217.
79. A.M. Miller, "South Africa's Air Link with Every World Centre", Daily Telegraph (London), Union of South Africa supplement, June 7, 1937. Miller was the famous South African air pioneer.

least in the first stages of expansion. In Africa, he could act out an "elderly brother" role in dealing with smaller British governments on the continent,<sup>80</sup> and, as Pirow identified air transport development with South African air defence objectives, the limits of Union interest were confined to the continent.<sup>81</sup>

By the autumn of 1938, arrangements were in hand for Pirow to visit Great Britain once more for discussions on the many matters still at issue between the Union and Great Britain in air transport and air defence development. In part, Pirow's visit was to obtain "the means of defence which are vitally necessary for the protection of South Africa",<sup>82</sup> but the main British aviation concerns were Pirow's intentions in African air transport.<sup>83</sup> In October,

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80. East African Standard quoted in The Times, September 5, 1936, p. 9.

81. On the general question of the relationship of air transport to military aviation, see F.R.C. Groves, "The Relations between Civil and Military Aviation", League of Nations, Advisory Committee, Organisation for Communications and Transit, Enquiries into the Economic, Administrative and Legal Situation of International Air Navigation (Geneva, 1930), pp. 87-92.

82. Smuts quoted in the Aeroplane, November 30, 1938, p.687.

83. There were other concerns as well. Pirow was to visit Germany during his self-styled 'peace mission', and assuredly his talks with Hitler would include discussion on Germany's claim to colonies in Africa. Pirow was sympathetic to the German claim. See Wolfe Schmokel, Dream of Empire: German Colonialism 1919-1945 (London, 1964), pp. 71, 121-22. Specific British concerns noted in PREMIER 1/289, 'South Africa, 1938. Question of Return of Colonies to Germany. Pirow's Visit to the United Kingdom'.

a meeting of the I.C.I.A.C. was called to determine the "principles to be adopted" in negotiations with Pirow.<sup>84</sup> The committee was aware of two of Pirow's aims: a daily Kisumu-Johannesburg return service, and the carriage of South African mails south of Kisumu by SAA.<sup>85</sup> On the idea that Pirow might be prepared to share the trunk service with Imperial Airways, the committee feared that Pirow would call for reciprocal SAA rights to England, and the idea had to be left, for the moment, without resolution. It was clear that a daily service along the route was not commercially feasible, but as this was not going to deter Pirow, it remained a question of how Great Britain should explain its hesitation and, at the same time, not surrender the whole route to Pirow and SAA. Great Britain did not want to see the trunk routes broken up between carriers, for such "sectionalisation" would destroy the very basis upon which existing arrangements and the E.A.M.S. were based. There was the problem too of protecting the interests of RANA and Wilson Airways. In the end, the committee recommended that,

- (1) Sectionalisation should be firmly resisted....
- (2) A prior right to local traffic should be reserved for local companies.

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84. AVIA 2/2041, 'Mr. Pirow's Visit to the United Kingdom - Civil Aviation Questions, 1938', encl. 4a, I.C.I.A.C. meeting, October 12, 1938.

85. I.C.I.A.C. meeting, October 5, 1938, and I.A.C. paper 488, November 2, 1938.

- (3) Mr. Pirow should be given a sympathetic hearing; but an endeavour should be made to keep the talks in general terms. 86

Pirow arrived in England in early November after discussions with the Portuguese in Lisbon concerning his proposed 'circle route' through Angola. 87 Almost immediately, Pirow introduced another idea, that of SAA cooperating on the Kisumu route with a "unified company working from the north". 88 The proposal aimed at getting rid of RANA and Wilson Airways on the main routes, and replacing them and Imperial Airways with a single company. "He wants to deal with big people instead of little people", noted Sir John Reith, the recently-appointed chairman of Imperials, and a man from whom Pirow could expect a ready response to his notions of 'bigness'. 89 Pirow had struck at a most opportune moment. Reith already had ideas of an empire or commonwealth corporation, owned and managed by Great Britain and the dominions, to replace Imperial Airways. 90 Although his

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86. I.A.C. paper 488, November 2, 1938, p. 3.
87. AVIA 2/2041, W. Selby (British embassy, Lisbon) to FO, October 29, 1938. Pirow was also making training facilities available for the Portuguese in South Africa.
88. Ibid., Banks (A.M.) to Kingsley Wood (Secretary of State for Air, 1938-1940), November 11, 1938.
89. I.A.C. paper 495, November 25, 1938, encl. A, memorandum by Reith on interview with Pirow, November 4, 1938.
90. See J.C.W. Reith, Into the Wind (London, 1949), pp. 335ff., on Reith's early days with Imperial Airways.

idea was not to mature, a beginning was made in the merger of Imperial Airways and British Airways in the British Overseas Airways Corporation. Thus, the idea of Imperials forming a new combine in Africa was attractive to the business-minded Reith, especially as it promised to resolve once and for all the difficulties with South Africa. "I could do business with Pirow", Reith recalled.<sup>91</sup> Pirow had sweetened the deal by offering the proposed new company access to Johannesburg on a reciprocal basis with SAA flights to Kisumu.<sup>92</sup> The question remained whether the idea could be sold to the British government and the British African administrations.

By mid-November, Imperials' B. W. Galpin had prepared a scheme for consideration by a sub-committee of the I.C.I.A.C.<sup>93</sup> It called for the formation of a new company to operate landplane services between Kisumu and Johannesburg on a reciprocal basis with SAA. Shares in the new company were to be distributed as follows: Imperial Airways, 60%, RANA and Wilson Airways, 20% each. Imperials were to continue the flying boat service to Durban, the new company would operate the landplane route via Salisbury, SAA would operate a similar route through Livingstone, and SAA could

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91. Ibid., p. 336.

92. I.A.C. paper 495, Reith memorandum.

93. Ibid., encl. B, 'Imperial Airways. Co-operation with Local Companies and with South African Airways', November 16, 1938.

run another Kisumu service through South-West Africa, Angola and the Congo. Both the new company and SAA were to "operate aircraft of approximately equal capacity and performance".<sup>94</sup>

While British government officials would have preferred the formation of a company with South African participation, Pirow's idea and Galpin's tentative scheme were accepted with little fuss. The I.C.I.A.C. sub-committee took the view that

the inland route must be developed at some time, and from the political point of view it would be difficult to deny to South African interests a share in the development of that route. Wilsons and RANA alone are clearly not in a position to compete against the resources of South African Airways. <sup>95</sup>

There were, of course, problems to be faced. The new company would require subsidy support, and probably expenditures would be needed to improve the aerodromes to handle the proposed De Havilland DH 95 aircraft, expected in service by the end of 1939.<sup>96</sup> More important was the opposition expected from East Africa and the Rhodesias where there was "considerable local sentiment against RANA and Wilsons being put out of existence...", as appeared to be the case if the proposal was accepted.<sup>97</sup> Not until such

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94. Ibid.

95. Ibid., minutes of second meeting of sub-committee (chaired by Sir Donald Banks of the Air Ministry), November 17, 1938, p. 1.

96. Ibid., p. 3.

97. Ibid., p. 2.

time as agreement was reached with the East African and Rhodesian governments could agreement be reached with Pirow. However, the sub-committee's view was that if the response from Africa was favourable, Pirow could be advised "that his proposal for side-by-side operation with a unified company is acceptable in principle subject to the settlement of details later".<sup>98</sup>

Pirow had left England for a short visit to Germany, and it was hoped to have a favourable reply to his proposal in hand for his expected return in early December. Accordingly, the Colonial Office and the Dominions office advised the British African governments of the proposed scheme and invited reply "at earliest possible date".<sup>99</sup> The despatch noted:

It is obvious that further development of internal landplane route for through traffic is inevitable in due course and it is also clear from recent discussions with Mr. Pirow that he is anxious that South African interests should participate to increasing extent....[we] do not consider that the route in question can be adequately developed through the medium of such local companies alone in view of their limited resources. Nor will it be possible in general Imperial interest indefinitely to deny to South African interests a larger share in the development of that route.<sup>100</sup>

In anticipation of reactions, the despatch pointed out that the intention was not to destroy the local companies, but in fact, their share-holdings would safeguard their

98. Ibid., p. 3.

99. AVIA 2/2041, telegram, November 26, 1938. Also I.A.C. paper 497, November 29, 1938.

100. Ibid.

interests on the main route, and in addition, they would have a monopoly of traffic on other routes and all the charter work available. <sup>101</sup> In a final note, the African colonial governments were assured that the proposed changes would not require additional subsidy support or other expenditures. <sup>102</sup>

The East African governments replied in general favour of the idea, although urging that Wilsons' shares in the new company should be 25%. <sup>103</sup> Northern Rhodesia likewise raised no serious objections. <sup>104</sup> The stumbling block to any quick acceptance of the new company was Southern Rhodesia, where fears were genuine that the proposals meant the end of RANA. <sup>105</sup> In a cable to Reith, J. W. Downie, RANA's chairman, complained that with the introduction of the new scheme, some £48,000 out of an expected revenue of £70,000 would be lost to the new company and SAA. <sup>106</sup> Barnard, Imperials' resident operations manager in Salisbury, pointed out,

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101. Ibid.

102. Ibid.

103. AVIA 2/2041, High Commissioner for Transport, Kenya and Uganda Railway, to CO, December 2, 1938.

104. Ibid., Governor to CO, December 5, 1938.

105. Ibid., Governor to CC, December 2, 1938.

106. Ibid., Downie to Reith, November 29, 1938.

The fact that we - Imperial Airways - propose to come back onto the central route in some other guise, will, I am afraid, not be very palatable to a good many interests:.... 107

In a second communication, Downie expressed his disappointment that RANA had not been "taken into your confidence immediately you knew these proposals were taking shape", and warned:

You may continue to operate along the East Coast but sooner or later you will be driven back to the central route with the mails and to share them if not to part with them at Kisumu. The political as well as the commercial implications will be far reaching and very likely far beyond anything you contemplate at the present moment. To my mind the great mistake was made - when the South African Airways were permitted to go beyond Lusaka. 108

Downie's reaction reflected past Rhodesian dealings with Pirow, especially his insistence on "absolute reciprocity" on RANA/SAA pooling arrangements between Bulawayo and Johannesburg, and his threat to close the route if SAA was not allowed north. 109 Reith was prepared to handle RANA's and Southern Rhodesian complaints, but in the meantime, hopes had vanished for more detailed discussions with Pirow prior to his return to South Africa. Fortunately, Pirow did not regard the matter as one of "particular urgency", and he agreed to further

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107. BOAC, I.A. file, 'Kisumu-Johannesburg Services, 1936-1938', Barnard to Galpin, December 3, 1938.

108. Ibid., Downie to Reith, December 3, 1938.

109. Ibid., encl., 'Notes of Interview between Pirow and Southern Rhodesian Delegation, Pretoria, 22 June 38, re Extension of SAA Service beyond Bulawayo', 15 pp.

communications on the idea and was prepared to await "more concrete proposals". <sup>110</sup>

While the Treasury had yet to be convinced of the merits of the plan, <sup>111</sup> Imperials and the Air Ministry were prepared to take further action. Reith decided to send Sir John Maffey, a director of Imperial Airways, on a mission to Africa with the task of reaching agreement on '15 Points for Settlement' prepared by the company. <sup>112</sup> These were carefully reviewed by a sub-committee of the I.C.I.A.C. in late January, 1939, and Maffey was briefed on the role he was expected to play. <sup>113</sup> In effect, Maffey was to represent the government as well as Imperial Airways in Nairobi, Lusaka, Salisbury and Pretoria. Accompanied by B. W. Galpin, Maffey found, as expected, a determination everywhere to keep alive both Wilsons and RANA, respectively the 'chosen instruments' of East Africa and the Rhodesias. <sup>114</sup> Nonetheless, he urged acceptance by local authorities of the necessity of displacing the local companies on the main route, and won a general

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110. AVIA 2/2041, encl. 52b, Notes of meeting with Pirow, December 8, 1938.
111. Ibid., extracts from meeting of I.C.I.A.C., November 30, 1938. It was estimated the new company would require £162,500 p.a. in subsidy, an amount which sent a shudder through Treasury delegates.
112. Ibid., B. W. Galpin to Burkett (A.M.), secret, January 14, 1939.
113. I.A.C. paper 516A, February 2, 1939.
114. A resume of discussions may be found in AVIA 2/2041, encl. 142b, Central African Landplane Route.

endorsement of the scheme for a new company, and co-operation with SAA plans to develop additional services. By mid-March, Maffey was in Cape Town where he was able to set out the lines of an informal general agreement with Pirow. <sup>115</sup>

In summary, Pirow had obtained all that he had wanted. SAA was to maintain its existing weekly Johannesburg-Kisumu service, but would now operate, in addition, a twice weekly Ndola-Johannesburg service which could later be expanded into a through service. As well, South Africa obtained the rights to operate beyond Kisumu to Entebbe and the Congo, thus the realisation of Pirow's 'circle route'. On the British side, Imperials were to operate one through service extended to Durban via Johannesburg, thus re-introducing the imperial presence in the Union. On behalf of Imperials, RANA would operate a twice weekly Johannesburg-Ndola service until such time as additional through services were organised and run by Imperials. Details of revenue sharing, cabotage, ground facilities and related matters were likewise agreed upon. <sup>116</sup> Only a formal agreement remained to be signed before the whole new operation could be put into effect, but the war intervened to prevent its implementation. <sup>117</sup>

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115. I.A.C. paper 525, April 12, 1939, encl. Letter of Agreement, Pirow to Maffey, March 17, 1939.
116. Ibid. Also BOAC, I.A. file No. 13, 'South African Airways (Company Matters), 1938-1953, encl.
117. Formal agreements had likewise to be arranged with the British African governments, as yet not party to the Pirow/Maffey arrangements.

For the moment, the new arrangements represented an important triumph for Pirow. In return for what was, in fact, one added British service to the Union, SAA was now solidly entrenched on the inland trunk route. His civil/military Junkers aircraft were to be used, thus realising the aim of pushing outward the Union's first lines of defence with air transport. Most important, Pirow could claim credit for an accelerated pace of air transport development in much of British Africa. The new scheme promised swifter and more frequent air services with modern aircraft, and coupled to Pirow's planned services to Angola, Mozambique and the Congo, these served to promote Union aims of spreading its influence northward in pursuit of the dream of a united 'white' Africa. Few of these achievements were spelled out in the Pirow/Maffey agreement, but the political implications of the expanded SAA role were apparent and conclusive. In the meantime, Pirow could but await the results of British efforts to persuade East Africa and the Rhodesias to accept the agreement and new company idea.

The Pirow/Maffey agreement prompted almost immediate concern in East Africa and Southern Rhodesia. In the East African view, the probable effects were worse than either Wilsons or Imperial Airways had contemplated, for Wilsons were to be removed from the main route entirely. <sup>118</sup> Since

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118. AVIA 2/2041, H. L. Gurney, Secretary, Conference of East African Governors, to CO, May 11, 1939.

the commencement of SAA services to Kisumu, Wilsons had operated a twice weekly service on the Kisumu-Lusaka sector. With adequate subsidy support provided by the E.A.M.S. agreement,<sup>119</sup> the company needed the route, despite the loss of £400 per month on the second service, operated outside the terms of the E.A.M.S. agreement to compete with SAA.<sup>120</sup> In effect, the implementation of the Pirow/Maffey agreement would spell financial disaster for Wilson Airways, unless the East African governments were prepared to be more generous with their 'chosen instrument'.<sup>121</sup> Wilsons' remaining services thus had a clouded future, and the suggestion was made that Imperial Airways should complete the take-over.<sup>122</sup>

Matters were equally serious in Southern Rhodesia where the government was pressing ahead with plans to purchase the Beit Trust shares in RANA.<sup>123</sup> There were a number of details

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119. AVIA 2/2030, 'Proposed Agreement for Kisumu-Lusaka Service, 1938-1940', part I, Notes of a meeting, May 30, 1938. As per Cmd. 5770 (1938), Wilsons was to receive £17,500 in subsidy in 1938-39.
120. Ibid., Notes of a meeting, May 25, 1938, p. 6. Wilsons had to run two services to match the carrying capacity of Pirow's Junkers.
121. The East African governments accepted the recommendations of the Sir Osborne Mance report that Wilsons be granted a monopoly and the status of 'chosen instrument' in air transport policy. See Kenya, Report on the Co-ordination of Transport in Kenya, Uganda, and the Tanganyika Territory (Nairobi, 1937).
122. AVIA 2/2041, Gurney to CO, May 11, 1939.
123. Ibid., Governor to DO, June 6, 1939. This would give Southern Rhodesia a controlling interest.

in the Pirow/Haffey agreement which disturbed the Rhodesians, including the right of SAA to operate one service through Salisbury, and the prospect of being ousted from the Ndola-Johannesburg route when Imperials decided to exercise their option.<sup>124</sup> Huggins, the Southern Rhodesia Prime Minister, argued the point that RANA could not be expected to operate "on reasonably commercial lines if the cream of traffic was going to be skimmed by the six services of Imperial Airways and South African Airways between Kisumu and South Africa". He added, "the thought that RANA had been squeezed out by Mr. Pirow would rise prominently in the public's mind".<sup>125</sup> What became clear was that the basis of Southern Rhodesian antipathy to the scheme lay in the prominent role to be played by SAA at the expense of RANA. RANA had hoped to operate as far north as Kisumu, but this ambition was now denied, and the prospects of RANA being other than a minor local company were being swiftly dimmed. Much more so than in East Africa, a great deal of prestige was attached to RANA as the 'chosen instrument' in the Rhodesias and Nyasaland. Only with firm assurances by Imperial Airways and the Air Ministry was Southern Rhodesia won to a more accommodating position toward the new scheme.<sup>126</sup>

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124. AVIA 2/2102, 'Negotiations in Connection with Kisumu-South Africa Landplane Service, 1939-1940', Notes of a meeting, June 29, 1939, p. 3.

125. Ibid., Minutes of a meeting, July 10, 1939, pp. 1, 3.

126. Ibid., pp. 3-4.

'Grumbles' from the British African colonies dragged out negotiations until mid-summer 1939, and with the second world war but weeks away, Pirow's plan, like many other matters, was swept aside' as Smuts led the Union into the war, the last victory for the forces of British imperialism in South Africa. 127

Nonetheless, Pirow's record as Minister responsible for the development of South African air transport is outstanding, indicative of a firm resolve to push forward a 'South Africa First' policy, and a shrewd political sense that rallied support for the cause in the Union. Capitalising on the nascent Afrikaner nationalism of the 1930's, Pirow translated this mood into a rival imperialism which challenged the might of the British empire in Africa. To a great extent, Pirow and South Africa were the victors. His fleet of Junkers aircraft was the finest in Africa, and only the war prevented the introduction of the JU90's, great four-engined aircraft which would have given SAA a ten year lead on its competitors. 128

Pirow had no qualms about operating his airline at a deficit,

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127. Pirow was replaced in the new Smuts cabinet by Frederick Claud Sturrock in the Railways and Harbours portfolio, and by Smuts himself in Defence. The triumph of South African nationalism had to await the nationalist electoral win in 1948.

128. Four JU90 aircraft were on order in 1939. None were delivered, and the only one tested in African conditions crashed on take-off at Bathurst in 1938, killing 11 of 17 persons on board. Aeroplane, November 30, 1938, p. 688.

its air defence dimension being sufficient justification for expenditures which neither Imperial Airways nor RANA and Wilsons could match.<sup>129</sup> Under Pirow, air transport in the Union never struggled with the British dictum: 'civil aviation must fly by itself'.

Pirow's decision to monopolise all air transport in the Union provided the strong base for his expansionist air policy. By 1939, the Union could boast of the finest network of air services on the continent.<sup>130</sup> On the question of foreign carriers operating into the Union, Pirow's policy was to demand "strict reciprocity".<sup>131</sup> Thus, the Italians were rejected in 1938, the Dutch in 1936, and the Germans earlier.<sup>132</sup> None of these states could offer SAA reciprocal privileges, although the Dutch made a second effort in 1939, prompting Pirow to fear that "it might become embarrassing" in light of Dutch sympathies in the Union.<sup>133</sup> In Pirow's terms, the only non-British states

129. For the financial year 1938-39, SAA estimated a deficit of £262,554. AVIA 2/1879, encl. 129b, South African Railways and Harbours Estimates, 1938-39, Airways Revenues and Expenditures.

130. See map, p. 569.

131. An exception was the British service to Durban. Not until 1945 was SAA able to commence the 'Springbok' services between England and South Africa in co-operation with BOAC. Stroud, Annals, p. 553.

132. Cape Argus, February 7, 1938.

133. FO 371/23899, Political (Western) Commercial Aviation (1939), W4865, Dutch Air Services to South Africa, Clark to DO, February 27, 1939. A K.L.M. 'goodwill' flight did visit the Union in January, 1940.

eligible to operate reciprocal services with South Africa were Portugal and Belgium. By 1939, DETA was flying to Johannesburg, and in return SAA opened its Luanda service from South-West Africa. A Belgian/South African agreement was reported in August, 1939, allowing SABENA access to the Union in return for SAA operation through the Congo on Pirow's 'circle route'.<sup>134</sup> Had this agreement been implemented, one can speculate the probable effects this might have had on the European mails and passenger traffic monopoly enjoyed by Imperial Airways, despite Pirow assurances that "there was no intention of operating the Congo service in such a way as to affect Imperial Airways adversely".<sup>135</sup>

Pirow, a man whose virtues of perseverance and national pride were often overshadowed by his militant racism and pro-Nazi sympathies, was nonetheless the principal architect of South African air transport development. For six years, he led the strongest of all challenges to British air paramountcy in Africa with considerable success. His most lasting contribution was the strong foundation which he built in the Union, upon which South African Airways could continue to build after the war.<sup>136</sup> SAA was destined to become one

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134. AVIA 2/1995, encl. 34a, extract from Flight, August 10, 1939. The Air Ministry admitted it had no record of the outcome of Union/Belgian negotiations on reciprocal services to the Rand. Ibid., encl. 30a.

135. BOAC, I.A. file No. 13, notes on Pirow/Maffey agreement.

136. See South African Airways, Fifty Years of Flight, chapters 8-11.

of the great air lines of Africa in the post-war era, and it was Oswald Pirow who was instrumental in assuring a future of South African, not British, air transport paramountcy in the Union.

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CHAPTER XII  
TWO DECADES OF AVIATION IN  
BRITISH AFRICA: THE BALANCE SHEET

The passengers, the cargo and the mail do not want to ride in an aeroplane; what they want is to be at their destination.

Jack Grumbridge, 1966. <sup>1</sup>

"There is still time", noted Imperials' J.C.W. Reith in late 1938,

--- though time presses and competition is intense and increasing on every foreign land --- still time to order outlook and procedure, so that (in Mr. Bridges' phrase of another but cognate agency) the 'globe-spread net of speeded intercourse' shall be of British weaving, and that through the seven skies, if seven there be, as once upon the seven seas, British craft may ply supreme. <sup>2</sup>

The sentiments were not unlike those of Sir Samuel Hoare a decade earlier. <sup>3</sup> Such were the proud hopes of the new chairman of Great Britain's 'chosen instrument'

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1. Jack L. Grumbridge, Marketing Management in Air Transport (London, 1966), p. 29.
  2. Imperial Airways, Report of the Annual General Meeting 1938, November 14, 1938, p. 13.
  3. See above, chapter II, passim.

even as two decades of British imperial air transport were coming to a close in a world racing madly but inexorably to war. Reith's message clearly expressed a concern for the problems facing Imperial Airways, and with cause.

International air transport had rapidly become an increasingly competitive operation.<sup>4</sup> This was certainly true in Africa. In the Union, Pirow was challenging British dominion.<sup>5</sup> Elsewhere, the French were building an air empire with considerable success.<sup>6</sup> By 1938, for all the great pioneering work Imperial Airways had done in Europe and along the empire routes, and despite its generally excellent record of regularity and safety, it was apparent, as one critic later wrote, that

these services were less frequent than they should have been, slower than they could have been, and less comprehensive than they might have been. <sup>7</sup>

Changes were thus being called for in the last few years before world war two, changes which would re-define the aims and re-organize the means of British imperial air transport

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4. Burt M. McConnell, "The Race for Aerial Trade Routes", Yale Review, XXVII (December, 1937), 348-57.

5. See above, chapter XI.

6. R.-J. de Marolles, "La Régie Française 'Air Afrique' et son Remarquable Développement", Schweizer Aéro-Revue, XIV (August 25, 1939), 365.

7. Nigel Tangye, Britain in the Air (London, 1944), p. 31.

policy. These involved (1) the abandonment of the more or less laissez faire policy defining the relationship between the government and Imperial Airways and other air transport operators, and (2) the formation of a new 'chosen instrument', the British Overseas Airways Corporation (BOAC), so named by Reith because in his view, it expressed best the "function" of the air line.<sup>8</sup> Most important, in the merger of Imperial Airways and British Airways, the two existing 'flag carriers', BOAC was created as a public corporation, bringing British air transport into line with its continental rivals, and in Africa, with the Union. In turning to nationalization as the panacea for the many ills which appeared to plague British air transport, the government had at last recognized the national and imperial importance of this still young industry.<sup>9</sup> It was a step taken with reluctance by some,<sup>10</sup> while greeted with joy by British

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8. Among the names considered for the new corporation were British Air Lines, British Air Transport, British Air Services, British Airways, British Airways Transport, British Commonwealth Airways, and British Skyways. AVIA 2/2091, 'Title of New Civil Air Transport Corporation, 1939'.
  9. For a brief discussion of British public corporation building, see Sidney Pollard, The Development of the British Economy, 1914-1950 (London, 1962), pp. 172-73. See too John Longhurst, Nationalization in Practice: the Civil Aviation Experiment (London, 1950).
  10. Earl of Woolton, The Memoirs of the Rt. Hon. Earl of Woolton (London, 1959), p. 141. Woolton served on the Cadman Committee (to be discussed below).

socialists who could argue that full state control was long overdue. <sup>11</sup>

These changes were fundamental. Even as they reflected the failure of laissez faire, the guiding principle of British air transport since 1918, <sup>12</sup> they signalled the end of one era and the beginning of another. British aviation was now set on a new course, and, as it was to affect Great Britain, so too was it to affect subsequent air transport planning and development in British Africa. Although world war two delayed the emulation of the British model in the African empire, state control was to become the pattern of organization in the formation of regional air carriers after the war and national airlines in the years of independence. <sup>13</sup>

The developments leading up to the formation of BOAC need no detailed accounting here. <sup>14</sup> Criticism of both

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11. Ernest Davies, "Civil Aviation: From Subsidy to Public Corporation", "National" Capitalism (London, 1939), pp. 245-64. Also "Wings for Peace. Labour's Post-War Policy for Civil Flying", (London, 1944), pamphlet.
  12. Robin Higham, "The British Government and Overseas Airlines, 1918-1939; a Failure of Laissez Faire", Journal of Air Law and Commerce, XXVI (Winter, 1959), 1.
  13. For example, East African Airways Corporation and Central African Airways; later, Ghana Airways and others.
  14. A good summary account is provided in Higham, Britain's Imperial Air Routes, pp. 260-309. See also H. J. Dyos and D. H. Aldcroft, British Transport (Leicester, 1969), pp. 386-88.

Imperial Airways and the Air Ministry had been voiced throughout the 1930's and was, in part, responsible for the government decision to sponsor a second 'chosen instrument', British Airways, to build up the British air presence in Europe, West Africa and South America.<sup>15</sup> In November 1937, a House of Commons debate on civil aviation brought matters into sharp focus. In a scathing indictment of British air policy, Robert Perkins, a pilot and vice-president of the British Air Line Pilots' Association (BALPA), delivered a 56 minute speech covering a wide range of specific criticisms.<sup>16</sup> He called for a public inquiry, and "the head of the Secretary of State for Air on a charger" as well.<sup>17</sup> In summary, both the Air Ministry and Imperial Airways were included in this general accusation of inefficiency. An embarrassed government could not ignore the criticism. Within a week, Lt. Col. A. J. Muirhead, the under-secretary of state, announced the formation of a committee to investigate the charges under the chairmanship of Lord Cadman of the Anglo-Iranian Oil Company.<sup>18</sup>

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15. See above, chapter X.

16. Hansard, CCCXXIX, November 17, 1937, cols. 417-34.

17. Ibid., col. 417.

18. Besides Cadman, the committee included Sir Frederick Marquis (later Lord Woolton), a Midlands businessman and bank director; T. Harrison Hughes, a shipowner; and J. W. Bowen, President of the Post Office Employees' Approved Society. Hansard, CCCXXIX, November 30, 1937, cols. 1879-80.

The Cadman Committee completed and submitted its important report in February 1938,<sup>19</sup> in the Aeroplane's view, "about the most sensible official document that has yet been issued on Civil Aviation".<sup>20</sup> The Report supported most of the criticisms that had been brought out in the debate in the House of Commons, noting that it had revealed "a genuine apprehension that, except on Empire routes [my italics], this country is backward in civil air transport".<sup>21</sup> Tracing the development and expression of British air policy since the formation of Imperial Airways in 1924, the Committee found much to cause alarm. The British aircraft manufacturing industry had yet to produce a medium-sized air liner, "comparable to the leading foreign types", and this the Committee blamed on "an operating policy which disregarded aircraft development and production...."<sup>22</sup> The Air Ministry was indicted on several counts. The Committee found that as Imperial Airways' contracts dealt only with specific routes, "they neither supported nor encouraged the development of new

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19. A.M., Report of the Committee of Inquiry into Civil Aviation and the Observations of H. M. Government Thereon, Cmd. 5685 (1938). Papers and correspondence in CAB 27/643, 'Cabinet - Committee on the Cadman Report on Civil Aviation'. See also, E. D. Weiss, "Civil Aviation: Report of the Inquiry onto Civil Aviation", Economic Journal, XLVIII (September, 1938), 558-66.

20. Aeroplane, March 16, 1938, p. 331.

21. Cadman Report, p. 6.

22. Ibid., p. 7.

routes. The essential stimulus to expansion was, therefore, entirely lacking".<sup>23</sup> The gist of the Committee recommendations with regard to the Air Ministry was a strengthening of the civil aviation side, beginning with the creation of a "second post of Parliamentary Under-Secretary of State who will devote his whole time to the problems of civil aviation".<sup>24</sup> This did not answer fully the complaints of critics who felt that as long as civil aviation was controlled by the RAF-dominated Air Ministry, civil aviation would remain "as a sort of Cinderella to be kept in the background".<sup>25</sup> Nonetheless, the recommendation made clear the inadequacy of the existing Air Ministry establishment to meet the growing needs of air transport development.

Turning to Imperial Airways, the Committee was especially critical of the company's relations with the Air Ministry, accusing it of failing to co-operate while being "intolerant of suggestion and unyielding in negotiation".<sup>26</sup> In the

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23. Ibid., p. 8.

24. Ibid., p. 12. The recommendations called for a further strengthening of the department at all levels.

25. Lord Brabazon of Tara, "Ad Astra", Journal of the Royal Aeronautical Society, XLVI (October, 1942), 252. Many would have liked to see civil aviation under the Board of Trade or the Ministry of Transport. A separate Ministry of Civil Aviation was established in 1944, but after several changes in the next decades, civil aviation came to rest with the Board of Trade and there remains as of date of writing (1974).

26. Cadman Report, p. 15.

opinion of the Committee, Woods Humphrey, the managing director, had taken "too narrow a commercial view" of the company's operations. <sup>27</sup> It recommended that the company have a full-time chairman who would personally control the management of Imperials, as it noted that "serious defects in the management of Imperial Airways call for immediate reform; and some change in directing personnel may well be involved". <sup>28</sup> It was an attack on the 'chosen instrument' which would lead to the forced resignation of Woods Humphrey, the man who, with Eric Geddes, had contributed so much to the building of Imperial Airways. <sup>29</sup>

The Cadman Committee Report had much else to say about aeronautical research, aircraft manufacturing and other pertinent air matters. Although its criticisms may well have pointed to the formation of a public corporation or the merger of the two 'chosen instruments', the Committee

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27. Ibid. Imperials felt this to be a most unfair charge in that the very charter of the company had called for a "commercial organisation run entirely on business lines...." Imperial Airways Staff News, March 17, 1938, p. 2. See discussion in Higham, Britain's Imperial Air Routes, pp. 283-84.
28. Cadman Report, p. 32.
29. Some had hoped that Woods Humphrey would be promoted to head Imperials or to head any new company that came into being, and his departure was lamented in civil aviation circles. Aeroplane, June 29, 1938, pp. 798-800; Flight, June 23, 1938, p. 605; Alfred Instone, The Early Birds, pp. 48, 191-92. Reith and Woods Humphrey simply could not see eye to eye on the future course of the new concern. Reith, Into the Wind, p. 315.

was quiet on the matter, leaving this to be the work of Reith from the moment of his appointment as Chairman of Imperial Airways. <sup>30</sup>

In general, the Report was accepted by the Government <sup>31</sup> and the most important of its recommendations, calling for greater support and financial assistance for civil aviation, brought a quick and generous response. The Government pledged an immediate increase to £3,000,000 p.a. in subsidies payable to air transport companies. <sup>32</sup> Such a reaction was not as surprising as it would first appear to be. Awakened to air transport realities by the sweep and comprehension of the Cadman Report, Great Britain was compelled to remedy the situation. A failure to do so at this late date would have meant a final abandonment of British dreams and claims to an 'empire of the air'. What was being abandoned instead were the inadequate means to this end. The Cadman Report and the positive response to

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30. Reith took over July 4, 1938. On his appointment, see PREMIER 1/246, Civil Aviation, 1938. Chairmanship of Imperial Airways.
31. Cadman Report, 'Observations of H.M. Government', pp. i-iii.
32. A.M., Memorandum by the Secretary of State for Air to Accompany the Air Estimates, 1938; Parliament, Air Navigation (Financial Provisions) Act, 1938, 1 & 2 Geo. 6, ch. 33. It moved one critic to comment later, "At last, in 1938, we, the victors of the world war, had voted as much for Civil Aviation as Germany, the vanquished, did in 1928". Bruce Elliot, Our Airlines our Lifelines (London, n.d.), p. 16.

its recommendations thus sounded the death knell of the idea that 'civil aviation must fly by itself'.

The Cadman Committee Report was the first step in the major transformation of British and Imperial air transport planning and policy. The second, the formation of BOAC, followed swiftly. The forceful Reith argued that he had only accepted the chairmanship of Imperial Airways on the condition that it would be nationalized.<sup>33</sup> Once this view was accepted, it took little persuasion to expand the idea to include the second 'chosen instrument', British Airways. By November 1938, a co-operative and concerned Cabinet was discussing the first draft of the proposed new corporation.<sup>34</sup> In the House of Commons, the Air Minister, Kingsley Wood, announced the government's public corporation proposal, to be "the most satisfactory instrument for the development of overseas civil aviation....".<sup>35</sup> Noting the authorized increase in subsidy support provided earlier in the year, he pointed to an important financial rationale for the proposal. The Cadman Committee had censured the idea of

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33. Reith, Into the Wind, pp. 329-31.

34. CAB 24/280, C.P. 246(38). Cabinet. 'Imperial Airways and British Airways'. Memorandum by the Chancellor of the Exchequer and the Secretary of State for Air, November 3, 1938. Also CAB 23/96, 54(38)8, November 9, 1938.

35. Hansard, CCCXLI, November 11, 1938, cols. 453-55. Note the emphasis on "overseas civil aviation".

dividends being paid out of public money, as had been the case with Imperial Airways. The new organization would thus eliminate this criticism, and at the same time, facilitate the raising of new capital by the government "on terms which would not prove unduly expensive to the Exchequer". The government was therefore to take over the existing undertakings of Imperial Airways and British Airways, for "a fair and reasonable price".<sup>36</sup>

In general, the proposed new corporation was well received.<sup>37</sup> By the summer of 1939, shareholders of Imperial Airways and British Airways had accepted purchase prices of £2,659,086 and £573,500 respectively.<sup>38</sup>

Discussions with Dominion and Colonial governments obtained approval for a continuation of their subsidy and postal agreements with Imperial Airways.<sup>39</sup> In August, on the eve

36. Ibid.

37. The Times, November 12, 1938, p. 13; Aeroplane November 16, 1938, pp. 591-92; The Economist, November 19, 1938, pp. 370, 386.

38. For correspondence and negotiations, see AVIA 2/2055, 'Proposed British Overseas Airways Corporation: Purchase of Imperial Airways' Shares, 1939'; AVIA 2/2056, 'Proposed British Overseas Airways Corporation: Purchase of British Airways' Shares, 1939'; and AVIA 2/2116, 'Financial Problems Relating to the Acquisition of Imperial Airways and British Airways by the British Overseas Airways Corporation, 1939'.

39. AVIA 2/2073, 'Proposed Overseas Airways Corporation. Discussions with the Dominion Office'; AVIA 2/2074, 'Proposed Overseas Airways Corporation. Discussions with the Colonial Office'; and AVIA 2/2111, 'B.O.A.C. Participating Countries: Correspondence with the Colonial Office, 1939-1940'.

of war, Royal assent was given to an Act

to provide for the establishment of a corporation to be known as British Overseas Airways Corporation; to facilitate the acquisition by that Corporation of certain air transport undertakings; to make further and better provision for the operation of air transport services, and for purposes connected with the matters aforesaid. 40

The transformation process had taken time, and in the rapidly-changing world of air transport, delay might have been costly to British efforts had war not intervened to direct attentions to more pressing concerns. Kingsley Wood had urged an early passage of the legislation through the House in the spring. He noted with legitimate concern that both Imperial Airways and British Airways were reluctant to plan ahead while awaiting their acquisition by the new company. In an atmosphere of uncertainty as to future goals and financial means, both companies were 'marking time', and in the matter of fleet re-equipment, were not "keeping up to date" pending the take-over. Thus, BOAC would begin life with a good deal of ground to make up, and the greater the delay, the greater the problem to be faced.<sup>41</sup> As it turned out, however, with the commencement of hostilities, the situation was emptied of any urgency. BOAC was not formally established until November 1939, with the formal take-over of the older air lines taking place April 1, 1940.<sup>42</sup>

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40. Parliament, British Overseas Airways Act, 1939. 2 & 3 Geo. 6, ch. 61.

41. CAB 24/286, C.P. 117, Cabinet. British Air Transport Bill. Memorandum by the Secretary of State for Air, May 20, 1939.

42. Stroud, Annals, pp. 175-76.

This ended the dramatic re-organization of British air transport, a major step forward in an attempt to make British aviation truly 'worthy' of the empire.<sup>43</sup> To what extent BOAC would have been immediately successfully must remain conjectural as the war dictated rather different lines of policy and development. Nonetheless, for a brief moment, the future looked bright for imperial aviation development in Africa, as elsewhere. While the impetus for the changes which had taken place had grown mainly out of dissatisfaction with British air services in Europe, the main thrust of British air policy continued to aim at the empire overseas. The 'imperial mission' which had brought India, South Africa and Australia into swift and regular communications with London during the past decade was no less important than it had ever been.

Indeed, there was much in these new developments to foster a spirit of optimism among the empire-minded in 1938-39. First in importance was the additional monies which had been voted in support of civil aviation.<sup>44</sup>

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43. The thesis advanced by Harold Cox, "Looking Forward. Prolegomena for a Detailed Study of the Future of British Civil Aviation", Journal of the Royal Aeronautical Society, XLIV (1940), 682-754.

44. In 1936, the estimates had provided £760,000 for civil aviation. In 1939, the figure was £4,787,000 of which £2,059,000 was allocated for "external air services". A.M., Memorandum by the Secretary of State for Air to Accompany the Air Estimates, 1939, Cmd. 5953 (1939).

Beginning in the spring of 1938, the Air Ministry was busy planning the expansion of existing empire services and the introduction of new ones with the extra £1,000,000 now available. <sup>45</sup> In Africa alone, these ideas included the extension of a third Kisumu-Durban service, a Bathurst-Lagos route to link up with a flying boat service to South America, support for and inclusion in the Empire Air Mail Scheme of Anglo-Misr proposals for Egyptian external air transport, and a light plane mails and passenger service between Khartoum and Aden to provide the latter imperial outpost with an air service for the first time. <sup>46</sup> The Air Ministry aimed as well at bringing Mauritius into the mail scheme, with a flying boat or RANA landplane from Mozambique, or with a British company to be formed on the island to operate to Antananarive, from where Air Afrique could link with the empire route at Mozambique. <sup>47</sup> In the fall of 1938, Captain D.C.T. Bennett flew a Short S. 20 'Mercury' seaplane

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45. AVIA 2/2027, Civil Aviation - Overseas Policy (Non-European), 1939 - Finance (2/5/38 -). A.M. memorandum, 'Plan for Overseas Air Services (Extra European),' encl., I.A.C. Paper 456, May 6, 1938.
46. Ibid., appendix I. On Egyptian plans, see also, AVIA 2/1571, Egypt - Organisation of Civil Aviation (5/7/39 -).
47. FO 371/21617, Political (Central) France, 1938, C3994, 'Proposed Air Service to Mauritius', May 7, 1938, encl. I.A.C. Paper 454, May 6, 1938. Later, plans called for the formation of a joint Anglo-French company. Ibid., C4887 and C6279.

6,045 miles in 42 hours, 5 minutes non-stop from Dundee to the Orange river. <sup>48</sup> It was an experiment not to be followed up, but it did suggest Imperial Airways and Air Ministry interest in developing long range aircraft capabilities which could serve Africa as elsewhere. In 1939, Africa was prominent in consideration of another route. Australia expressed an interest in an alternative route from there to South Africa and the United Kingdom. In June, Captain P. G. Taylor flew a 5,600 mile survey in the 'Guba', from Port Hedland (north-western Australia) via Batavia, Christmas Island, Cocos Island, Diego Garcia, and the Seychelles to Mombasa. <sup>49</sup> Here again, the war interrupted possibilities for expanding the idea, first entertained in the 1920's. <sup>50</sup>

In the matter of aircraft equipment, there were promising developments too, as the Armstrong Whitworth A.W. 27 'Ensign', the De Havilland D.H. 91 'Albatross', and two new Short designs, the S. 30 C class and the S. 26

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48. A.M., unpublished 'General Report - Long Range Experimental Flight Scotland to South Africa, 6th to 8th October, 1938'. This and other 'mercury' Flights by Bennett in his Pathfinder - Wartime Memoirs (London, 1958).
49. Stroud, Annals, p. 169. Article by Jack Percival jr. in The Times, July 21, 1939.
50. See above, p. 190.

G class, were coming into service with Imperials. <sup>51</sup> This did not suggest any de-emphasis of military priorities, indeed, production runs for civil aircraft were considerably curtailed by the demands to expand and re-equip the RAF. <sup>52</sup> Nonetheless, there was a growing awareness that military and civil aviation might well be two sides of the same coin in the sense that both could profit from the technological advances made by the British aircraft industry. Clearly, developments in air force aircraft could be turned to civil use, <sup>53</sup> and, as with the new aircraft appearing in Imperial Airways/BOAC colours, help promote the cause of British air transport in Europe and the empire. By the summer of 1939,

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51. On the other hand, there were problems. The under-powered 'Ensigns' were a disappointment, being 'grounded' in January, 1939, to be re-equipped with American Wright Cyclone engines. AVIA 2/2068, Armstrong Whitworth 'Ensign'. Introduction into service by Imperial Airways Ltd. The Directorate of Civil Research and Production still sought a category 'D' air liner (40-50,000 lbs.) for short and long haul routes to carry 10-30 passengers at 200 m.p.h. AVIA 2/1322, Invitation to Tender for 38,000 lb. [sic] Civil Air Liner, encl. A.M. Specification 15/38.
52. RAF priority was laid down in 1936. AVIA 2/2018, Parts I and II, Civil Aviation in Time of War. Present and Future Policy, 10/2/36. Plans were also in hand to take over civil aviation in a war situation. I.A.C. Paper 526, 'Civil Aviation in the Precautionary Stage and in War', April 14, 1939.
53. On the civil to military air relationship, see W. H. Primrose and Nigel Tangye, "The Correlation of Civil and Military Aviation", Quarterly Review (July, 1938), pp. 135-52, and Sir F. Handley Page, "The Influence of Military Aviation on Civil Air Transport", Journal of the Institute of Transport (May, 1933), pp. 107-18.

when Imperial Airways was faced with a critical aircraft shortage and a consequent need to limit passenger accommodation on the empire routes, <sup>54</sup> the Brown Committee urged closer co-operation between the RAF, the air transport operators and the aircraft manufacturers. <sup>55</sup> It called upon the RAF in particular to assist air transport aircraft development, advocating better liaison between the military and civil sides of the Air Ministry. <sup>56</sup> It was not the case that RAF/Imperial Airways relations had been poor, indeed, Geddes had once referred to "the hundred and one ways" in which the RAF had helped the company. <sup>57</sup> But the fact remained that the Air Ministry, acting for a government which controlled every phase of aircraft development, and in its capacities of "customer, paymaster, and regulator" compelled the aircraft manufacturing industry "to tailor themselves to its

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54. Details in AIR 20/204, Proposal for meeting Shortage of Aircraft on British Civil Air Routes, 1939; and AVIA 2/1581 on the limiting of passenger accommodation. Ideas ranged from borrowing RAF aircraft for mails to purchasing American DC-5 aircraft.
55. A.M. Production of Civil Aeroplanes. Report of a Committee Appointed by the Secretary of State for Air, Cmd. 6038 (1939). The Committee, chaired by Harold G. Brown, reported in June.
56. The RAF was urged "wherever possible" to use civil aircraft for transport and other purposes. Ibid., p. 3.
57. Quoted in Keith Granville, "The United Kingdom's Part in the Development of Air Transport of other Nations", Journal of the Institute of Transport, XXIX (May, 1962), 298.

demands", <sup>58</sup> and had done little to facilitate RAF/Imperial Airways co-operation.

All these were sure signs which pointed to significant future progress in the development of British air transport at home and in the empire in the last few years before the war. There was now a new vigour to British air policy, characterized by a renewed emphasis on empire and the expanded designs of BOAC as the new 'chosen instrument' of British air aims. Within this framework, immediate progress in African air transport seemed assured. As it turned out, progress did take place although not along the lines imagined but a few years before. Africa, for example, especially British West Africa, was to benefit greatly from the impetus of war. In 1939, it was still well down the list of British air transport priorities. <sup>59</sup> But the war, and the need to provide an alternative to Mediterranean transit, promoted the development of the 'reserve route' through West Africa to the Middle East, and the basis for future civil air transport development was hastened at a pace far more rapid than would have been possible in the peaceful circumstances of BOAC expansion. <sup>60</sup>

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58. Robin Higham, "Government, Companies and National Defence: British Aeronautical Experience, 1918-1945, as the Basis for a Broad Hypothesis", Business History Review, XXXIX (Autumn, 1965), 324.
59. At this date, first priority was a trans-Atlantic route.
60. Beginnings were made in early 1939. See BOAC, I.A. files, Imperial Airways, U.K.-Egypt-Central Africa Surveys, 1939. Miscellaneous papers and reports by

Still, however much air transport was to move ahead during the war and subsequent years, the fact remains that considerable development had taken place by 1939. Sykes, the one-time Director General of Civil Aviation, could write of the period between his departure from the Air Ministry and the Cadman Report as a "melancholy tale of missed opportunities".<sup>61</sup> Group Captain Wynn would later thunder at the British failure to keep pace with American developments.<sup>62</sup> Yet another critic of the pre-war period complained about

a national air policy which was entirely lacking in realism, and accepted by a people who did not understand the significance of the aeroplane in their national life and who resisted all attempts at education. <sup>63</sup>

At best, these and other similar criticisms of British air transport development expressed only partial truths. The special and unique challenges and circumstances of

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60. (continued) Major Brackley. Also, BOAC, "The Great Skyway Across Africa. How British Merchant Airmen Pioneered the Route that is now our Near East Armies' Air Life Line", press release, February, 1944; and J. Stanton, "Trans-Africa: The Story of Pioneering an Air Line Across the African Continent".

61. Sykes, From Many Angles, p. 301.

62. Wynn, Civil Air Transport, passim.

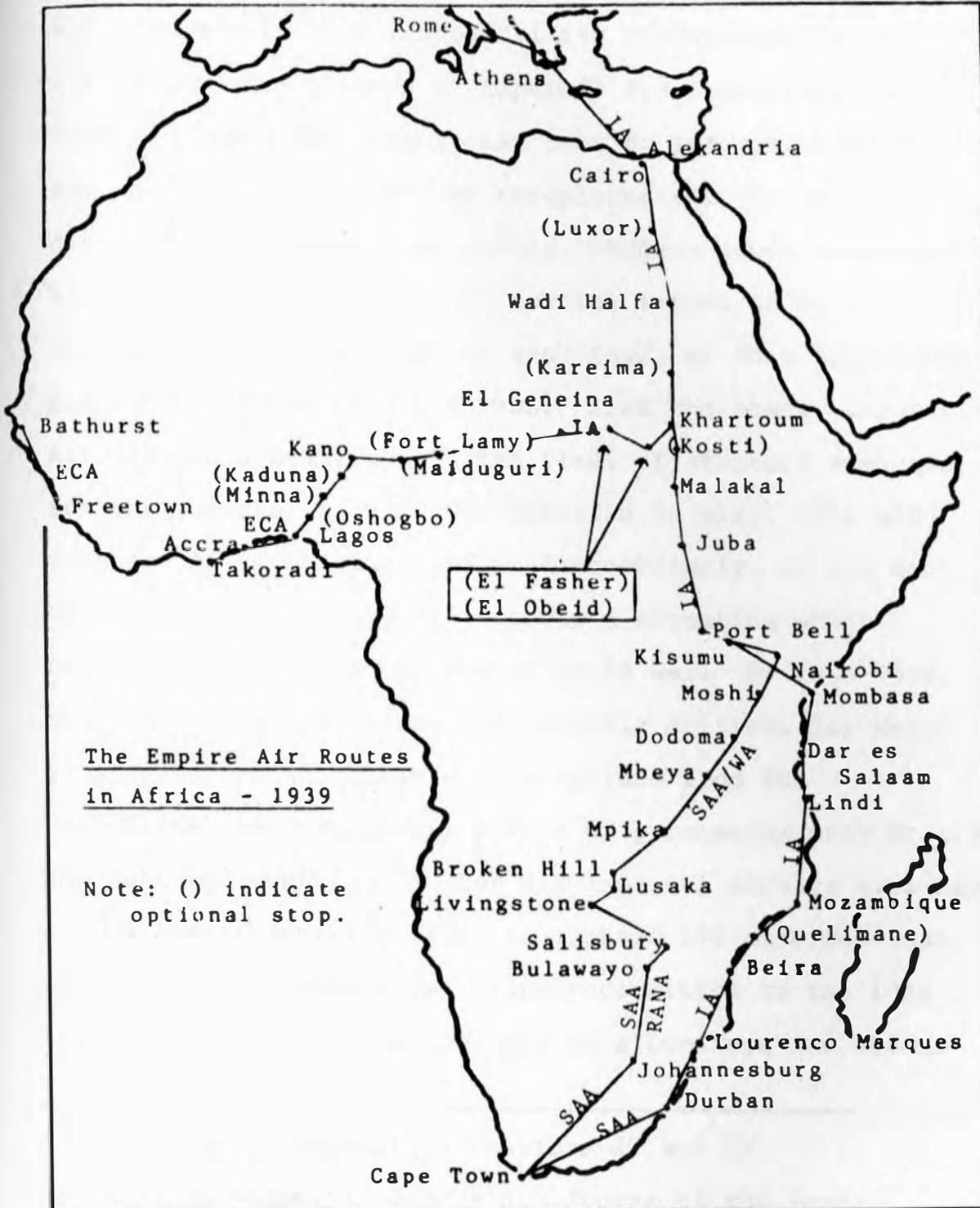
63. S. E. Veale, Airliners and Airways of Today (London, 1947), p. 11.

pioneer civil aviation were glossed over or ignored. This is particularly true in the British African experience. Here, successes far outweighed failures, and the total British effort merited applause not mindless censure. From the end of world war I to 1939, the individual efforts of Alan Cobham, Samuel Hoare, Sefton Brancker and a host of others, the pioneer work of the local companies such as Wilson Airways in Kenya and RANA in the Rhodesias, the survey work of the RAF and the Air Ministry, and, above all, the steadfast purpose and achievements of Eric Geddes, Woods Humphrey and Imperial Airways, had together contributed to the making of a modern and changing Africa. Swift communications and transport, as an important dimension of progress and material development, had been brought to Africa to share in its advance towards the future. By 1939, the vast continent was criss-crossed by an extensive network of airways linking the major centres with each other and Europe. The British role in this development was unquestionably considerable. <sup>64</sup>

As discussed earlier, it was Imperial Airways which

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64. See map, p. 626. Summary in "African Air Services", Aeronautical World News, II (February 29, 1940), 378, 383-85. For African routes in a global context, "Air Routes of the British Empire", Great Britain and the East, L (January 20 & 27, 1938), 62, 90; C. J. Galpin, "World Air Routes", Journal of the Royal Society of Arts, LXXXVI (March 18, 1938), 408-34 [republished as "Air Routes of Today and Tomorrow", Fortnightly Review, May, 1938, pp. 595-604].



The Empire Air Routes  
in Africa - 1939

Note: ( ) indicate optional stop.

Route Key: IA - Imperial Airways  
 ECA - Elders Colonial Airways  
 RANA - Rhodesian and Nyasaland Airways  
 WA - Wilson Airways  
 SAA - South African Airways

was charged with the responsibility of bringing British Africa into the network of imperial air communications.<sup>65</sup> From the beginning, theirs had been an imperial mission, and the pilots who flew the aeroplanes and the men who directed the planning and policy, Geddes, Woods Humphrey, Burchall and others, had an imperial vision to match their purpose.<sup>66</sup> It was never an easy task, as this thesis has gone into some detail to stress. From the start, Imperial Airways could never obtain the fleet of aircraft adequate for the imperial role it was expected to play. The air conquest of Africa thus suffered accordingly, as did much of the rest of the empire. It was a situation which remained right up to the second world war. By late 1938, this situation had become sufficiently critical for Reith to suggest the unthinkable; a departure from the traditional and compulsory policy of purchasing only British aircraft and engines.<sup>67</sup> Nor did Imperial Airways ever have a generous financial backing to support its imperial task. The British government was blindly committed to the idea that civil aviation must operate as a business and become

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65. See above, especially chapters II and IV.

66. Harold Champion, Famous Air Routes of the World (London, 1956), p. 35.

67. Imperial Airways, Report of the Annual General Meeting, 1938, p. 11. "Unthinkable" only as far as Imperials was concerned. British Airways operated 'foreign' aircraft as the second "chosen instrument".

eventually a 'paying proposition', so subsidy and other financial support for Imperial Airways was always limited. The airline was thus forced to operate at strict economy and compelled to be conservative in the matters of route development and equipment. Although, as one observer noted later, "it was always 'thinking Imperially', it was forced to think rather pawkily".<sup>68</sup> The failure of the British government to provide more generously for its 'chosen instrument' was doubly unfortunate. More so than its African colonies, Great Britain had the resources to sponsor civil aviation development in the empire, but failed to exploit its opportunity. Following the British lead, British Africa in turn was reluctant to provide more than modest support.<sup>69</sup> In all British Africa outside the Union, only £246,245 was voted for civil aviation in 1938, a mere £15,906 more than voted the year before.<sup>70</sup> Unlike South Africa, the colonies lacked an Oswald Pirow determined to advance civil aviation beyond considerations of commercial self-sufficiency.<sup>71</sup> Generally, then, both the British

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68. V. E. Mearles, ed., Highways of the Air (London, 1948), p. 39.

69. See discussions above, chapters V, VI, VIII and X.

70. The dependencies of Basutoland, Bechuanaland, Sierra Leone, British Somaliland and Swaziland made no provisions whatsoever for civil aviation expenditure. A.M., Civil Aviation Statistical and Technical Review 1937 (London, 1938), pp. 87-99, and ibid., 1938 (London, 1939), pp. 100-06.

71. Ibid. The Union provided £57,040 in 1937, £57,130 in 1938 for general expenses and subsidy. See above, chapter XI.

government and the African administrations were slow to appraise the potential of air transport development. Given these circumstances, the record of Imperial Airways in Africa, and, for that matter, the record of the local companies, is all the more remarkable.

In 1931, when the Cairo-Mwanza sector of the Cape route was in operation, 223,800 aircraft miles were flown for a total of 96,100 ton miles, of which mail represented 15,800 ton miles. 705,000 passenger miles were flown.<sup>72</sup> In 1939, the corresponding figures were 1,771,000, 2,598,000, 1,567,200 and 9,138,000.<sup>73</sup> Expressed another way, in the January-August period in 1939, the last months of peacetime operations in Africa, Imperial Airways carried 3,730 passengers, 40.94 tons of freight and baggage, and 382.42 tons of mail on the South and West African services.<sup>74</sup> These dramatic increases --- in the case of mail, the amount carried had increased almost a hundredfold since 1931 --- were the result of a number of factors: the route extensions to South and West Africa, an increased frequency of services, larger aircraft, and the introduction of the E.A.M.S. They

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72. A.M., "An Outline of British Air Transport Development (1919-1939)", p. 11, an unpublished account by the A.M. Directorate of Public Relations, 1944.

73. Ibid. The 1939 figures are for the full year, including the war period.

74. AVIA 2/1396, Imperial Airways Limited: Traffic Returns in Respect of Empire Services, 1938-1940.

pointed to the readiness of British Africans to exploit fully the air transport opportunities available. And, to the extent that Africa was 'ready' for the aeroplane,<sup>75</sup> the use made of the new technology in the 1930's encouraged confidence in the continued growth and development of air transport in the future.

Certainly much more could have been done by British air transport in Africa, and more quickly. None of the empire routes was established at "astonishing speed" as claimed by one observer.<sup>76</sup> West Africa was ignored until late in the period, and then poorly served by a roundabout Khartoum-Takoradi route before war broke out.<sup>77</sup> Internal and inter-colonial air services only scratched the surface of opportunity. Not until after the war would individual colonies obtain the study and concern which had accompanied

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75. For the most part, pre-war African air transport served the European and 'white settler' market. As elsewhere, the growth of passenger traffic in Africa would depend on the development of an "industrialized urban society with high cash incomes". See Sir Duncan Cumming, "Aviation in Africa", African Affairs, LXI (January, 1962), 29-39.

76. William Armstrong, Pioneer Pilot (London, 1952), p. 107.

77. See above, chapter X.

the establishment of the trunk routes in the late 1920's and early 1930's. <sup>78</sup> The brilliance of the E.A.M.S. idea came too late to do more than demonstrate the traffic potential of an inexpensive mail service, perhaps the key to the hopes of placing civil aviation on a sound commercial footing. <sup>79</sup>

Nonetheless, insofar as Imperial Airways was charged to establish the British air presence in Africa, its record remains impressive, its impact considerable. The handicaps to be overcome were several and all serious. In pursuit of two often conflicting aims --- one, an 'imperial mission' to advance the cause of empire with swifter communications, the other, to obtain 'commercial self-sufficiency' --- Imperials faced the dilemma, as does any national or imperial airline, of being compelled by their masters in government "to do

78. See B.C.H. Cross, "Future of Air Transport in the Colonies", Crown Colonist, XVI (March, 1946), 167, and his unpublished (1) "Air Transport Report on the Gambia" (February, 1946), (2) "Air Transport Report on the Gold Coast" (January, 1946), and (3) "Air Transport on Sierra Leone" (February, 1946). Also Ministry of (Civil) Aviation, Reports on Civil Aviation pamphlets, (1) Basutoland Protectorate (April, 1965), (2) Bechuanaland Protectorate (November, 1963), and (3) Swaziland Protectorate (March, 1965).

79. The E.A.M.S. was 'suspended' with the outbreak of war. On the 'wind-up' of the operation, see AVIA 2/1359, Empire Air Mail Scheme: Payment of Subsidy; AVIA 2/2079, Empire Air Mail Scheme: Revision of Confidential Estimates, 1939-1940. Plans in 1940 did call for a "modified" mail scheme. AVIA 2/1666, Air Estimates, 1940, encl. 10a.

things that they would not do for normal commercial reasons".<sup>80</sup> As pointed out earlier, and they merit especial stress, financial and aircraft delivery problems were particularly critical in shaping the pace and extent of air transport development in British Africa. Neither with Imperial Airways before the war, nor later with BOAC, did Great Britain have the kinds and quantity of aircraft available to take full advantage of its air transport opportunities in Africa.<sup>81</sup> Thus, whether measured in terms of route mileages, loads carried, number of services or centres served, the British record, if creditable, was clearly capable of improvement.<sup>82</sup>

Throughout this study, emphasis has been placed on the difficulties associated with the establishment of air transport in British Africa. These were many, and undoubtedly dictated care, patience and perseverance in planning and operation. Yet, it is also evident, that with the exceptions of a few men of imagination and moments of urgency, the whole pace of civil aviation progress never quickened to a rate which would reflect the magnitude and importance of its

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80. Sir Duncan Cumming, "Cooperation in Commonwealth Air Transport", Commonwealth Journal, VIII (June, 1965), 97.

81. Ibid., 101.

82. An excellent statistical summary of Imperial Airways' record overall is Peter Masefield, "Some Economic Aspects in Air Transport Operation", Journal of the Institute of Transport, XXIV (March, 1951), 79-108.

mission. Air transport in Africa never did soar to the heights entertained by its proponents. Parsimony, faint-heartedness and conservatism characterized too much of the British approach to air matters. Air Transport thus plodded ahead, surely but slowly, belying the swiftness of its own image and appeal. That this was the case, despite the heroics of Cobham, or the enthusiasm of Samuel Hoare, or the determined efforts of the airline operators, needs explanation, and it might best be understood in the wider context of imperial attitudes and colonial policy as they were expressed in the British Empire's "golden afternoon" between the wars. <sup>83</sup>

The historian can explain in many ways air transport's modest rather than spectacular development. For governments and investors, aviation called for large financial support while appearing to provide little immediate return as the high costs of operation consumed capital in ever-increasing amounts. The slow growth of public response reflected the still questionable reliability of air travel, <sup>84</sup> or simply pointed to a general disinterest in a technology which was

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83. A. P. Thornton, For the File on Empire (Toronto, 1968), p. 352.

84. Quite rightly, one historian has noted that "the aeroplane did not become a normal method of travel in the inter-war years: the existing machines were too unreliable, the costs still too high". A.J.F. Taylor, From Sarajevo to Potsdam (London, 1966), p. 92.

seen to be important only in its military application. However, while these observations hold true for the whole of British aviation history in the period, its African dimension must be studied in an additional light. The African and colonial experience with air transport was and must be seen as a subordinate part of British colonial development policy. As such, air transport more often than not was compelled to surrender its ambitions to the stronger claims of other British priorities. Rita Hinden could write of a "a whole continent crying out for development", <sup>85</sup> an appeal to which air transport advocates could respond and add their own notes of urgency. But, 'economy', not 'development' was a first priority. Thus, to the extent that British colonial policy was guided by the dictum that the colonies 'must pay for themselves', so too was air transport development crippled in Africa by the similar notion that 'civil aviation must fly by itself'. The one, perhaps, begat the other. Even the most empire-minded in this age held on firmly to the purse-strings, forgetting or ignoring the command of one of their own in an earlier time to "treat the Empire as a great estate which must be developed, in the first instance at considerable expense". <sup>86</sup>

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85. Rita Hinden, Plan for Africa (London, 1941), p. 216.

86. Joseph Chamberlain quoted in Griff Jones, Britain and Nyasaland (London, 1964), p. 65.

For much of the 1920's and 1930's, Smuts and Lugard commanded the heights of influence in the shaping of British policy in Africa.<sup>87</sup> This was still the "period of building", wherein matters of native policy and indirect rule overshadowed questions of development and economic progress.<sup>88</sup> Thus the Colonial Development Fund, established in 1929 under the terms of the Colonial Development Act, was provided with a paltry £1,000,000 to provide assistance for all the British colonies.<sup>89</sup> There was little evidence in these years to indicate a sense of urgency in British colonial policy. Development was to be a long-term process in an empire that must have seemed eternal. As more than one historian has observed, the administration of Africa was carried on at a "leisurely" and "unhurried" pace.<sup>90</sup> Within this framework, then, and as a subordinate dimension to the whole of British African colonial policy, air transport development could but move ahead at a pace dictated by attitudes, not by needs.

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87. Kenneth Kirkwood, Britain and Africa (London, 1965) pp. 47-8.

88. Sir Andrew Cohen, British Policy in Changing Africa (London, 1959), pp. 14, 18-9.

89. Parliament, Colonial Development Act, 1929, 20 & 21 Geo. 5, ch. 5.

90. Roland Oliver and John Fage, A Short History of Africa, 2nd. ed. (Harmondsworth, 1966), p. 208; Dame Margery Perham, Colonial Sequence (London, 1967), p. xi.

However, great changes were being set in train in the last years of the period under study, even as the preparations for war were crowding aside all other concerns. As noted above, British air transport was re-shaping its image and ambitions in the formation of BOAC. An important and not dissimilar transformation was taking place in British colonial policy. Reflecting a new-found vigour and generosity, early in 1940, the Colonial Office proposed to "proceed with their policy of development as far and as fast [my italics] as the exigencies of the times permit".<sup>91</sup> Translated into statute, the British government made available more than £5,000,000 p.a.,

for promoting the development of the resources of colonies, protectorates, protected states and mandated territories and the welfare of their peoples, and for relieving colonial and other governments from liability in respect of certain loans. <sup>92</sup>

As with air transport plans, the war delayed the full implementation of this policy, and by 1941, the Colonial Office was appealing to the colonial governments to economize everywhere until the war ended.<sup>93</sup> Nonetheless, the groundwork had been laid for a more positive and comprehensive program of development in Africa in the post-war years.

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91. CO, Statement of Policy on Colonial Development and Welfare, Cmd. 6175 (1940), p. 4.
92. Parliament, Colonial Development and Welfare Act, 1940, 3 & 4 Geo. 6, ch. 40.
93. CO, Despatch from the Secretary of State for the Colonies to the Colonial Governments Regarding Certain Aspects of Colonial Policy in War-Time, June 5, 1941, Cmd. 6299 (1941).

In British Africa, two decades of history ended as they had begun, in war. For British imperial air transport, an era had ended as well. For the next six years, the role of air transport would be less the building of empire than the defending of the British world.<sup>94</sup> In Africa, the great task of bringing air transport to every corner of the continent was for the moment set aside.

It was a task which had begun even before world war I, at a time when aeroplanes were still 'contraptions' and people thought of flights of fancy not of men. Still, the first steps were taken when pioneers in South Africa introduced the aeroplane, and Francis McLean flew up the Nile to Khartoum.<sup>95</sup> After the war the sense of an 'imperial mission' came alive in the organization of Imperial Airways in 1924, and in the relationship of aviation and empire, it was Imperials which led the British charge to bring Africa into the modern age of air transport and communications. The mission was to accelerate imperial communications, and to the extent that civilization depends on its communications, to advance the cause of British civilization in Africa.<sup>96</sup> If

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94. On British civil aviation during the war, see A.M., Merchant Airmen (London, 1946), the A.M. account of their global activities, 1939-1944, and the BOAC "Handbook", an unpublished history circulated in limited quantities to BOAC management, August, 1945.

95. For South Africa, see above, chapter VII. On McLean, see Jones, The Time Shrinkers, pp. 1-5.

96. On the relationship of aviation to civilization, see T. P. Wright, "Aviation's Place in Civilisation", Journal of the Royal Aeronautical Society, XLIX (June, 1945), 299-340.

the realities of this mission never matched the hopes and dreams of air transport enthusiasts, the mission was not without its triumphs. By 1939, Durban was only five days air travel from Southampton, Kisumu only three days, Lagos and Accra but four. Each in turn had been brought within hours or days of one another. In all, the combined efforts of Imperial Airways, Wilson Airways, RANA and South African Airways were bringing regular air services to 85 cities and towns, all but 9 of which were in British Africa.<sup>97</sup> It was a major if not great achievement.

This thesis has been a study of that achievement and the men who made it possible. It is a story of struggle, as it is one of success, the efforts of men "to bend the newest invention of all, the conquest of the air, to the service of mankind...."<sup>98</sup> In the case of British Africa, the odds against an easy or early triumph were several and formidable, but the conquest was made, the aims of empire for the moment met and satisfied. As 1939 brought to a close this first chapter in the history of civil aviation

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97. Imperial Airways, Africa Timetable, August 1939. The non-British centres were Alexandria, Cairo, Luxor and Wadi Halfa in Egypt, Fort Lamy in French Chad, and Mozambique, Quelimane, Beira and Lourenco Marques in Portuguese East Africa.
98. H. E. Wimperis, "The Future of Flying", Journal of the Royal Aeronautical Society, XLIII (November, 1939), 875.

in British Africa, so too did it suggest a promising course of future air transport development. A legacy of strong foundations had been established upon which to build, and the aeroplane had demonstrated its right to a permanent place in the political, economic and social development of the vast African continent. In the years ahead, as imperialism gave way to nationalism and the fortress of empire fell before the 'winds of change', civil aviation would no longer serve the aims of empire, but the needs of Africa. 99

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99. See Institut Français du Transport Aérien research papers 179, 182-83 and 186-87 under the general heading of Adapting Air Transport to the Needs of Dark Africa, English issues, May, July and September, 1950.

APPENDIX INOTES ON COMMERCIAL AIRCRAFT  
IN BRITISH AFRICA, 1919-1939

Types are described in typical configuration although many were operated with engine and other modifications.

Legend: E - engine equipment; W - maximum or 'all-up' weight; P - passengers; S - cruising or maximum speed; R - range; O - operator.

Airspeed A.S. 6 Envoy (1934). Wood construction low wing monoplane. E - 2 x 350 h.p. Armstrong Siddeley Cheetah IX; W - 6600 lbs.; P - 6-8; S - 153-170 m.p.h.; R - 620-650 miles; O - South African Airways.

Armstrong Whitworth Argosy (1926). Biplane. E - 3 x 385 h.p. Armstrong Siddeley Jaguar III; W - 18,000 lbs.; P - 20; S - 90 m.p.h.; R - 405 miles; O - Imperial Airways.

Armstrong Whitworth A.W. 15 Atalanta (1931). High wing monoplane. E - 4 x 340 h.p. Armstrong Siddeley Serval III; W - 21,000 lbs.; P - 9-11; S - 130 m.p.h.; R - 400 miles; O - Imperial Airways.

Avro 504K (1919). Three-seater biplane. E - 1 x 110 h.p. Le Rhone; W - 1829 lbs.; P - 2; S - 87-95 m.p.h.; R - 2-3 hours; O - South African Aerial Transport, Rhodesian Aerial Tours.

Avro Avian 594 mk. III (1926). Two-seater biplane. E - 1 x 95 h.p. Cirrus III; W - 1435 lbs.; P - 1; S - 87-102 m.p.h.; R - 400 miles; O - Tanganyika Government Air Service, Lupa Airways. Used on Cape flights by Murdoch and Heath (1928).

Avro 619 Five (1929). Scaled down version of Avro 618 Ten, in turn a British adaptation of a Fokker VII B/3m. High wing monoplane. E - 3 x 105 h.p. A.S. Genet Major I; W - 4420 lbs.; P - 4; S - 95 m.p.h.; R - 400 miles; O - Wilson Airways.

Avro Tutor 621 (1931). Two-seater biplane. E - 1 x 215 h.p. A.S. Lynx; W - 2218 lbs.; P - 1; S - 95-110 m.p.h.; R - 375 miles; O - Tanganyika Government Air Service.

Blackburn Bluebird (n.d.). Biplane. E - 1 x 60 h.p. Armstrong Siddeley Genet; W - 1385 lbs.; P - 1; S - 88 m.p.h.; O - Rhodesian Aviation Syndicate.

Blackburn Nile Flying Boat (1930). One built. E - 3 x 400 h.p. Bristol Jupiter X1F; W - 22000 lbs.; S - 121 m.p.h. Intended for Nile route. Did not operate.

Bloch 120 (1934). All metal high wing monoplane. E - 3 x 300 h.p. Lorraine Algol 9Na; W - 13,227 lbs.; P - 3-10 (payload of 1763 lbs.); S - 143 m.p.h.; O - Régie Malgache on Madagascar-Broken Hill service.

Cant Z 506 (1935). Low wing monoplane. E - 3 x 550/760 h.p. Wright Cyclone GR-1820; W - 23,148 lbs.; P - 12-16; S - 199-236 m.p.h.; R - 807 miles; O - Ala Littoria through Egypt and Sudan to Abyssinia.

Comper C.L.A. 7 Swift (1930). Single seater high wing monoplane. E - 1 x 75 h.p. Pobjoy R; W - 1,130 lbs.; P - nil; S - 120-140 m.p.h.; R - 380 miles; O - Tanganyika Government Air Service. C. W. Byas flew one to the Cape in 1932.

De Havilland DH6B (1919). Biplane. E - 1 x 90 h.p. Curtiss OX-5; W - 2,380 lbs.; P - 2; S - 75 m.p.h.; R - 3 hours; O - Rhodesian Aviation Syndicate, Natal Aviation, Aerial Stunts.

De Havilland DH9C (1919). Cabin biplane. E - 1 x 240 h.p. Armstrong Siddeley Puma; W - 3,300 lbs.; P - 3; S - 95-115 m.p.h.; R - 500 miles. Flown by Cobham on early flights in North Africa. DH9As were flown by the R.A.F. on flights to West Africa.

De Havilland DH50 (1923). Wooden biplane. E - 1 x 420 h.p. Bristol Jupiter; W - 4,200 lbs. (on floats); P - 3; S - 110 m.p.h.; R - 240 miles; O - North Sea Aerial and General transport. A DH50J was flown by Cobham on his first Imperial Airway Survey. It had an air-cooled 385 h.p. A.S. Jaguar engine and a range of 660 miles.

De Havilland DH60 Moth (1925). Biplane. E - 1 x 85 h.p. Cirrus II; W - 1,550 lbs.; P - 1; S - 85 m.p.h.; R - 430 miles; O - John Carberry, Commander Robinson, Rhodesian Aviation Syndicate.

De Havilland DH60G Gipsy Moth (1927). Two-seater biplane.

E - 1 x 100 h.p. Gipsy I or 120 h.p. Gipsy II; W - 1,650-1,750 lbs.; P - 1; S - 83-95 m.p.h.; R - 290-320 miles;

O - National Flying Services, South African Airways, Union Airways, Wilson Airways. An improved version, the DH60G III Moth Major appeared in 1931. Several flown by private operators in Africa.

De Havilland DH60K Moth (1926). E - 1 x 90 h.p. Cirrus III;

W - 1,750 lbs.; P - 1; S - 85 m.p.h.; R - 290 miles;

O - Cobham, R. S. Rattray in the Gold Coast, G. R. Boyd-Carpenter in Nigeria.

De Havilland DH61 Giant Moth (1928). Wooden biplane.

E - 1 x 500 h.p. A.S. Jaguar VIC or 500 h.p. Bristol Jupiter XI; W - 7,000 lbs.; P - 6-10; S - 110 m.p.h.; R - 650 miles.

O - Cobham with 'Youth of Britain' model.

De Havilland DH66 Hercules (1926). Wooden biplane. E - 3 x

420 h.p. Bristol Jupiter VI; W - 15,600 lbs.; P - 7; S - 110 m.p.h.; R - 525 miles; O - Imperial Airways.

De Havilland DH80A Fuss Moth (1929). Wooden cabin monoplane.

E - 1 x 120 h.p. Gipsy III or 130 h.p. Gipsy Major; W - 2,050 lbs.; P - 1; S - 108 m.p.h.; R - 300 miles; O - Christowitz Air Services, Rhodesian Aviation Company, RANA, South African Airways, Union Airways, Wilson Airways, and many private fliers on Cape route.

De Havilland DH83 Fox Moth (1933). Biplane. E - 1 x 120 h.p.

Gipsy III or 130 h.p. Gipsy Major; W - 2,070 lbs.; P - 4;

S - 96 m.p.h.; R - 360 miles; O - Rhodesian Aviation Company, RANA.

De Havilland DH84 Dragon (1932). Biplane. E - 2 x 130 h.p. Gipsy Major; W - 4,200-4,500 lbs.; P - 6; S - 109-114 m.p.h.; R - 460-545 miles; O - Misr Airwork, RANA, Wilson Airways.

De Havilland DH85 Leopard Moth (1933). High wing monoplane. Successor to the Puss Moth. E - 1 x 130 h.p. Gipsy Major; W - 2,225 lbs.; P - 2; S - 119 m.p.h.; R - 715 miles; O - RANA.

De Havilland DH86A Express Airliner (1934). Cabin biplane. E - 4 x 200 h.p. Gipsy Six I; W - 10,250 lbs.; P - 10; S - 145 m.p.h.; R - 764 miles; O - Imperial Airways, Elders Colonial Airways.

De Havilland DH87 Hornet Moth (1934). Biplane. E - 1 x 130 h.p. Gipsy Major; W - 1,950-2,000 lbs.; P - 1; S - 105-111 m.p.h.; R - 620-640 miles. Rare in Africa; one known to have operated in the Sudan; also DETA on Lourenco Marques-Johannesburg service.

De Havilland DH88 Comet (1934). Wooden low wing monoplane. E - 2 x 205 h.p. Gipsy Six series II; W - 5,320 lbs.; P - 1; S - 220 m.p.h.; R - 2,925 miles. Basically a racing plane. One flown through Africa in 1937 by Mrs Kirby-Greene on Cape record flight.

De Havilland DH89A Dragon Rapide (1934). A scaled-down DH86. E - 2 x 200 h.p. Gipsy Six series I; W - 5,500 lbs.; P - 6-8; S - 132 m.p.h.; R - 578 miles; O - RANA, Wilson Airways.

De Havilland DH90 Dragonfly (1935). Cabin biplane. E - 2 x 130 h.p. Gipsy Major; W - 4,000 lbs.; P - 4; S - 125 m.p.h.; R - 625 miles; O - RANA, Wilson Airways.

De Havilland DH91 Albatross (1937). Wooden low wing monoplane. E - 4 x 525 h.p. Gipsy Twelve series I; W - 29,500 (passenger version) or 32,500 (mail version) lbs.; P - 22; S - 210 m.p.h.; R - 1,040 (passenger) or 3,300 (mails) miles; O - Imperial Airways. Carried Christmas mail London-Egypt, 1938. Opened England-Egypt services via Tunis, June, 1940.

Desoutter II (1930). Cabin high wing monoplane. E - 1 x 120 h.p. Gipsy III; W - 1,900 lbs.; P - 2; S - 100 m.p.h.; R - 500 miles; O - Northern Aviation.

Dornier DO J II Wal (1922). Flying boat. E - 2 x 600 h.p. BMW VI; W - 17,637 lbs.; S - 120-140 m.p.h.; R - 1,367 miles; O - Deutches Luft Hansa.

Dornier DO18E (1935). Flying boat. E - 2 x 600 h.p. Jumo 205C; W - 22,046 lbs.; P - 14; S - 140-160 m.p.h.; R - 3541 miles; O - Deutches Luft Hansa.

Fairey IIID (1920). Biplane/seaplane. E - 1 x 360 h.p. Rolls Royce Eagle VIII; W - 3,549 lbs.; P - 1; S - 101 m.p.h.; R - 500 miles; O - North Sea Aerial and General Transport. Basically a R.A.F. aircraft.

Fokker F.VIIA (192?). E - 1 x 480 h.p. Bristol Jupiter; W - 7,936 lbs.; P - 3-4; S - 93 m.p.h.; R - 559 miles. One flown to Cape by the Duchess of Bedford in 1930.

Fokker F.XI Universal (1927). High wing cabin monoplane. E - 1 x 300 h.p. Wright Whirlwind J-6; W - 4,189 lbs.; P - 5; S - 89 m.p.h.; R - 497 miles; O - Union Airways.

Handley Page O/400 (1918). Civil adaptation of military biplane. E - 2 x 360 h.p. Rolls Royce Eagle VIII; W - 12,050 lbs.; S - 97.5 m.p.h.; R - 600-700 miles. Used on first England-Egypt flight by R.A.F. in 1918. On one of the 1920 Cape flight attempts. Possibly this type or the modified version, HF O/11, used by Handley Page South African Transport.

Handley Page HF 42E Hannibal (1929). All metal biplane. E - 4 x 550 h.p. Bristol Jupiter XIF; W - 28,000 lbs.; P - 6-12; S - 100 m.p.h.; R - 300 miles; O - Imperial Airways.

Junkers JU F13 (1919). All metal low wing monoplane produced in numerous variations. E - 1 x 200 h.p. Ju L2; W - 4,078 lbs.; P - 4; S - 87-105 m.p.h.; O - Aero Development, South African Airways, South-West African Airways, Union Airways.

Junkers JU W34 (1926). Development of the F13. E - 1 x 420 h.p. Gnome Rhone Jupiter VI; W - 5,952 lbs.; P - 4; S - 109 m.p.h.; R - 528 miles; O - South-West African Airways, South African Airways, Union Airways.

Junkers JU A50 Junior (c.1925). Low wing monoplane. E - 1 x 80/88 h.p. Armstrong Siddeley Genet; W - 1,330 lbs.; P - 1; S - 87-109 m.p.h.; R - 370 miles; O - South-West African Airways, South African Airways.

Junkers JU 52/3m (1932). All metal low wing cabin monoplane. E - 3 x 600 h.p. Pratt & Whitney Wasp R-1340 or 770 h.p. BMW 132H or 775 h.p. Bristol Pegasus VI; W - 23,150 lbs.; P - 14-17; S - 160 m.p.h.; R - 546 miles; O - South African Airways.

Junkers JU 86 (1934). All metal low wing cabin monoplane. E - 2 x 525 h.p. Pratt & Whitney Hornet; W - 16,975-17,637 lbs.; P - 10; S - 177-223 m.p.h.; R - 683 miles; O - South African Airways.

Klemm L25 (1924). Two seater tandem open cockpit low wing monoplane. E - 1 x 30 h.p. Daimler; W - 1364 lbs.; P - 1; R - 600 miles; S - 65 m.p.h.; O - Africana.

Lockheed Vega (1930). High wing cabin monoplane. E - 1 x 450 h.p. Pratt & Whitney Wasp; W - 4750 lbs.; P - 6; S - 170 m.p.h.; O - Glen Kidston.

Miles M.3 Falcon (1935). Cabin monoplane. E - 1 x 120 h.p. DH Gipsy Major; W - 2200 lbs.; P - 2; S - 125-145 m.p.h.; R - 615 miles; O - Tommy Rose Cape flight, 1936.

Moraine Saulnier (1912). Single-seater French seaplane. E - 1 x 80 or 100 h.p. Gnome; S - 75-80 m.p.h.; Flown by Marc Pourpre on first Nile flight to Khartoum in 1913.

Parnall Heck (1934). Cabin monoplane. E - 1 x 200 DH Gipsy Six; W - 2600 lbs.; P - 1; S - 155 m.p.h.; R - 600 miles; O - Wyndham and Llewellyn Cape flight, 1935.

Percival New Gull (1935). Low wing monoplane racing model. E - 1 x 205 h.p. DH Gipsy Six; W - 2125 lbs.; S - 190-205 m.p.h.; R - 600-800 miles; O - Cape flights, 1936, 1937, 1939.

Percival Vega Gull (1936). Cabin monoplane. E - 1 x 205 h.p. DH Gipsy Six; W - 3250 lbs.; P - 3; S - 150-160 m.p.h.; R - 660 miles; O - Wilson Airways.

Savoia-Marchetti S.73 (1935). Low wing monoplane. E - 3 x 700 h.p. Piaggio Stella 9RC; P - 18; S - 205 m.p.h.; R - 995 miles; O - SABENA, Ala Littoria.

Short Nile Hydro-biplane S.80 (1913). Open cockpit seaplane. E - 1 x 160 h.p. Gnome; W - 3,600 lbs.; P - 3; S - 60 m.p.h.; R - 160 miles; O - Francis Kennedy McClean on first flight of British aircraft on Nile route to Khartoum in 1914.

Short Singapore (1927). All-metal flying boat. E - 2 x 700 h.p. Rolls Royce Condor; W - 20,000 lbs.; S - 120 m.p.h.; R - over 1,000 miles; O - Alan Cobham on 'Round Africa' tour.

Short S.8 Calcutta (1928). Biplane flying boat. E - 3 x 540 h.p. Bristol Jupiter XIF; W - 22,500 lbs.; P - 15; S - 97 m.p.h.; R - 650 miles; O - Imperial Airways.

Short S.17 Kent/Scipio (1931). Flying boat. E - 4 x 540 h.p. Bristol Jupiter XIF; W - 32,000 lbs.; P - 16; S - 105 m.p.h.; R - 450 miles; O - Imperial Airways.

Short Valetta (1931). High-wing monoplane/seaplane. E - 3 x 490-525 h.p. Bristol Jupiter XIF; W - 22,400 lbs.; S - 135 m.p.h.; R - 520 miles; O - Alan Cobham.

Short S.22 Scion Senior (1933). High-wing monoplane. E - 4 x 90 h.p. Pobjoy Niagara III; W - 5,750 lbs.; P - 8; S - 115 m.p.h.; R - 390 miles; O - Elders Colonial Airways.

Short S.23 'C' Class Empire Flying Boat (1936). High-wing monoplane. E - 4 x 920 h.p. Bristol Pegasus XC; W - 40,500 lbs.; P - 24; S - 165 m.p.h.; R - 760 miles; O - Imperial Airways.

Sikorsky S. 43 (1936). Seaplane monoplane. E - 2 x 750 h.p. Pratt & Whitney Hornet; P - 15; S - 194 m.p.h.; R - 800 miles; O - Aéromaritime on West African coastal route.

S.P.C.A. VII Type 40T (1930). High-wing monoplane. E - 3 x 135 h.p. Salmson 9NC; W - 6,715 lbs.; P - 3-4; S - 90 m.p.h.; R - 264 miles; O - Régie Malgache.

Vickers Vimy Commercial (1919). Converted R.A.F. bomber. E - 2 x 720 h.p.; W - 12,500 lbs.; P - 10; S - 85-90 m.p.h.; R - 450 miles; O - The Times and Van Rynveld/Brand Cape flight attempts in 1920.

Westland Wessex (c.1931). Cabin monoplane. E - 3 x 140/149 h.p. Armstrong Siddeley Genet Major; W - 6,000 lbs.; P - 5; S - 100-118 m.p.h.; R - 420 miles; O - RANA.

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APPENDIX IINOTES ON COMMERCIAL AIR TRANSPORT COMPANIES  
WITH REFERENCE TO BRITISH AFRICA, 1911-1939\*

Aerial Stunts. Formed 1919 at Durban by Captain Douglas Mail with one aircraft for joy-ride and taxi work. Ceased operations, 1920.

Aero Development Company. Formed 1931 in England by Messrs. J. I. Cowan, C. H. Bembridge and E. S. Cotterill, the latter representing Walcot Trust Ltd. Operated a short-lived air mail service in Nigeria with one Junkers F13 aircraft. Company dissolved early in 1932.

Aéromaritime. Formed 1935 by the French shipping interests, Compagnie des Chargeurs Réunis. Commenced a Dakar-Pointe Noire coastal service in 1937. After the war, continued as Union Aéromaritime de Transport until absorption by Air Afrique in 1960.

African Air Services. Few details available. Operated for a short period in Kenya in the 1930s, mainly flying training. Closed down in 1936.

African Air Transport Company. No details. Flew in South Africa and Southern Rhodesia in the 1930s.

\* Including Egypt and the Sudan

African Airways Ltd. Company proposed by Major Miller in 1928 to operate a Durban-Johannesburg service with support of Alan Cobham Aviation. Company did not operate.

African Aviation Syndicate. South African company formed in 1911 by Messrs. Guy Livingstone, Compton Paterson and E. F. Driver "to promote the science and practice of aviation in South Africa". Operated from Alexandersfontein. Went into liquidation in 1912.

Africana Ltd. Operated a short-lived taxi and joy-ride service in Kenya in 1928 with Klemm Daimler Aircraft.

A German general trading company.

Air Survey Company Ltd. A British company, after 1929, a subsidiary of Fairey Aviation, with operations mainly in the Far East, but considerable survey work in Africa. Operated a thrice weekly experimental mail service Entebbe-Kisumu in 1932.

Aircraft Operating Company. A British company formed in 1923 essentially for survey work. In 1928-29, proposed establishment of services in West Africa. Attempted to develop services in South Africa, including a Johannesburg-Ndola operation. Actual operations confined to survey work and technical advice.

Aircraft Transport & Travel Ltd. (A. T. & T.). A pioneer British air transport company formed in 1916 by George Holt-Thomas. Negotiated concession to establish Rhodesian services in 1919. Sponsored one aircraft on the 1920 Cape flight attempts. Company ceased operations in 1920.

British Air Navigation Company. British-based company formed in 1932 with plans to operate services in and to West Africa. Company folded in 1934.

British Air Transport Services Ltd. Formed at Salisbury in 1938. With three aircraft, operated local and chartered services.

British Airways Ltd. Private rival to Imperial Airways. Formed in 1939 from several British companies. Plans to operate South American service via West Africa, surveyed route in 1938-39. Absorbed by British Overseas Airways Corporation in 1940.

British Airways Service. Proposed to operate a Johannesburg-Durban service in 1927. No details available.

LEAF 653 OMITTED IN PAGE NUMBERING.

British East African Airways. Formed in Kenya in 1931. Hoped to obtain subsidy to develop local services. Commander L. Mansfield Robinson was the driving force, but the company had the support of Tony Gladstone and the Blackburn interests. As far as can be determined, company did not operate under this title.

Christowits Air Services. First air transport service in Nyasaland founded by G. J. Christowits in 1931. Initiated Blantyre-Salisbury and Blantyre-Beira routes with Moth aircraft. Merged with Rhodesian and Nyasaland Airways in 1934.

British Air Navigation Company. British-based company formed in 1932 with plans to operate services in and to West Africa. Company folded in 1934.

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Christowitz Air Services. First air transport service in Nyasaland founded by C. J. Christowitz in 1931. Initiated Blantyre-Salisbury and Blantyre-Beira routes with Moth aircraft. Merged with Rhodesian and Nyasaland Airways in 1934.

Companhia de Informacao e Trafico Aereo (CITA). Made efforts to establish a Europe-South Africa service in conjunction with French and South African interests in 1930s.

Cobham/Blackburn Airlines. A merger of Alan Cobham Aviation interests in East Africa and the North Sea Aerial and General Transport Company, a subsidiary of the Blackburn Aircraft Company, in 1928. Plans were to establish services along the Cairo-Cape Town route, beginning with a Khartoum-Kisumu service. Merged with Imperial Airways in 1929 to form Imperial Airways (Africa) Ltd. Interests purchased by Imperials in 1930.

Dar es Salaam Airways. Owned by a local trader, one Hasmani, company operated briefly along coast and in Kenya-Tanganyika in 1935-36 with three aircraft. Disappeared in bankruptcy.

De Havilland Company. Primarily manufacturing agents throughout much of British Africa. Air transport interests in Egypt (1923) and South Africa. Active in flying training and air display organization in Rhodesia and South Africa. Operated a charter service in Southern Rhodesia in 1930s until outbreak of war.

Deutches Luft Hansa (D.L.H.). Formed in Germany in 1926 from the Aero Lloyd and Junkers groups. Operated a successful Bathurst-South America service from 1933 to 1939. Had ambitions to extend activities along the west coast and in Egypt.

Divisao de Exploracao dos Transportes Aereos (DETA). Took over flying operations of the Mozambique Railway in 1937. With De Havilland and later Junkers aircraft, commenced a Lourenco Marques-Johannesburg service in 1938. Continues to operate in post-war period in Mozambique.

East African Airways. Skimpy evidence suggests this might be connected with African Air Services or a continuation of British East African Airways. Not to be confused with East African Airways Corporation formed in 1946. Company flew in Kenya in 1930s until 1936, mainly in the mining areas, in competition with Wilson Airways.

East African Trading Company Ltd. Few details available. Pressed East African governments for subsidisation of an Aden-Mombasa route in 1923-24. Never operated.

Elders Colonial Airways. Formed by Elder Dempster Shipping Lines and Imperial Airways in 1935 to operate a Lagos-Accra-Takoradi service. Commenced operations in 1937. Also operated a Bathurst-Freetown weekly service in 1938-39. Company ceased operations in 1940.

Fairey Aviation Ltd. Minimal commercial interests in Africa, but did propose 3 Fairey seaplanes to attempt London-Cape Town Flight in 1919 as possible prelude to air services establishment. Flight not made.

Flights Ltd. Formed in Rhodesia in 1938. Did charter work with three aircraft until the war.

Handley-Page South African Transport Ltd. Formed in the Union in 1919 with high hopes of eventually linking Cape Town and Cairo. Crash on first Cape Town-Johannesburg service dimmed hopes. Company ceased operations in 1923.

Handley Page Transport Limited. British company formed in 1919. Proposed services in Egypt with Italian interests in 1920. Sponsored one of the aircraft on the 1920 Cape flights.

Holman & Davis. No details available. Believed to be a short-lived taxi, charter and training service partnership in South Africa. Believed to be owners of Arrow Air lines operating out of Durban in 1932.

Imperial Air Transport Company. Chartered company proposed by Major-General W. G. Salmond in 1919 to operate services to South Africa from Egypt. Did not operate.

Imperial Airways. Great Britain's 'chosen Instrument', formed in 1924 from existing British companies to monopolize imperial air route development. Operated world-wide services. Established London-Cape Town route in 1932, West African route in 1936. Merged with British Airways in 1940 to form British Overseas Airways Corporation (BOAC).

Imperial Airways (Africa) Ltd. Formed in 1929 to operate the Cairo-Cape Town route, originally in partnership with Cobham/Blackburn Air Lines. Absorbed into British Overseas Airways Corporation (BOAC) in 1940.

Imperial Airways (Gold Coast and Nigeria) Ltd. Another subsidiary company of Imperial Airways organised in 1935 to operate West African services in cooperation with Elders Colonial Airways.

Imperial Airways (South Africa) Ltd. Registered in 1929. Did not operate.

John Weston Aviation Company of South Africa Ltd. Formed at Brandfort in 1911. Mainly joy-ride and air taxi work done.

International Airways Limited. Reportedly, a company formed in 1936 with £450,000 capital and Union government support to operate a bi-weekly Europe-South Africa service through West Africa. Likely associated with the Colonel Jellicoe or the Epstein group.

Junkers Aviation (Junkers Luftverkehr). Formed in Germany in 1921 and party to the formation of D.L.H. in 1926. In Africa, interested in operating services in Egypt and South Africa. Established South-West Africa Airways in 1930. Operated Union Airways jointly with Major Miller from 1932 until take-over by South African Airways in 1934.

Koninklijke Luchtvaart Maatschappij voor Nederland an Kolonien (K.L.M.). Only African operation transit flights through Egypt on Far Eastern route. Pressed for a Holland-South Africa route in 1936 which did not materialise.

Kenya Aviation Company. A short-lived training and taxi service formed by John Carberry in 1927 at Nairobi. Operated one DH 51 aircraft, 'Miss Kenya'.

London & Rhodesian Mining and Land Company (LONRHO).

Operated small air transport operation in Southern Rhodesia with two aircraft. Ceased operations in 1938.

Lupa Airways. Formed at Mbeya in 1933 or 1934. Operated two Avian aircraft for about six months.

Misr Airwork. Formed in Egypt in 1932 by the Misr bank and the British company Airwork. Operations mainly in the Middle East, but commenced local service up the Nile to Aswan in 1936. After war, Misrair became United Arab Airlines in 1948.

Natal Aviation Company. Successor company to Aerial Stunts. Operated a one aircraft operation until 1924.

National Flying Services. British company with widespread aviation interests. Sponsored the 'Guest expedition' to East Africa in 1929 with hopes of introducing services there and in Central and South Africa. Proving flights but no operations carried out.

Nieuport & General Aircraft Company Limited. British aircraft manufacturers. Known to have proposed establishing services in South Africa in 1919 at Cape Town but these did not materialise.

North Sea Aerial & General Transport. A Blackburn subsidiary formed in Great Britain in 1919. With Tony Gladstone as representative in East Africa, attempted to establish air services along Cape route. Merged with Cobham in 1928 and Imperial Airways in 1930.

Northern Aviation Company. Single aircraft operation owned by one Mr. Figof at Ndola in 1930-32. No details available.

Régie Air Afrique (Air Afrique - Régie Alger/Congo). Formed in 1937 by amalgamation of Compagnie Transafricaine d'Aviation, Lignes Aériennes Nord-Africaines, and Régie Malgache. Operated France-Madagascar service through Northern Rhodesia at Broken Hill.

Régie Malgache. (Service de la Navigation Aérienne de Madagascar). Operated weekly service with tri-motor aircraft Tananarive-Broken Hill, 1934-37. International route taken over by Air Afrique, but domestic services developed under the name, Service de l'Aéronautique Civile.

Rhodesian Aerial Tours. Short-lived taxi and charter company formed by Major Miller in 1922 at Bulawayo.

Rhodesian Airways Ltd. Proposed (1932) company to operate in Rhodesias, Nyasaland and Mozambique. Principals were to be Companhia de Mocambique, Manica Trading Company, Imperial Airways, British South Africa Company and Rhodesian Aviation Co. C. R. Alston, Manica manager, most active promoter. Folds with formation of RANA.

Rhodesian Aviation Company. Formed in 1929 at Bulawayo as successor company to the Rhodesian Aviation Syndicate. Principals included F. Issels, G. Cecil Roberts, C. M. Newman, H. L. Stewart, R. Redrup, and Cobham/Blackburn Air Lines. Operated taxi, charter, and scheduled service, Salisbury-Bulawayo-Johannesburg until absorbed in Rhodesian and Nyasaland Airways in 1933.

Rhodesian Aviation Syndicate. Formed in 1927 at Bulawayo by local interests. Large plans but little flying done before succeeded by the Rhodesian Aviation Company.

Rhodesian and Nyasaland Airways. Organised by Imperial Airways, the Beit Trust (on behalf of the Rhodesian Railways), the Rhodesian Aviation Company, and others in 1933. Developed extensive regional network of services in Central Africa until taken over by the government at the beginning of world war II. One of the most successful air transport operations in British Africa.

Ross-Thompson Aircraft Company. C. R. Thompson and C. G. Ross formed company in 1921 at Johannesburg with aircraft purchased from South African Aerial Transports. Mainly a 'barn-storming' operation in the Transvaal, Natal and Southern Rhodesia. Aircraft sold to the Rhodesian Aviation Syndicate in 1927.

Short Bros. Ltd. British aircraft manufacturing company. Provided F. K. McClean's 'hydro-aeroplane' for 1914 flight from Alexandria to Khartoum. Interested in South African services in 1926, but carried out no African operations.

Société Anonyme Belge d'Exploitation de la Navigation Aérienne (SABENA). Formed in 1923 to succeed Syndicat National pour l'Etude des Transports Aériens and Comité d'Etudes pour la navigation Aérienne au Congo, parent companies of Africa's first operating airline, Ligne Aérienne du Roi Albert (LARA). Proposed services to the Sudan (1928 + 1935) and South Africa (after 1935), to link with Belgium-Congo service, did not materialize.

Société de Navigation Aérienne Italo-Egyptienne. Proposed services in Egypt in 1920 and 1923. No other details.

Solomon Brothers. Frank and Shirley Solomon operated small air taxi and joy-ride business at Cape Town in 1919-20.

South African Aerial Navigation Company. Formed in England in 1919 by Major Miller and others. Five AVRO aircraft were purchased to commence local services in South Africa. Merged with South African Aerial Transports in 1919.

South African Aerial Transports Ltd. Formed in 1919 at Johannesburg by A. Francis and W. Honnett. Joy-rides and charter flights were carried out, but scheduled services were not established and the company went into liquidation in late 1920.

South African Airways (S.A.A.). A wholly-owned subsidiary of the South African Railways and Harbours administration, organised in 1934 with the take-over of Union Airways.

Absorbed South-West African Airways in 1935, thus obtaining a monopoly on scheduled services in the Union. By 1939, had developed an extensive network of domestic services, and operated routes as far north as Nairobi, all with Junkers aircraft. Commenced Angola service in 1939. Under Oswald Pirow, planned West African and Congo services, but this expansion did not come about until after the war. Africa's largest airline.

South African Airways Ltd. Few details available. Planned to develop services in the Union beginning with a Cape Town-Pretoria operation in the early 1920's.

South-West African Airways. Formed by Junkers Flugzeugwerk Aktiengesellschaft in late 1930 to provide feeder services, Windhoek-Kimberley, to the Imperial Airways Cairo-Cape Town route. Taken over by South African Airways in 1935.

Spartan Air Lines Limited. A British Company formed by Whitehall Securities in 1933. Proposed trans-Saharan services to West Africa. Merged with others to become British Airways in 1935.

Spencer's Air Service. Principally a joy-ride and game park charter operation established in 1935 by E. H. Spencer. Operated until the war.

Syndicat des Transports Aériens du Katanga. Formed by the Aero Club du Katanga to operate a feeder service from Elizabethville to Broken Hill in early 1930s. In 1936, service taken over by the Air Afrique/SABENA trans-Africa operation.

Tanganyika Government Air Services. Although essentially a survey service, carried out air transport services for government officials. Thus, while not a 'commercial' company as such, its work merits inclusion. Formed in 1930 with 6 aircraft, maintained two after 1933 until the war.

Union Airways Ltd. The first operating air line in South Africa formed by Major Miller in 1929. Based at Port Elizabeth, it operated routes to Cape Town, Durban and Johannesburg. In 1932, Junkers obtained an interest in the company. Taken over by South African Airways in 1934.

Vickers Ltd. British aircraft manufacturing company and part-sponsor of one of the 1920 Cape flight attempts. Made proposals to establish air transport services in Egypt, Gold Coast and South Africa, none of which were developed.

West Africa Air Line. Few details available but reportedly connected with Spartan Air Lines to develop local services in Nigeria and the Gold Coast 1933-35. Did not operate.

West African Airways Ltd. Company proposed by J. I. Cowan and C. H. Bembridge, principals in the defunct Aero Development Corporation, to organise six routes in West Africa, including a Kano-Khartoum service. Without capital, the proposal died in 1932. Company not to be confused with West African Airways Corporation, formed in 1946.

West Coast Air Mails Ltd. A subsidiary of Walford Lines Ltd., formed in 1933 to operate services in the Gold Coast and Nigeria in cooperation with French trans-Saharan services. Company did not operate.

Wilson Airways. Founded in 1929 by Mrs. Flora Wilson in Kenya. Imperial Airways obtained an interest in the company in the early 1930s. Operated with DH aircraft a well-developed network of East African services, and as far south as Lusaka. Operations ceased with world war II, company succeeded by East African Airways Corporation in 1946.

This is by no means a definitive listing of all the commercial air interests in British Africa during the period. Many other individuals and groups proposed services, or owned aircraft with ambitions to move into the air transport field. Egypt, South Africa, and Europe-South African services across the Sahara attracted the most attention. In 1921, Luigi Sanda of Cairo wanted to bring in aeroplanes to Egypt. M. de Meck, on behalf of a Russian refugee group, asked for a 50 year concession and subsidies from the Egyptian government to develop domestic and international air services. M. Paullac (1922) and G. Joiris (1923) sought Egyptian concessions. In South Africa, a host of major and minor concerns, including General Motors, Atlantic Refining, Armstrong Siddeley, and the British South Africa Company, expressed interest or worked through local agents to promote air transport services. From 1930 onwards, the trans-Saharan route to West and South Africa invited a variety of proposals, including those from Messrs. Thwaites, Jellicoe and partners; Dr. Cullen, Messrs. Hutchison, Remnant, and Sir John Pakeman; and Messrs. Epstein, Jellicoe, Chamberlain and Falk.

The sources for this listing are various. Most of the proposals and companies appear in the AIR and AVIA 2 series, some in CO and FO 371 series. Details range from mere mention to comprehensive assessment. The more successful operations may be found in Davies, A History of the World's Air Lines, and some details are provided in Stroud, Annals of British



B I B L I O G R A P H YNote

It is not the intention here to set out an annotated bibliography of sources pertaining to air transport and British Africa in the period 1919-1939. For one reason, such a large and detailed task lies quite outside the parameters of time and space in thesis preparation and presentation. As will be noted below, this dissertation is based upon a wide variety of primary and secondary sources of mixed quality and utility. While the vast bulk of this material is drawn from British and British African sources, there are many listings calling upon non-aviation material, references are made to other than African themes, and, in a few cases, non-British sources are cited. All this means that the assembling of research material has been a major task in itself. Certainly the listing calls for at least some editorial comment and this has been provided in a few instances referring to primary sources, while fuller comments can be found in the footnotes throughout the text. Secondly, because a comprehensive and fully annotated bibliography is needed and long overdue in this area of history, such is being provided in my Aviation and Africa: Selected Sources. Volume I, 1919-1939 (in preparation, 1974). Scholars interested in more than a mere listing of sources should find this to be a valuable research tool and, as far as it has been possible to

make it so, a definitive catalogue of British and African aviation research material.

While the above comments explain in part the approach taken to the setting out of this bibliography, it must be pointed out as well that what follows is not a typical listing of selected references of a kind usually noted in graduate dissertations. The view has been taken here that a thesis bibliography should be something more than an indicator of sources found especially useful to the writer. It should be, in definition and in fact, a reliable guide to all the sources known and available in manuscript and published form. Thus, although this bibliography is quiet on the matter of which sources proved to be most useful whereas a "selected references" listing makes the importance of sources quite clear, a full bibliographic listing does provide a more accurate index of the range and quality of the research. In addition, as mentioned earlier, fully documented and explanatory footnotes do accompany the text throughout, and this provision is more than adequate substitution for bibliographic annotations, and is clearly an indication of the importance and utility of various sources. In short, the aim of this bibliography is to indicate to the scholar and student the rich variety of research materials dealing directly and peripherally with the dissertation theme, and at the same time to act as a departure point for subsequent research and study.

A few more general comments about the approach to and organisation of the bibliography should be sufficient to conclude this brief note. The bibliography is divided basically into two parts, the first containing primary sources, the second, secondary sources. The first part is further sub-divided into manuscript and printed matter sections, with further breakdowns of these sections determined by types of sources --- Government Documents, Other Official Documents, Newspapers and Periodicals, Books, Pamphlets and Miscellaneous Publications, and Articles. In the case of Public Record Office (PRO) documents, they have been summarized by series (e.g., AVIA 2. Civil Aviation Files, 1919-1941) in preference to identifying individual items by title. Full document titles will be found in the footnotes. Elsewhere, all British and other Government documents have been entered under the name of the issuing authority (Colonial Office, Foreign Office....) where known. The listing of Newspapers and Periodicals is long and varied in usefulness. The most important entries are the Aeroplane, Flight, the Journal of the Royal Aeronautical Society, and The Times, but all listed have been researched and all have provided either information or interpretation for the thesis. It must be noted that in some cases present-day publications are included as primary sources. The criterion determining these cases is their content; modern periodicals containing reminiscent accounts of pre-war Africa and aviation are primary sources, those

containing historical accounts are secondary. In both parts of the bibliography, the sections titled, Books, Pamphlets and Miscellaneous Publications, have been further sub-divided into categories determined by content; (a) Africa, (b) Aviation, Communications and Transportation, and (c) Great Britain, Empire and Commonwealth. This is a convenient division although here, as in the case of the periodicals, some arbitrary classifications had to be made. Books dealing with more than one of the broad categories listed above have been assigned to the grouping which best suggests their major contribution.

The secondary sources are listed in much the same way as the primary sources. In the section titled, Theses and other Unpublished Papers, all papers of this kind have been grouped together regardless of the dates of their origin, again a matter of convenience rather than scholarship. There is also a listing of bibliographic aids which have been most useful in the compilation of this bibliography and in indicating lines of inquiry.

In a listing of this complexity and size, there is always the possibility of errors appearing, errors of omission and commission, although hopefully such will be few and minor. I accept full responsibility for mistakes and welcome correction and criticism from any source.

## BIBLIOGRAPHY

PRIMARY SOURCESA. Manuscript

1. British Government Papers in the Public Record Office, London, England.

(a) Air Ministry

- AIR 1. Air Historical Branch Records, 1917-1939. Series I.
- AIR 2. Correspondence, 1919-1939.
- AIR 5. Air Historical Branch Records, 1917-1939. Series II.
- AIR 19. Private Office Papers, 1917-1939.
- AIR 20. Unregistered Papers, 1917-1939.
- AVIA 2. Civil Aviation Files, 1919-1941. This series contains the bulk of the correspondence and papers relating to civil aviation development and is the most important single source of unpublished material for the thesis. In all, 163 files were researched, of which 110 refer specifically to the African experience.

(b) Cabinet

- CAB 23. Summaries of Cabinet Meetings, 1923-1937.
- CAB 24. Cabinet Papers (C.P. series), 1919-1939.
- CAB 27. Reports, Proceedings and Memoranda of Cabinet Committees, 1924-1938.
- CAB 32. Reports, Proceedings and Memoranda of Imperial Conference Committees, 1923-1937.

CAB 35. Report by the Committee of Imperial Defence (C.I.D.) on the Scheme submitted by Imperial and International Communications, Ltd., for the External Communications of the Colonies, Dependencies and Protectorates, 1929.

(c) Colonial Office

The various Africa CO series have not been exhaustively researched, their use dictated for the most part by gaps in the AIR and AVIA 2 series. In this respect, the Registers of Correspondence are indispensable aids. Where material is duplicated in the CO and civil aviation files, reference is generally made to the latter source in the footnotes.

- CO 87. The Gambia. Original Correspondence, 1918-1939.
- CO 96. Gold Coast. Original Correspondence, 1918-1939.
- CO 267. Sierra Leone. Original Correspondence, 1918-1939.
- CO 270. Sierra Leone. Sessional Paper No. 3, 1939. Correspondence with the Sierra Leone Chamber of Commerce regarding the Air Mail service, Freetown-Bathurst.
- CO 525. Nyasaland. Original Correspondence, 1918-1939.
- CO 533. Kenya. Original Correspondence, 1918-1939.
- CO 536. Uganda. Original Correspondence, 1918-1939.
- CO 554. Africa West. Original Correspondence, 1918-1939.
- CO 583. Nigeria. Original Correspondence, 1918-1939.
- CO 691. Tanganyika. Original Correspondence, 1918-1939.
- CO 767. Southern Rhodesia. Original Correspondence, 1923-1925.

- CO 795. Northern Rhodesia. Original Correspondence, 1924-1939.
- CO 822. Africa East. Original Correspondence, 1927-1939.
- CO 847. Africa. Original Correspondence, 1932-1939.

(d) Dominions Office

- DO 63. Southern Rhodesia. Original Correspondence, 1926-1929.
- DO 114/57. Dominions No. 150. Aviation: Correspondence and Papers, 1934-1936.

(e) Foreign Office

- FO 371. General Correspondence, 1920-1939. This series is most useful as a complement to material in the AVIA 2 series. Especially helpful in interpreting developments related to civil aviation in Egypt, the Sudan, Ethiopia, and in elaborating the negotiations with France, Belgium, Italy and Portugal on air matters.

(f) Prime Minister's Office

- PREMIER 1/ 51. Committee of Imperial Defence. Aircraft Production, 1925.
- 1/147. Parliamentary Air Committee. Civil Aviation, 1934.
- 1/148. Civil Aviation, 1934. Announcement of Empire Air Mail Scheme.
- 1/246. Civil Aviation, 1938. Chairmanship of Imperial Airways.
- 1/289. South Africa, 1938. Question of Mr. Pirow's Visit to the United Kingdom and the Return of Colonies to Germany.

2. Air Ministry (Department of Civil Aviation) Reports and Papers in the Civil Aviation Library and Archives (Board of Trade), London, England.
  - (a) Unpublished Reports on Air Transport Surveys in Africa, 1926-1941. Archives contain most of the flights of survey reports made by Cobham and others, including the Air Ministry and Imperial Airways.
  - (b) Minutes, Memoranda and Reports of the Inter-departmental Committee on International Air Communications (Sir Warren Fisher Committee), 1935-1939. A most important collection of papers, especially for West African and South Atlantic developments.
  
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  - (a) Imperial Airways Ltd. Correspondence, memoranda and reports on air services and routes in Africa, 1924-1940.
  - (b) Imperial Airways (Africa) Ltd. Company matters, 1930-1939.
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  - (d) Cobham/Blackburn Airlines, Ltd. Company matters, 1928-1933.
  - (e) Elders Colonial Airways, Ltd. Company matters, 1935-1939.
  - (f) Rhodesian Aviation Company, Ltd. Company matters, 1930-1932.
  - (g) Rhodesian and Nyasaland Airways, Ltd. Company matters, 1933-1939.
  - (h) South African Airways, Ltd. Papers on civil aviation in South Africa, 1930-1940, and company matters, 1938-1953.
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  - (a) Air Service in the Gold Coast: Proposals (Alan Cobham Aviation, Ltd.). Accession No. 3182/58.
  - (b) Royal Air Force - Visit to the Gold Coast, 1929. Accession No. 3197/58.
  - (c) Squadron Leader Woods' Report on Possibilities of Aviation in the Gold Coast Colony, Ashanti and Northern Territories. M.P. 17215/20. Accession No. 2548/58.
  - (d) Aeroplanes - Employment of in the Colony. Vickers, Ltd. correspondence. M.P. 17073/18. Accession No. 2548/58.
  - (e) Visits of Aircraft (other than R.A.F.) to the Gold Coast, 30/9/30 - 18/7/39. Gold Coast C.S.O. 1758/30.
  
5. Selected Documents in the National Archives of Rhodesia, Salisbury, Rhodesia.
  - (a) Federation of Rhodesia and Nyasaland. Ministry of Posts. Memorandum on 30 Years of Air Mail Service. Typescript, September, 1961.
  - (b) Southern Rhodesia. Department of Civil Aviation. Annual Reports, 1930-1938. (Only 1938 published; reports variously titled). S.R.G. 3.
  
6. Selected unpublished papers and reports (Official and Company); and reports of limited circulation.
  - (a) Beit Railway Trust. "Report on Aviation Facilities in Northern and Southern Rhodesia with Special Reference to the Grant, 1933-34". 1933.
  - (b) British Airways Ltd. "Operational Survey Flight Heston-Bathurst-Heston, 28/12/38 - 11/1/39". 1939.  
"Report on South America Section and the whole Route England-South America". November 15, 1938.

- (c) B.O.A.C. "Air Transport Summary, West Africa". 1948.  
 "Civil Aviation Development, West Africa". 1940.  
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 "Report of the Committee appointed by the Resident Minister, West Africa, 1943-1944. April, 1944.  
 "Report on Survey Flight, Khartoum-Aden". June, 1941.
- (d) Canada. "Inter-Imperial Communications". Secret Report prepared for the Imperial Economic Conference, 1932.
- (e) Cross, B.C.H. (Air Ministry). "Air Transport Report on the Gambia". February, 1946.  
 "Air Transport Report on the Gold Coast". January, 1946.  
 "Air Transport Report on Sierra Leone". February, 1946.
- (f) Shell Company of Egypt, Ltd. "Mr. W. K. Brett's Report on West African Tour, June, 1936".

## B. Printed Matter

### 1. Government Documents (Africa)

- (a) East African Governors' Conference. Report of the Committee Appointed to Prepare a Scheme for Post-War Air Services in East Africa. Nairobi, 1943.
- (b) Gambia. Blue Books, 1928-1938. Bathurst, 1929-1939.
- (c) Gold Coast. Blue Books, 1934-1939. Accra, 1935-1940.  
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- (d) Kenya. Blue Books, 1926-1938. Nairobi, 1927-1939.  
Report of a Committee Appointed to Investigate and Consider the Desirability of Co-ordinating all Forms of Transport in the Colony. Nairobi, 1936.  
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- (e) Nigeria. Air Transport Report on Nigeria. Lagos, 1946.  
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The Present Position in Regard to Aviation Organisation. Lagos, 1947.
- (f) Northern Rhodesia. Blue Books, 1928-1938. Livingstone and Lusaka, 1929-1939.
- (g) Nyasaland. Blue Books, 1930-1938. Zomba, 1931-1939.
- (h) Sierra Leone. Blue Books, 1931-1937. Freetown, 1932-1938.
- (i) Southern Rhodesia. Legislative Assembly. Votes and Proceedings. Agreement between the Government of the Colony of Southern Rhodesia and Rhodesian and Nyasaland Airways, Ltd., April 21, 1938. Salisbury, 1938.  
Official Year Book of the Colony of Southern Rhodesia. No. 3. Salisbury, 1932.  
Report on the Progress of Civil Aviation for the Year 1938. Salisbury, 1939.  
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- (j) Tanganyika. Agreement between Tanganyika Government and Wilson Airways, Limited. Dar es Salaam, August, 1933.
- Blue Books, 1925-1938. Dar es Salaam, 1926-1939.
- Department of Civil Aviation. The Air Pilot of Tanganyika Territory. Dar es Salaam, 1937.
- Report of the Central Development Committee. Dar es Salaam, 1940.
- Report of the Committee Appointed to Inquire into the Question of Competition between Road Transport and Railways and the Possibility of Co-ordinating the various Forms of Transport in the Tanganyika Territory. Dar es Salaam, 1937.
- (k) Uganda. Blue Books, 1929-1938. Entebbe, 1930-1939.
- Report on Civil Aviation in the Uganda Protectorate. Entebbe, 1936.
- (l) Union of South Africa. The Air Pilot of the Union of South Africa and South-West Africa. 1st ed. and supplements. Pretoria, 1937.
- Department of Railways and Harbours. Annual Reports, 1920-1940. Pretoria.
- Office of Census and Statistics. Official Year Book of the Union of South Africa, and of Basutoland, Bechuanaland Protectorate and Swaziland. Pretoria, annual, 1921-1940.
- Record of Proceedings of the Southern Africa Transport Conference, 1936. Pretoria, 1937.
- Reports presented by the Government of the Union of South Africa to the Council of the League of Nations concerning the Administration of South West Africa for the Years 1931, 1935, 1938. Pretoria, 1931, 1935, 1938.

2. Government Documents (Great Britain)

Parliamentary Papers and other published materials are listed under the headings of the British Government Ministry or Department responsible for their promulgation.

(a) Aeronautics

Reports of the Advisory Committee for Aeronautics for the Years 1916-1920. Issued as Command Papers: Cds. 8629 (1917), 9145 (1918), Cmds. 488 (1920), 1120 (1921).

Report of the Aeronautical Research Committee, 1920-21.

(b) Air Ministry

Some 110 Reports, Statements and other papers pertinent to civil aviation matters in the United Kingdom and the Empire/Commonwealth were published as Command Papers in the period 1918-1939. A complete listing in chronological order may be found in Robin Higham, Britain's Imperial Air Routes, 1918-1939 (London, 1961), pp. 369-80, and need not be repeated in entirety here. Only those Command Papers which have special reference to the thesis or to British Africa are noted, as well as other non-Parliamentary publications sponsored by the Air Ministry. Specific reference to omitted Command Papers, such as the Annual Reports on the Progress of Civil Aviation (issued as Command Papers until 1927) and the Memoranda by the Secretary of State for Air to Accompany the Air Estimates (annual), can be found in the footnotes.

(i) Command Papers

Reports of the Civil Aerial Transport Committee. Cd. 9218 (1918).

Advisory Committee on Civil Aviation.  
Report on Imperial Air Routes. Cmd. 449 (1919).

Civil Air Transport Subsidies Committee.  
Report on Government Financial Assistance to Civil Air Transport Companies. Cmd. 1811 (1923).

Agreement made with the British, Foreign, and Colonial Corporation, Ltd., providing for the Formation of a Heavier-than-Air Transport Company to be called the Imperial Air Transport Company, Ltd. Cmd. 2010 (1923).

Agreement made with Imperial Airways, Limited, for the Establishment of a Civil Air Transport Service between Egypt and India. Cmd. 2758 (1926).

Air Subsidies to Civil Air Services. Cmd. 3143 (1928).

Note by the Secretary of State for Air on the Principal Provisions to be Embodied in a Contract with Imperial Airways, Limited, for a Weekly Air Service between Cairo, Egypt, and Cape Town.... Cmd. 3696 (1930).

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Civil Air Transport Services. Cmd. 5770 (1938).

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(ii) Non-Parliamentary Publications. (All H.M.S.O.).

The Air Ministry and its Organisation. AP 1399. 2nd. ed. London, 1937.

The Approach towards a System of Imperial Communications. London, 1926.

The Civil Aviation Communications Handbook. AP 1692. London, 1939.

Medical Notes and First-Aid Treatment for Detached Personnel in the Tropics and Sub-Tropics. AP 1486. 3rd. ed. London, 1937.

Merchant Airmen. The Air Ministry Account of British Civil Aviation, 1939-1945. London, 1946.

Pilot's Handbook of Air Routes: Cairo to Cape Town Air Route. London, 1928.

Résumé of Commercial Aviation. London, 1938.

Résumé of Commercial Information. Special Issue No. 3/1937. List of British Record and Civil Long Distance Flights, 1919-1936. London, 1937.

A Short History of the Royal Air Force. AP 125. Rev. ed.

Strip Map of the Route to Cape Town. London, 1930.

Department of Civil Aviation. Civil Aviation Statistical and Technical Review for 1937 and 1938. London, 1938, 1939.

----- Reports on the Progress of Civil Aviation. Annual. London, 1927-1938.

----- Report on the Progress of Civil Aviation, 1939-1945. London, 1946.

(c) Air Ministry and General Post Office

Five major papers were promulgated jointly by the A.M. and the GPO as Command Papers under the general title, Empire Air Mail Scheme, related to agreements between the A.M., the GPO and Imperial Airways for Empire Services: Cnds. 5414 (1937), 5497 (1937), 5501 (1937), 5616 (1937), 5769 (1938).

(d) Board of Trade

Industry and Trade Committee. Memorandum on Transport Development and Cotton Growing in East Africa. Cmd. 2463 (1925).

(e) Cabinet

Report of the Board of Inquiry Appointed by the Prime Minister to Investigate certain Discussions Engaged in by the Permanent Secretary to the Air Ministry. Cmd. 5254 (1936).

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(f) Colonial OfficeAnnual Reports for the Colonies and Protectorates:

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 Basutoland, 1919/20-1938.  
 Bechuanaland, 1919/20-1938.  
 Cameroons, 1922-1938.  
 Gambia, 1918-1938.  
 Gold Coast, 1918-1938/39.  
 Kenya, 1918/19-1938.  
 Nigeria, 1918-1938.  
 Northern Rhodesia, 1924/25-1938.  
 Nyasaland, 1918/19-1938.  
 Sierra Leone, 1918-1938.  
 Somaliland, 1918/19-1938.  
 Swaziland, 1918/19-1938.  
 Tanganyika, 1922-1938.  
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 4079 (1932), 4316 (1933), 4634 (1934),  
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 5789 (1938), 6062 (1939), 6298 (1941).

The Colonial Empire. Statements to Accompany  
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 Services, 1938, 1939. Cmds. 5760 (1938),  
 6023 (1939).

The Colonial Empire, 1939-1947. Cmd. 7167 (1947).

Colonial Office Conference, 1927. Summary of  
 Proceedings, Cmd. 2883 (1927), and Appendices,  
 Cmd. 2884 (1927).

Colonial Office Conference, 1930. Summary of  
 Proceedings, Cmd. 3268 (1930), and Appendices,  
 Cmd. 3629 (1930).

Correspondence (1931-1932) Arising from the  
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Despatch from the Secretary of State for the  
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 126 (1937), 179 (1938), 179 (1940).

Education Policy in British Tropical Africa.  
 Cmd. 2374 (1925).

Future Policy in regard to Eastern Africa.  
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Memorandum. Indians in Kenya. Cmd. 1922 (1923).

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Report by Sir Sydney Armitage-Smith on a Financial Mission to Tanganyika. Cmd. 4182 (1932).

Report of the Commission on Closer Union of the Dependencies in Eastern and Central Africa.  
Cmd. 3234 (1929).

Report of the Commission Appointed to Enquire into the Financial and Economic Position of Northern Rhodesia. Colonial No. 145 (1938).

Report of the Commission Appointed to Enquire into the Financial Position and Further Development of Nyasaland. Colonial No. 152 (1938).

Report of the Commission Appointed to Consider and Report on the Financial Position and Policy of the Zanzibar Government in Relation to its Economic Resources. 1932.

Report of the East Africa Commission. Cmd. 2387 (1925).

Report of the East African Guaranteed Loan Committee. Cmd. 2701 (1926).

Report by the Hon. W.G.A. Ormsby-Gore on his Visit to West Africa during the year 1926.  
Cmd. 2744 (1926).

Report of Sir Samuel Wilson on his Visit to East Africa, 1929. Cmd. 3378 (1929).

Statement of Policy on Colonial Development and Welfare. Cmd. 6175 (1940).

Statement of the Secretary of State for the Colonies to Accompany the Estimates for Colonial and Middle Eastern Services. Cmds. 2704 (1926), 2906 (1927), 3149 (1928).

(g) Committee on National Expenditure

Reports. Cmds. 1581 (1922), 1589 (1922), 3920 (1931).

(h) Dominions Office

Imperial Economic Conference, 1932. Summary of Proceedings, Cmd. 4174 (1932), and Appendices, Cmd. 4175 (1932).

Report of the Commission Appointed by the Secretary of State for Dominions Affairs on the Financial and Economic Position of the Bechuanaland Protectorate. Cmd. 4368 (1933).

Report of the Oversea Settlement Committee for the Year Ended 31st December, 1927. Cmd. 3088 (1928).

(i) Foreign Office

A complete listing of the Treaties, Agreements and Conventions related to Air Transport sponsored by the Foreign Office from 1919-1939 may be found in Higham, Britain's Imperial Air Routes, pp. 369-80. All were issued as Command Papers.

Annual Reports on the Finances, Administration and Condition of the Sudan. Cmds. 2281 (1924), 2544 (1925), 2742 (1926), 2991 (1927), 3284 (1928), 3403 (1929), 3697 (1930), 3935 (1931), 4159 (1932), 4387 (1933), 4668 (1934), 5019 (1935), 5281 (1936), 5575 (1937), 5895 (1938), 6139 (1939).

Convention for the Regulation of Aerial Navigation. Treaty Series No. 2 (1922). Cmd. 1609 (1922).

Documents of Identity for Aircraft Personnel. Treaty Series No. 24 (1931). Cmd. 3855 (1931).

United States of America and Union of South Africa: Certificates of Airworthiness for Aircraft. Treaty Series No. 18 (1932). Cmd. 4111 (1932).

United States of America and the Union of South Africa. Issue of Licences to Pilot Civil Aircraft. Treaty Series No. 15 (1934). Cmd. 4603 (1934).

Exchange of Notes between the Governments of the Union of South Africa and the United States of America Regarding Air Navigation. Treaty Series No. 16 (1934). Cmd. 4604 (1934).

Exchange of Notes between His Majesty's Government in the United Kingdom and the Portuguese Government Regarding the Operation of Air Services over Africa. Treaty Series No. 41. Cmd. 5047 (1935).

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Agreement between His Majesty's Government in the Union of South Africa and the Government of the German Reich Regarding the Reciprocal Recognition of Efficiency Certificates for Aircraft and Aircraft Motors. Treaty Series No. 23 (1938). Cmd. 5705 (1938).

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- (j) General Post Office  
The Post Office. London, 1934.
- (k) Meteorological Office  
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- (m) Ministry of Information  
An Outline of British Pioneering in Civil Air Transport. London, 1945.
- (n) Ministry of Reconstruction  
The Future of Aerial Transport. London, 1919.
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General Information as to Kenya Colony and Protectorate. Rev. ed. London, 1924.
- (p) Parliament  
(i) Debates  
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Parliamentary Debates (House of Lords), 5th. series, vols. XXIX - CXIV (1918-1939). Cited as Hansard (H.L.), vol. no., date, column.

(ii) Legislation

Aerial Navigation Act, 1911. 1 & 2 Geo. 5, ch. 4.

Air Navigation Act, 1913. 2 & 3 Geo. 5, ch. 22.

Air Navigation Act, 1919. 9 & 10 Geo. 5, ch. 3.

Air Navigation Act, 1920. 10 & 11 Geo. 5, ch. 80.

Palestine and East Africa Loans Act, 1926. 16 & 17 Geo. 5, ch. 62.

Colonial Development Act, 1929. 20 & 21 Geo. 5, ch. 5.

Air Transport (Subsidies Agreement) Act, 1930. 20 & 21 Geo. 5, ch. 30.

Carriage by Air Act, 1932. 22 & 23 Geo. 5, ch. 36.

Air Navigation Act, 1936. 26 Geo. 5 & 1 Edw. 8, ch. 44.

Air Navigation (Financial Provisions) Act, 1938. 1 & 2 Geo. 6, ch. 33.

British Overseas Airways Act, 1939. 2 & 3 Geo. 6, ch. 61.

Ships and Aircraft (Transfer Restrictions) Act, 1939. 2 & 3 Geo. 6, ch. 70.

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(iii) Parliamentary Papers

Joint Committee on Closer Union in East Africa. 3 vols. H.C. 156, 1931.

Special Report from the Select Committee on the British Overseas Airways Bill. H.C. 161, 1939.

(q) Treasury

Memorandum on the Measures Proposed by His Majesty's Government to Secure Reductions in National Expenditure. Cmd. 3952 (1931).

(r) War Office

Statistics of the Military Effort of the British Empire during the Great War, 1914-1920. London, 1922.

(s) Imperial Conferences

Conference of Prime Ministers and Representatives of the United Kingdom, the Dominions, and India, June-August, 1921. Summary of Proceedings and Documents. Cmd. 1474 (1921).

Imperial Conference, 1923. Summary of Proceedings, Cmd. 1987 (1923), and Appendices, Cmd. 1988(1923).

Imperial Economic Conference, 1923. Record of Proceedings and Documents, Cmd. 2009 (1923), and Summary, Cmd. 1990 (1923).

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Imperial Conference, 1937. Summary of Proceedings, Cmd. 5482 (1937).

3. Other Official Documents

(a) League of Nations. Convention Relating to the Regulation of Aerial Navigation signed at Paris, October 13, 1919, with Additional Protocol signed at Paris, May 1, 1920. No. 297. Treaty Series. Vol. XI. Lausanne, 1922.

(b) Malaya. A Report on Civil Aviation. Report by R. L. Nunn for the Government of Malaya on Civil Aviation Development in Africa and elsewhere. Singapore, 1935.

4. Newspapers and Periodicals

Because of the broad nature of the thesis, reference has been made to a wide range of newspaper and periodical literature as the list below will indicate. For editorial comment, see the bibliographic essay heading this section of the thesis. Additional journals are listed under secondary sources.

Aeronautical Journal  
Aeronautical World News  
Aeronautics  
L'Aéronautique  
Aeroplane  
African Observer  
African World  
L'Afrique Française  
Air  
Air Review  
Aircraft  
Aircraft Engineering

Airways  
Asiatic Review  
Atlantic Monthly  
Blackwood's Magazine  
British Empire Review  
British Survey  
Bulawayo Chronicle  
Bulletin de Renseignements de la CINA  
Cambridge University Colonial Services Club Magazine  
Cape Argus  
Cape Times  
Chambers' Journal  
Congo  
Crown Colonist  
Daily Mail  
Daily Telegraph  
De Havilland Gazette  
Discovery  
East Africa and Rhodesia  
East African Aviation  
East African Standard  
Eastern Province Herald  
Economic Journal  
Economist  
Edinburgh Review  
Elder Dempster Magazine  
Empire Mail  
Empire Review  
Engineer  
Engineering and Mining Journal  
English Review  
Evening News  
Flight  
The Fly Paper  
Foreign Affairs  
Fortnightly Review  
Gambia Echo  
Geographical Journal  
Geographical Review  
La Géographie  
Geography  
Gold Coast Independent  
Gold Coast Review  
The Graphic  
Great Britain and the East  
L'Illustration  
Imperial Airways Monthly Bulletin  
Imperial Airways Monthly Gazette  
Imperial Airways Staff News  
Imperial Airways Weekly Aviation News Bulletin  
Intava World  
International Affairs Journal

Journal of the Institute of Petroleum Technologists  
Journal of the Institute of Transport  
Journal of the Royal Aeronautical Society  
Journal of the Royal African Society  
Journal of the Royal Society of Arts  
Journal of the Royal United Services Institution  
Listener  
Living Age  
Livingstone Mail  
London Illustrated News  
Mine and Quarry Engineering  
Modern Transport  
Morning Post  
Nation  
National Geographic Magazine  
Natural History  
Nature  
Near East and India  
New Rhodesia  
New Statesman  
New York Times  
News Chronicle  
Nigeria Daily Times  
Nineteenth Century and After  
Outlook  
Overseas  
Quarterly Review  
Rafters on Safari  
Rand Daily Mail  
Revue Générale des Transports par Air, Eau, Terre  
Revue de Paris  
Revue Politique et Littéraire  
Revue Scientifique  
Rhodesia Herald  
Rhodesia Weekly Review  
Round Table  
Royal Aero Club Gazette  
Royal Air Force and Civil Aviation Record  
Royal Air Force Quarterly  
Saturday Review  
Scottish Geographical Magazine  
Scottish Geographical Review  
Shell Aviation News  
Shell Magazine  
Sierra Leone Weekly News  
Société Géographique Alger  
South African Aviation News  
South African Engineering  
South African Journal of Industries  
South African Railway News  
South African Railways and Harbours Employees' Review  
South African Shell Chronicle

Southern Rhodesia, 1890-1950  
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Sudan Daily Herald  
Sudan Railways Bulletin  
Sunday Express  
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Tanganyika Notes and Records  
Tanganyika Standard  
Tanganyika Times  
The Times  
Uganda Herald  
United Empire  
West Africa  
West African Review  
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Yale Review

5. Books, Pamphlets, Miscellaneous Publications

(a) Africa

- Buchan, John. The History of the South African Forces in France. London, 1920 [?].  
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 Cameron, Sir Donald. My Tanganyika Service and some Nigeria. London, 1939.  
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Air Affairs  
Air Pictorial  
BOAC Air News  
Business History Review  
Commonwealth Journal  
Contact  
Corona  
Holiday and Travel  
Horizon  
ICAO Monthly Bulletin  
Illustrated Life Rhodesia  
L'Information Géographique  
Journal of Air Law and Commerce  
Journal of Contemporary History  
Journal of the Society of Licensed Aircraft Engineers  
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