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DEVELOPMENT OF INTERNATIONAL AIR PASSENGER TRAVEL — AFRICA

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FOREWORD

Terms of reference

1. This study of measures to further the development of international air passenger travel to, from and within Africa has been undertaken in response to a resolution[1] adopted by the Assembly of the International Civil Aviation Organization at its Fifteenth Session in July 1965. The basis for this Assembly action was a general recognition, first of the importance, particularly for developing States, of an accelerated expansion of air transport; second that this largely depends on the development of the air passenger market; third of the dependence of such accelerated development on the growth of tourism[2]; and fourth of the benefit that States would derive from studies designed to further this development. With this broad objective, the Assembly agreed that during the period 1966 to 1968 a series of such studies should be undertaken with priority given to the developing regions, in the first instance the region of Africa.

2. Matters listed by the Assembly as requiring consideration in these studies were:

a) the relative importance of air tourist traffic to the economies of States, and the economic environment for air tourist travel;

b) the relationship of increased travel to scheduled and non-scheduled carriers engaged in the transportation of international air traffic in terms of

   i) capacity, schedules and traffic flow;
   ii) fares and costs; and
   iii) anticipated technological developments; and

c) any significant problems or obstacles which may be hindering the development of international air tourist travel.

3. The Assembly also indicated that, in carrying out these studies, Contracting States, IATA, and other international organizations should be consulted as appropriate, and that copies of the completed studies should be forwarded to these entities for consideration and action. In approving the Secretariat's plan for the study for the African region, the Air Transport Committee of ICAO agreed that the international organizations other than IATA that should be consulted were UNCTAD (United Nations Conference on Trade and Development) and IUOTO (International Union of Official Travel Organizations).

1/ Resolution A15-17, the text of which is given in Appendix 1.

2/ For the meaning of "tourist" and "tourism" see General Notes on page viii.

UNCTAD, it was understood, was proposing to carry out basic studies of tourism within the economies of developing countries, but did not expect to produce any results until 1967 or later. These studies, when completed, should provide a basis for assessing "the relative importance of air tourist traffic to the economies of States", one of the matters listed by the Assembly for consideration. IUOTO had agreed to undertake a preliminary survey of the development of tourism in Africa to be completed during 1966.3/

Objectives and scope

4. The primary objective of this study is accordingly to assist the developing States of Africa by elucidating measures to accelerate the growth of air passenger travel between their territories and between Africa and other regions. Because of the dependence of such accelerated growth on the development of tourism, the secondary objective is to explore measures to foster the growth of air tourism. In considering the requirements of air transport and those of the tourist industry, due regard is paid to the terms of ICAO's Convention which states that the role of the Organization is "to foster the planning and development of international air transport so as to ... meet *the needs of the peoples of the world for safe, regular, efficient and economical air* transport".4/

5. The special responsibility and competence of ICAO being in the field of international civil aviation, it follows that the development of air tourism is here dealt with from the aviation point of view and that the many non-aviation matters that affect the development of air tourism, such as accommodation, local surface transport, tourist services and amenities, publicity, and cost of living, are necessarily given rather summary consideration. These non-aviation aspects of African tourism are, however, dealt with more fully in the IUOTO study referred to in paragraph 3. Furthermore this ICAO study does not deal with the question of economics of tourism which has been dealt with by IUOTO in the Economic Review of World Tourism (see Bibliography in Appendix 3) and will be covered by the UNCTAD studies mentioned in paragraph 3 above.

6. Defining the scope of this ICAO study it may be said that, in addition to being written from the aviation point of view, it is concerned, in accordance with its terms of reference, only with the transport of passengers by air, excluding from consideration the other categories of load, -- mail and cargo -- except in so far as these affect passenger services. Also following the terms of reference, it deals primarily with international air transport and considers domestic air services only incidentally and in so far as they have a direct bearing on the development of international services.

Limitations imposed by data and resources

7. Limitations on the scope of the study are imposed by the inadequacies of the data available. For example, the operations of air charter companies, which are known to be of increasing importance in a few African States, are dealt with much less fully than those of scheduled airlines because of the shortage of precise information on the former; and estimates of the elasticity of demand and of future traffic growth under

3/ Pilot Survey of Africa's Tourism Prospects, IUOTO, Nov. 1966.

4/ Convention on International Civil Aviation, Article 44.

varying fare conditions are seriously hampered by lack of information on the nature of the passenger traffic, specifically on the proportion of passengers who pay their own fares as against those whose fares are paid by their employers. Furthermore, the nature of the traffic and financial statistics available does not permit a thorough analysis of the operations of non-African airlines on routes to, from and within Africa, nor does it permit detailed analysis of traffic and financial developments on a route basis.

8. Finally, a general overall limitation on the scope of the study is imposed by the time and resources available. In view of the vastness and diversity of the African continent it was clearly not feasible for ICAO to deal separately and in detail with the situation in each State. Instead the various questions arising have been considered from the regional or sub-regional point of view. This study is therefore intended to be no more than a broad general and preliminary review of the problem of developing international air passenger travel for Africa as a whole. The work presupposes that where necessary individual governments will make their own plans for detailed study and implementation. This preliminary review should nevertheless be of value in preparing these plans, and it can be amplified as States make more data available.

Sources of information and method of work

9. The greatest difficulty encountered, not unexpectedly, was in obtaining the precise, up-to-date and comparable information on all aspects of African air passenger travel and tourism necessary for a penetrating analysis. To accumulate as much of the required data as possible a number of steps were taken. First questionnaires[5/], approved by the ICAO Air Transport Committee, were addressed in March 1966, to the thirty-four African Contracting States of ICAO and to the thirty-three non-African Contracting States having airlines operating or believed to be about to operate to Africa. Substantive replies were received from the following:

African States (12 States out of 34 ICAO Contracting States)

Chad
East African Common Services Organization: Kenya and Tanzania and Uganda (a non-Contracting State)
Ethiopia
Ivory Coast
Mali
Morocco
Niger
Nigeria
Tunisia
United Arab Republic
Zambia

5/ See Appendix 2.

Non-African States (16 States out of 33 ICAO Contracting States)

Australia	Italy
Austria	Netherlands
Brazil	Spain
Cyprus	Sweden[6]
Czechoslovakia	Switzerland
Germany	United Kingdom
India	United States
Israel	Yugoslavia

The response to the questionnaires was thus from African States about 35 per cent and from non-African States about 50 per cent. The completeness of the answers, however, varied widely, a few being full and detailed and others somewhat meagre.

10. To supplement the questionnaire it was decided that an ICAO Economist should visit a number of African States during May and June 1966. Considerations of time and manpower necessitated the limiting of this mission to seven States selected, as far as possible, to represent different regions and conditions. The States visited were: Senegal, Ivory Coast, Nigeria, Kenya, Ethiopia, the United Arab Republic and Tunisia. The purpose of this mission was, where so requested, to assist States in the completion of their replies to the questionnaire, and, through conversations with government civil aviation and tourist authorities, airline officials, and travel agents, to gather as much pertinent information as possible.

11. Other action taken to gather data included the sending of a questionnaire to a selection of air charter companies and liaison, through conversations and correspondence, with IATA, IUOTO, UNCTAD, ECA and ITA (Institut du Transport Aérien). Of the fifteen air charter companies approached four replied. The ITA contribution was mainly in the form of publications consulted[7]; and IATA submitted some comments and other material. The greatest contribution, however, was made by IUOTO which, in addition to a number of publications[7], made available to the ICAO Secretariat the draft of the study of African Tourism prepared for it by the consultant organization *Transport and Tourism Technicians Ltd.* [3]

12. Parallel with such efforts to gather data on an ad hoc basis from sources outside ICAO, attention was given to the material readily available at the Organization's headquarters. In particular, analyses were undertaken of international scheduled passenger fares and of the relevant series of statistics regularly filed on ICAO Air Transport Reporting Forms. Regarding this latter material it must be pointed out, however, that coverage is far from complete since in Africa as in other parts of the world many States still find it impossible to provide the required data.

13. On the basis of the information gathered in the ways described the Secretariat proceeded to prepare a first draft of the study which was submitted to the Air Transport Committee for review. In the light of the views expressed in the Committee a revised draft was prepared and circulated to individual members of the Committee and representatives on the ICAO Council for further comment. Taking the comments received into consideration as far as possible, the present text was prepared by the Secretariat and is issued under the direction of the Council of ICAO.

6/ Covering Denmark and Norway in part.

7/ These publications are listed in the Bibliography given in Appendix 3.

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General Notes:

1. The words "tourist" and "tourism" are used generally in this study where transport is being considered to refer to travel for pleasure, paid for by the traveller, as distinct from travel on private or official business, paid for by the employer. This distinction is important in transport economics because of the difference in elasticity of demand for the two types of travel. Where the tourist industry in general is being considered, however, the words are used, in accordance with IUOTO practice, to refer to all non-resident travellers staying more than twenty-four hours in a country.

2. Dollars ($) and cents (¢) refer throughout this study to United States currency.

SUMMARY

Section I - The Need for Accelerated Development of Air Passenger Travel and Tourism for Africa

a) Lack of adequate transport in Africa. - One of the serious obstacles faced by the nations of Africa in their struggle to achieve full economic development is the general lack of adequate transport. In 1965, the total volume of scheduled air passenger traffic to, from and within Africa carried by the airlines of ICAO States, both African and non-African, was probably about 9,000 million passenger-kilometres or roughly 4.5 per cent of their world total. In relation to the population and size of Africa this is a small quantity of air passenger traffic consistent only with the present low level of African economic development. Furthermore, this situation is not alleviated by the surface transport system which is, in general, less developed than air transport. (Paragraphs 1-14, pages 1-6).

b) Normally acceptable rates of growth must be exceeded. - If the goal of economic development is to be attained, annual rates of growth that may be acceptable in the developed regions must be consistently exceeded in the developing regions. This truth applies to transport as to other economic activities, but with special force since transport is a keystone in the economic structure and an acceleration in the rate of transport growth can contribute in various ways to accelerated growth in other sectors. (Paragraph 15, page 6).

c) Potential role of air transport. - Air transport for a number of reasons, particularly its lower capital requirements and relative independence of climate, topography and population density, is more susceptible than surface transport to rapid development. For these reasons air transport has potentially a special role to play in the general economic development of Africa. (Paragraphs 16, 17, page 7).

d) Need to stimulate demand. - The accelerated growth of air passenger transport depends on transforming latent need into active and growing demand. Analysis of the demand for air passenger travel shows that it is composed of two general categories: (i) the demand for business travel where the traveller's fare is paid by his employer, whether government, or private company, which accounts at present for probably about 90 per cent of African air passenger traffic; and (ii) the demand for personal travel, chiefly tourism, where the traveller pays his own fare, which accounts for about 10 per cent of the total. Business demand is, by its nature, relatively inelastic and for this reason its rate of growth is not particularly susceptible to stimulation by modification of the air transport factors, depending more on the growth of general economic activity. Personal demand, on the other hand, may be highly elastic and accordingly susceptible to stimulation by such means as fare reductions, service improvements, the availability of tourist facilities and promotional activity. (Paragraphs 18, 19, page 7).

e) Air tourism, the key to accelerated traffic growth. - It follows that if the growth of African air passenger travel is to be appreciably accelerated attention will have to be focussed mainly on the stimulation of demand for air tourism to Africa. At present this demand is at a low level as may be seen from the fact that in 1964 the African share of world international tourist receipts amounted to $245 million which was 2.5 per cent of the total. By comparison, Europe had 62 per cent, North America 17 and the Caribbean 12 for a total of over 90 per cent. Furthermore, from 1959 to 1964 while the world total grew at an annual rate of 12 per cent, the rate of growth for Africa was only about 6 per cent. (Paragraphs 20, 21, page 8).

f) Need for conditions conducive to growth of tourism. - There is scope for radically increasing the volume of tourist travel at least to some parts of Africa. Therefore, since most tourist travel must be done by air, the possibility does exist of accelerating the development of African air passenger travel. To realize this possibility it will be necessary, however, to create conditions under which advantage can be taken of the elasticity of tourist demand. (Paragraphs 21, 22, pages 8-9).

g) Parallel development of freight and mail traffic. - If air transport services to, from and within Africa are to operate on a sound economic basis, it will be necessary to develop freight and mail at the same time as passenger traffic. (Paragraphs 23-26, page 9).

Section II - Development of Scheduled Passenger Services and Traffic to and within Africa

a) Intercontinental routes. - In 1965 about 82 per cent of the 2.5 million passengers moving on scheduled services between Africa and other continents travelled to and from Europe. This heavy preponderance of European routes had declined slightly from 1960 when the figure was 87 per cent. The average annual rate of growth in the number of passengers travelling on all intercontinental services to and from Africa from 1960 to 1965 was about 11 per cent. On the North American route though absolute numbers were relatively small the average growth rate was 36 per cent. It is also noteworthy that in 1965 more than one-third of the African airports used by international scheduled services were linked by direct non-stop flights to other continents. (Paragraphs 2-4, 6, pages 11-13).

b) Intra-African routes. - The number of direct transcontinental connections between the sub-regions of Africa has more than trebled since 1960, but there are still many gaps in this network, particularly between East and West and between the North-West and the Southern half of the continent, and it is still often easier to travel from one sub-region to another via Europe. International traffic within Africa has tended to concentrate on a few main channels, nearly half of the passengers carried in 1965 having been flown on less than 10 per cent of the 256 international stages operated. On these main channels, flight frequencies, capacity and traffic have steadily increased and are at reasonably high levels. Generally, however, the economic conditions are less favourable. Over half the stages are operated with a weekly frequency of one round-trip or less; on over two-thirds of the stages there are less than 10,000 passengers carried per year; and over two-thirds are less than 1,000 kilometres in length. (Paragraphs 2, 9, 10, 12, 13, pages 11, 14-16).

c) Changes in the traffic pattern. - A number of changes have occurred in the traffic pattern since 1960, mainly as a result of technological and political developments. With the introduction of the fast, long range, high capacity jets, there has been an increase in the number of long stages operated; intercontinental services penetrate more deeply into Africa while a number of intermediate centres are now overflown; frequencies have decreased on a number of stages; and load factors have generally declined in Africa as elsewhere. In the six years from 1960 to 1965, twenty-seven African States became independent and this fact has, of course, led to adjustments in the route pattern. Nearly one-third of the non-stop international stages operated in 1960 have been discontinued and more than one-third of the stages operated in 1965 were introduced after 1960. A number of the discontinued stages were short trans-border flights or domestic flights forming an integral part of an international service, but the real nature of the changes in traffic pattern can be revealed only by the analysis of origin and destination statistics which are not now available. (Paragraphs 5-9, 11-14, pages 12-16).

d) Capacity, traffic and load factors. - The total passenger capacity offered by African airlines on their international services increased much more than their traffic in 1961 and 1962, but at about the same rate from then until 1966, with the result that their average passenger load factor fell from 57 per cent in 1960 to about 50 per cent in 1961 and has remained close to that level up to 1966. During the same period the proportion of their total international traffic by weight represented by passengers fell from 78 to 75 per cent while freight rose from 17 to 21 per cent. The decline in passenger load factors from 57 to 50 per cent was exceeded by the decline in the load factor for total load by weight from 61 to 50 per cent. By comparison the average load factors for all scheduled airlines of ICAO States on their international services completed their decline by about 1963 and have been rising since then to 57 per cent for passengers and 55 per cent for total load in 1966. (Paragraphs 15-21, pages 16-18).

e) Volume and growth of passenger traffic of African airlines. - The total volume of scheduled passenger traffic carried by the African airlines more than doubled from 1960 to 1966 from about 2,400 to 5,400 million passenger-kilometres at an average annual growth rate for this period of 15 per cent. From 1963 to 1966, however, this rate declined to about 11 per cent, the same rate as for passengers carried on all intercontinental services to and from Africa between 1960 and 1965. The proportion of passenger traffic carried on the international as against the domestic services of the African airlines increased from about 50 per cent in 1960 to 75 per cent in 1963 where it has remained up to 1966. The different patterns of development followed by individual African airlines are shown in Appendix 8 and Chart 2. (Paragraphs 22-24, pages 18-21).

f) Traffic and load factors of non-African airlines. - The total scheduled international passenger traffic carried by all non-African airlines on routes to, from and within Africa amounted in 1965 to about 4,200 million passenger-kilometres, about 16 per cent more than the 3,600 million carried by the African airlines on their international routes in the same year. In this year also the non-African carriers achieved a 55 per cent passenger load factor compared to 50 per cent for the African carriers. Figures for other years

are not available but it seems probable that the operations of the non-African airlines (predominantly European) follow roughly the pattern of the European airlines on their international services, that is an average growth rate for passenger traffic from 1960 to 1965 of just over 15 per cent (close to that for the African airlines) with load factors somewhat above the average for African airlines. (Paragraphs 25, 26, pages 19, 22).

g) Inadequacies in air services as an obstacle to growth. - In general, the States that replied to the ICAO questionnaires did not believe that present inadequacies in African air services constituted an obstacle to accelerated development. A significant number of African and European States did, however, suggest that greater liberalism in the granting of traffic rights by African States was desirable or even essential for such development. (Paragraph 27, page 22).

Section III - Air Charter and Inclusive Tour Operations

a) Charter and inclusive tour services. - Although the major part of international air passenger traffic to and within Africa is carried on scheduled services at regular fares, a significant and growing proportion principally from Europe moves on charter and inclusive tour services, both of which may be operated by either scheduled or non-scheduled carriers. (Paragraphs 1-4, page 23).

b) Volume of non-scheduled traffic. - The general lack of statistical information on these categories of air transport seriously hampers analysis. Traffic statistics, for example, are not available for scheduled inclusive tour services and are available only to a very limited degree for non-scheduled services as a whole (generally making no distinction between charter and inclusive tour operations). However, from such information as is available, it is possible to conclude tentatively that non-scheduled traffic is increasing not only in absolute terms, but as a percentage of scheduled traffic and that this increase in relative importance is largely the result of the increase in non-scheduled tourist traffic between Europe and North Africa. In 1966, international non-scheduled passenger traffic probably amounted to about 8 per cent of scheduled traffic for Africa as a whole; perhaps 15 per cent for North Africa and nearer to 5 per cent for the remainder of the continent. (Paragraphs 5-8, pages 23-25).

c) Non-scheduled IT traffic. - Only for North Africa for 1965 are there statistics available to indicate the volume of non-scheduled inclusive tour traffic as distinct from the other categories of non-scheduled operation. The figures indicate that in 1965 the non-scheduled IT traffic between Europe and North Africa amounted to about 67,000 passengers (counted once in each direction) or approximately 100 million passenger-kilometres of which almost 80 per cent was for Tunisia. The build-up of this type of traffic, particularly from Germany, Switzerland, Scandinavia, France and the United Kingdom, is clearly well under way for Tunisia and has begun for Morocco and the United Arab Republic. There are indications also that the build-up has begun for Kenya, particularly from Germany and Switzerland. (Paragraphs 9-10, page 26).

d) Sources of non-scheduled traffic. - The sources of this non-scheduled traffic are, for charter flights, such special groups as non-Africans travelling on leave, pilgrims to Mecca, African students and delegates to conferences; and, for both charter and inclusive tour flights, tourists particularly from the medium income and lower age groups. Tourism as a non-scheduled traffic source is probably now more important than all other sources combined and, because of low fares, is apt to develop more rapidly in the future. The main flow of international non-scheduled passenger traffic is between Europe and Africa (particularly tourists to North Africa) with a small stream between the Middle East and Africa. There is very little such traffic between Africa and other regions or between the States of Africa. (Paragraphs 11-13, page 27).

e) Limitations on growth of non-scheduled traffic. - As a result of the development of tourism, non-scheduled passenger traffic will probably continue to increase in relative importance, but growth will be limited to some extent by three principal factors. First, where the traffic potential is small, the lack of return loads for charter flights raises the problem of restationing empty aircraft and leads to a higher charge per passenger. Second, the fact that non-scheduled services must move tourists by the plane load (55 to 185 passengers) means that these services can operate only to those centres where substantial accommodation and other tourist facilities are available. Third, government restrictions on non-scheduled operations, imposed to protect the interests of scheduled airlines, can effectively prohibit growth, or can permit development under controlled conditions, depending on government decision. (Paragraphs 14-17, pages 27-28).

f) Importance of inclusive tours on scheduled services. - Inclusive tour fares on scheduled services for Africa from the main sources of international tourism -- Europe and North America -- are available for constructing tours between Europe and most of Africa and between North America and North Africa only. Up to the present, this category of traffic has reached significant proportions only between Europe and North Africa; for the future, development will depend on such matters as the elasticity of tourist demand, the availability of tourist accommodation, and the competition offered by non-scheduled operators. (Paragraphs 18-19, pages 28-29).

g) Role of inclusive tour services in general. - Because of the low price of the package offered, inclusive tours, whether by scheduled or non-scheduled service, can play an extremely important role in the development of African air tourism as they have done in Europe. The European experience suggests that, if they are wisely regulated, non-scheduled inclusive tours need not be detrimental to the scheduled services and indeed may bring new customers to aviation who often become permanent ones requiring the introduction of new scheduled services. The two categories of inclusive tour may be complementary, the non-scheduled services taking large groups to the major centres while the scheduled services take small groups to both major and minor centres. (Paragraphs 20-23, pages 29-30).

Section IV - Periodic Variations in Passenger Demand

a) Demand variations on African routes. - The phenomenon of variation in passenger demand occurring in more or less regular patterns on a daily, weekly and monthly basis is found on African as on almost all other air routes. Because of the limited information available to ICAO, however, it is possible in this study to analyse only the monthly variation. From the data presented on this aspect it may be seen that on African routes monthly passenger demand is above average during the five-month period June to October and again in December, and below average during the other six months. Moreover, the pattern is generally the same for all of the sub-regions of Africa. When this pattern is compared with the patterns occurring on the intra-European and North Atlantic routes, two noteworthy facts emerge. One is that seasonal variations on African routes are much less pronounced than in the other two areas. The other is that the periods of high and low demand are essentially the same for all three areas. (Paragraphs 1, 2, 6, 7, 9-11, pages 31, 33, 34).

b) Causes of seasonal variations. - Seasonal variation in passenger demand results generally from the patterns of economic and social life in the traffic generating areas, the volume of travel being greatest during the summer and year-end holiday periods. Variation is, however, much more pronounced in personal than in business demand and for this reason routes with a high proportion of personal, chiefly tourist, traffic exhibit more extreme variations than do routes with mainly business traffic. This explains the relatively moderate nature of seasonal variations on African routes compared with intra-European and particularly North Atlantic, on both of which there is a much higher proportion of tourist traffic. That demand variation follows essentially the same seasonal pattern on African as on European and North Atlantic routes is explained by the economic and social relationship between Africa and the North Atlantic community and the high proportion of European and North American travellers on African routes. African climate and geography seem at present to have little effect on the seasonal variation of travel. (Paragraphs 3-5, 10, 11, pages 31-32, 34).

c) Effects and remedial action. - The main effects of variations in demand on airline operations are difficulties in scheduling and in fully utilizing equipment and load factors that are too high for good service during peak periods and uneconomically low during slack periods. The chief means of counteracting these undesirable effects are low promotional fares designed to encourage travel during slack periods. In general, airlines have not had great success in overcoming the problems of seasonal variations because the majority of passengers are more or less bound to the common pattern. However, it is possible with suitable fares to persuade some passengers to travel during the off-season (November to May) and it would seem that this possibility should be kept in mind when planning the development of air tourism particularly since the off-season may be the most attractive season for travel in some regions of Africa. (Paragraphs 4, 8, 11, pages 31, 33, 34).

Section V - Air Transport Fares and Costs

a) Level of fares for tourists critical. - Different categories of demand vary in their response to changes in air fares, but tourist demand is generally agreed to be highly elastic provided other conditions are right. Since the accelerated development of African international air passenger travel depends in large measure on the growth of air tourism, there can be little doubt that the level of international air fares available to tourists can have a critical effect on overall development. (Paragraph 1, page 35).

b) Fare levels depend on many factors. - The average level of fares on international scheduled services may after a certain time lag and in a general way be related to the average level of unit operating costs, but for particular routes and categories of traffic fares are set in accordance with many considerations of which operating cost is only one, others being the public interest, competition from non-scheduled carriers and surface transport, and estimates of the elasticity of demand. (Paragraphs 2-4, pages 35-36).

c) Fares compared on unit basis. - International scheduled fares, compared on a unit basis, show a certain pattern with significant variations. Between Europe and Africa where there are few excursion fares the lowest regular fare available to individual members of the public averages roughly just under 5 cents per passenger-kilometre. Against this, the lowest available regular fare from New York to Africa, because of the general availability of excursion fares, averages about 3.25 cents per passenger-kilometre. Intra-regional fares, on the other hand, influenced particularly by the shorter average stage lengths, are higher and are at about the same level between African as between European States, that is about 6 cents per passenger-kilometre on average. (Paragraphs 5-10, pages 36-38).

d) Actual fares to Africa from Europe and New York. - Consideration of fares on a unit basis ignores distance. When actual lowest available intercontinental fares from Europe and New York to Africa are compared, it is seen that to West, Central, East and South Africa, in spite of the greater distance to New York, they are at about the same level. This, of course, is because of the general availability of excursion fares from New York. It is only to North Africa, where the distance differential is greater and the unit fare differential less, that lowest available fares are much less from Europe than from New York. (Paragraphs 11-12, pages 38-39).

e) High fares an obstacle to air travel. - These fares to Africa (except Europe to North Africa) from the main generating sources of international tourists are, however, because of the distances involved, very high by comparison with lowest fares from these same sources to the countries of Western Europe which together earn the major share of all international tourist receipts. Whereas return fares between European States are generally under $200 and across the Atlantic about $300, return fares from Europe and New York to Africa (except Europe-North Africa) vary from about $400 to $900. In the highly competitive market for international tourists where Africa must compete with Europe as a destination area, the effect of distance on transportation cost puts Africa at serious disadvantage and makes it imperative that fares be kept at the lowest feasible level. (Paragraphs 13-14, page 39).

f) Complexity of fare setting requires selective approach. - The factors considered by the airlines when setting international fares are numerous and vary from route to route and from one category of traffic to another. Because of this, ICAO, which does not have detailed route data at its disposal, is not in a position to make specific recommendations, but only to offer general comments on the fare situation. In this vein the first observation to be made is that, because of the great complexity of the fare setting process, any general, area-wide reduction of regular fares for international scheduled services is unlikely to be desirable or feasible. The approach to fare reduction must rather be on a selective basis. (Paragraphs 15-21, pages 40-42).

g) Objection to reduction of regular fares. - It has been pointed out that the demand for air travel to and within Africa is predominantly for government or private business purposes and hence relatively inelastic. The traffic resulting from this demand, which is probably about 90 per cent of all traffic on services to and within Africa, moves on scheduled services at regular first and economy class fares. For these reasons, the majority of governments and airlines concerned believe that any reduction of these regular fares on intercontinental, intra-regional or domestic services would not produce a sufficient increase in traffic to offset the lower unit revenue. Such reduction would therefore be undesirable as it would result only in diminution of total revenues. (Paragraphs 22-23, pages 42-43)

h) Reductions through creative fares related to tourist demand. - Tourist demand is relatively elastic and thus likely to respond vigorously to fare reductions provided that such matters as hotel accommodation and promotion have been adequately dealt with. The majority of interested governments that have made their views known have for this reason favoured reduction by the use of creative fares aimed at stimulating air tourism. By these devices, particularly excursion, special group, family and inclusive tour (ITX) fares, which are restricted in such a way as to make them uninteresting to most users of the regular fares, the scheduled airlines can offer to tourists reductions varying from 10 to 50 per cent on the economy fares without appreciably diminishing their main revenue derived from business traffic paying regular fares. (Paragraphs 24-27, pages 43-44).

i) Inclusive tour (ITX) fares on scheduled services. - ITX fares, probably the most effective of the so-called "creative" fares for the development of tourism, are now available from Europe to most of Africa and from New York to North Africa at discounts on the lowest regular fares varying from 30 to 50 per cent. One effect of these ITX fares is to bring the base fare rate between Europe and Africa down from the 5 cent level of the regular fares to about 3 cents per passenger-kilometre. Tourists from North-West Europe can have a three-week vacation in East Africa for about $600. Provided that tourist accommodation and services are available and other local conditions are right such fares should do much to promote the development of air tourism to Africa. (Paragraphs 28-31, pages 44-47).

j) Costs and fares on non-scheduled services. - Because of their lower overheads the unit operating costs of the non-scheduled operators are probably somewhat below those of scheduled airlines using the same type of equipment. Under the most favourable operating conditions the non-scheduled carriers might achieve unit costs as low as 1.0 to 1.5 cents per passenger-kilometre. Their great competitive advantage derives from the fact that they operate at load factors approaching 100 per cent and that therefore the fares they charge per passenger need only cover cost plus a reasonable percentage for profit. In fact published charter fares, where restationing of aircraft is not required, are below 2 cents per passenger-kilometre or about 40 per cent below the lowest excursion rate, and non-scheduled inclusive tour prices suggest that their air transport component is at an even lower level. The chief factors limiting the availability of fares of this order are the frequent need to restation empty aircraft and the shortage of hotel accommodation for plane loads of tourists (both of which may be expected gradually to diminish in importance) and need to restrict non-scheduled operations in order to protect the interests of the scheduled carriers. To the extent that such fares do become available they can be expected to have a strong stimulating effect on air tourism to Africa. (Paragraphs 32-39, pages 47-50).

Section VI - Facilitation of African Air Passenger Travel

a) Visa requirements. - In general, there is a need to improve Facilitation for the air traveller in Africa and there are many ways in which this can be done. In order to encourage tourists, entrance visas should be abolished to the maximum extent possible and, until such time as this can be done, the issue of visas should be simplified as much as possible, e.g. they could be issued upon arrival at the airport of the country concerned. (Paragraphs 6-8, pages 51-52).

b) Clearance of arriving passengers. - Passengers and their baggage should be cleared with speed, efficiency and courtesy. This means that requirements for documentation, other than a passport and a vaccination certificate, should be eliminated, there should be a sufficient number of channels at each airport for completion of governmental controls and a sufficient number of trained staff to man them; baggage examination should be reduced to the minimum and should be carried out on a sampling or selective basis; the airport terminal building should be large enough to cope with the passenger traffic and the layout and facilities therein should be such that passengers and their baggage can be rapidly processed. (Paragraphs 9 and 12-14, pages 52-53).

c) Transit passengers. - Transit passengers should not be required to go through clearance controls unless they wish to leave the airport terminal building. (Paragraph 15, page 53).

d) Clearance of departing passengers. - With respect to air tourists leaving the country, clearance formalities should be minimal and requirements for such additional documents as currency declarations and taxation certificates should be eliminated at the earliest opportunity. Except where special conditions prevail, the baggage of outbound passengers should be free of inspection. (Paragraph 16, page 54).

e) Public health formalities. - Public health formalities should be carried out in an expeditious manner and double checking of vaccination certificates, i.e. on entry and departure, should be avoided. Finally, where disinsecting of aircraft is required, States should accept the "blocks-away" method recommended by the World Health Organization. (Paragraphs 10, 11 and 16, pages 52, 54).

Section VII - Future Prospects for Air Passenger Travel on African Routes

a) Nature of forecast and problems encountered. - Any forecast of air traffic growth on routes to, from and within Africa must, for lack of comprehensive statistical information, be extremely tentative. It is difficult to establish meaningful trends because of the profound political changes that have taken place in Africa over the past decade and because the statistical series filed with ICAO are not only incomplete, but do not differentiate between particular routes or categories of traffic and do not show origin and destination of passengers. In these circumstances the forecast, which covers the period up to 1980, is of necessity general in nature, referring to traffic on African routes as a whole and giving only broad indications as to sub-regional variations. (Paragraphs 1-7, pages 57-58).

b) Air transport trends up to 1966. - Since 1951 the total volume of scheduled passenger traffic carried on all services (both international and domestic) by all airlines (both African and non-African) to, from and within Africa has grown at an average annual rate of about 15 per cent. During this period there have been profound political and economic changes in Africa that have affected this growth and have brought about a major readjustment in the distribution of traffic between international and domestic services, but the situation appears to have stabilized to a considerable extent since 1963. Since that time the rate of growth for scheduled passenter traffic on the international African services of all airlines has been about 12 to 13 per cent. From 1960 to 1965 unit operating costs for all airlines of ICAO States fell on average about 4 per cent per year and unit revenues about 1 per cent. The African average has been about 20 per cent above the world level, but the rate of decline has probably been about the same. Break-even load factors fell in the same period from 59 to 51 per cent and actual passenger load factors from 59 to 52 per cent for African airlines and 55 per cent for non-African airlines on African routes. The primary cause of the decline in unit operating costs and break-even load factors has been the gradual introduction of jet aircraft which has also led to an increase in average aircraft speed and payload capacity and distance travelled per passenger. (Paragraphs 8-14, pages 59-61).

c) Other relevant trends and developments. - The receipts from international tourism have been increasing since 1950 at an average annual rate of about 12 per cent and tourism is now the largest single item in international trade. However over 60 per cent of international tourist receipts go to Europe compared with 2.5 per cent to Africa and the growth of receipts for Africa has been at about half the world level. International tourist expenditures come very largely (87 per cent) from Europe and North America and it is important to note that this demand is both income and price elastic. Other relevant socio-economic trends include annual average increases of 2 per cent in world population, 5 per cent in total gross domestic product, 3 per

cent in per capita gross domestic product and 1 per cent in consumer price inflation. During the same period the extent of paid holidays, of urbanization and of education has been increasing so as to stimulate the growth of tourism. (Paragraphs 15-19, pages 61-63).

d) Assumptions and forecast. - The future growth of international air passenger travel on routes to, from and within Africa will depend on how the various trends continue. To arrive at a forecast it has been necessary to make a number of assumptions concerning these trends. For example, it is assumed that the general socio-economic factors, and world tourist activity will continue to develop over the next fifteen years at much the same rates without major war or economic depression. Airline re-equipment will continue but at a slower pace. Air transport unit costs and revenues on international services will fall about 2 per cent per year. Break-even load factors will remain approximately at their present level while passenger load factors will rise slightly. The development of tourist accommodation and services will accelerate. The proportion of personal travel will gradually increase from the present level of about 10 per cent of the total. The "natural" growth rate of scheduled international passenger traffic on African routes, independent of fare changes, will be on average about 10 per cent, and the elasticity of demand for these services will be about 2:1. Non-scheduled traffic on African routes will continue to increase in absolute terms and as a proportion of scheduled traffic. On the basis of these assumptions it is suggested that scheduled international passenger traffic on routes to, from and within Africa should grow until 1980 at an average annual rate of about 14 per cent. (Paragraphs 20, 21, pages 63-66).

e) Limitations of the forecast. - The pattern of development suggested is tentative and subject to error if some of the assumptions prove unwarranted. Moreover there will clearly be important variations between the sub-regions of Africa, passenger travel growing less rapidly in some and more rapidly in others. Also it must be pointed out that the forecast development presupposes vigorous action to implement, as appropriate, the measures suggested in Section VIII-B to further the growth of international air passenger travel. (Paragraphs 22-27, pages 66-67).

I - THE NEED FOR ACCELERATED DEVELOPMENT OF AIR PASSENGER TRAVEL AND TOURISM FOR AFRICA

Requirement for the present study

1. This study has been undertaken as a contribution towards fulfilling the need for an acceleration in the present pace of development of air passenger transport for Africa, within the general context of furthering the economic and social development of that continent. In general terms the requirement of the African region under this heading may be said to have two broad aspects. In the first place there is a need for an air transport system that will facilitate the economic and social development of Africa by satisfying to the fullest extent possible the present and future demands of the peoples of the region for air passenger travel. At present this is primarily for business rather than personal reasons. Secondly there is need for a system that will meet and encourage the demand of foreign tourists for air transport to and within Africa. There is, however, a close interrelation between these two objectives. The foreign tourist demand is more elastic and capable of much more rapid growth than the demand for business travel to, from and within Africa. Encouraging and meeting the tourist requirement will actively contribute to satisfying the African need for a more than adequate air transport system since this will result in increased air services, frequencies, load factors and aircraft utilization and hence in reduced costs. Furthermore this development of air tourism will, by means of the foreign currency earned, appreciably contribute to the general economic growth of the region.

2. A general recognition of the need, felt particularly by developing nations, for action to accelerate the growth of the air passenger market was the consideration that led the one-hundred and two States represented at the ICAO Assembly in July 1965 to agree unanimously that a series of regional studies should be undertaken on this subject. Awareness of the special need that the developing regions of the world had for expanded air passenger services and also for increased tourism, on which the expansion of air services would largely depend, led the Assembly further to agree that the studies to be undertaken should give priority to these developing regions and in the first instance to Africa. The Addis Ababa Air Transport Conference of 1964 had specially recognized the importance of tourism development in that region.

3. In the course of the Assembly's discussions it was pointed out that one of the greatest problems facing Africa today is the lack of adequate transport. This fact, which was also emphasized in a previous study published by ICAO on Air Transport in Africa [1/], is widely known, but to be appreciated it must be considered in the light of a full realization of the importance of transport in human affairs. In the life of any State if communications may be likened to the nervous system, transport is the circulatory system. Without adequate transport full social and economic development are impossible. A system adequate for the full development of a modern State is a complex network of rail, road, pipeline, river, sea and air services and facilities, capable of meeting all the needs of the State for the movement of passengers, cargo and mail. Here, however, we are concerned only with passengers travelling by air.

1/ Doc 8419-AT/718, July 1964.

Development of African air passenger transport

4. Comparison between the air transport systems available to the various regions should serve to indicate relative stages of development. Unfortunately, however, because of the inadequacies of the statistical data at present available, such comparisons can only be based on the activities of the airlines registered in each region. In this way it is possible to obtain some idea of the relative development of Africa's airline industry, but not of the air passenger services available to, from and within Africa as against those available for other regions. An attempt is made later (see paragraphs 12 and 13) to estimate, on the basis of available traffic flow data, the total volume of scheduled passenger transport provided on international routes to, from and within Africa by non-African airlines. The figure arrived at, however, is approximate and it has not been feasible to produce similar figures for other regions.

5. An approximate idea of the relative level of development of the passenger transport system provided by African airlines is obtained from the figures given in Tables 1 and 2 which are based largely on Appendices 5 and 8. Table 1 shows the actual volume of scheduled passenger transport sold by the airlines of ICAO Contracting States, according to the region in which these airlines are registered, together with the population of these regions. It appears that while Africa has about 13 per cent of the population of ICAO States, its airlines account for only about 2 per cent of the passenger traffic of the airlines of these States, while at the other extreme the airlines of North America carry about 60 per cent of the passenger traffic although that region has only about 9 per cent of the population. These varying shares of the world's air passenger traffic are, however, what might be expected since they are clearly related to the varying levels of economic development of the different regions.

Table 1

Scheduled Airline Passenger Traffic and Population by Region 2/

Region	Scheduled Passenger Traffic of the Airlines of Each Region (millions of pass-km) 1965	Share	1964	Share	Population (millions) 1964	Share
North America 3/	118,086	60 %	100,430	59 %	211	9%
Europe	45,367	23 %	39,774	23 %	441	19%
Asia	10,483	5 %	9,194	5.5%	1,028	45%
Latin America 3/	10,144	5 %	9,145	5.5%	237	10%
Oceania	6,426	3 %	5,366	3 %	17	1%
Africa	4,654	2.5%	4,328	2.5%	303	13%
Middle East	3,010	1.5%	2,359	1.5%	65	3%
World 2/	198,170	100 %	170,596	100 %	2,302	100%

2/ Excluding the Peoples' Republic of China, the USSR, and other non-Contracting States of ICAO.

3/ North America comprises Canada and the United States; Latin America comprises the States of South and Central America and the Caribbean.

6. Airline activity is compared with indicators of general economic activity regionally on a per capita basis in Table 2. It may be seen under the heading of scheduled air passenger traffic that in 1964 against the African figure of 14 passenger-kilometres sold by the airlines of the region for each head of population only the Asian figure was lower; South America and the Middle East were more than double; the world average five times as great, Europe seven times, and North America almost thirty five times as great. As an indication of the degree to which the development of airline activity is related to general economic development it may be noted that these relationships between Africa and other regions in terms of air passenger transport sold by each region's airlines per capita are closely paralleled under the headings of energy consumption and gross domestic product per capita.

Table 2

Economic Activity per Capita by Region [2/]

Region	Sched. Pass. Traffic of Region's Airlines (pass-km) 1958	1964	Energy Consumption (kg. of coal equivalent) 1964	Gross Domestic Product (GDP) (US $) 1958	1963	Sched. Pass. Traffic of Region's Airlines per $100 GDP (pass-km) 1958	1964/63
North America [3/]	280	474	8,622	2,308	2,764	12.2	14.1
Europe	40	90	2,985	768	1,062	5.2	8.5
Asia	2.9	9	304	101	141	2.9	6.4
Latin America [3/]	31	39	745	322	345	9.6	11.3
Oceania	184	316	3,349	1,015	1,301	18.1	24.3
Africa	7.5	14	306	105	(116) [4/]	7.1	12.1
Middle East	17	36	339	206	(227) [4/]	8.2	15.8
World [2/]	41	74	1,542	472	584	8.7	12.7

7. If allowance is made for the differing levels of economic development the radical variations in regional airline activity largely disappear. Thus in the last two columns of Table 2 are shown the volumes of air passenger transport sold by the airlines of each region for each $100 of gross domestic product. Measured in this way the airline activity of Africa does not differ greatly from that of other regions except Asia which is significantly lower and Oceania which shows a significantly higher level, probably because of the many over-water routes which favour air transport development. It also may be observed from these figures that the relative position of Africa has not changed greatly since 1958.

4/ Estimated on basis of average annual rate of growth.

African services of non-African carriers

8. As has been stated, the foregoing comparisons have been based on the region of airline registration. The figures comprise all of the scheduled passenger traffic of the airlines of each region, that is the domestic traffic within each State, the regional traffic between the States of the region and intercontinental traffic between regions. They provide a useful basis for comparing the development of the airlines in the various regions, but do not show the total volume of scheduled air passenger transport used by either the residents of a region or all travellers, resident and non-resident, within, to and from a region.

9. To arrive at the former figure for Africa, for example, it would be necessary to adjust the figure quoted by subtracting the international transport sold by African carriers to residents of other regions and adding the international transport sold to African residents by the carriers of other regions. Air transport is an item of international trade under which some regions have a net surplus, others a deficit. With the data available, it is not possible to calculate the balance for Africa. From the information that is available, however, it seems probable that Africa as a whole, because of the history of air transport development under the colonial regimes, is still a net importer of international air transport, on balance using more of the foreign product than is sold by its own airlines, as is suggested by the following table:-

Table 3

Numbers of airlines providing direct scheduled passenger services between Africa and other regions, August 1966

	African airlines to other regions	Airlines of other regions to Africa
Europe (incl. USSR)	17 (from 28 States)	23 (from 21 States)
Middle East	7 (from 9 States)	8 (from 8 States)
Asia [5]	3 (from 5 States)	4 (from 4 States)
North America [3]	2 (from 12 States)	2 (from 1 State)
Latin America [3]	-	2 (from 2 States)
Oceania	1 (from 1 State)	1 (from 1 State)

10. In August 1966 there were 40 non-African airlines [6] (including all of the 12 largest international carriers [7]) from 37 States providing services between all other regions and Africa. Against this there were 19 African airlines (some of them quite small) from 30 States, linking Africa to other regions [8]. An indication of the distribution of these services between the various regions is shown in Table 3. From this it can be seen that by far the largest number of links are between Africa and Europe, a region that would appear to be a net exporter of international air transport services.

5/ Excluding Peoples' Republic of China.

6/ See Appendix 6.

7/ These carriers are: PAA, BOAC, Air France, TWA, KLM, DLH, Alitalia, SAS, Qantas, Swissair, JAL, and BEA.

8/ See Appendix 7.

The discrepancies between the numbers of States and airlines in Table 3 result from there being in a few cases more than one airline from a single State while on the other hand three airlines (Air Afrique, EAAC and SAS) represent between them seventeen States. From these facts no exact conclusions can be deduced concerning Africa's balance of trade in air transport. It should be borne in mind, however, that a number of the non-African carriers provide, not only inter-regional links with Africa, but also regional services between African States on the basis of "fifth freedom" traffic rights.

11. We have referred to the volume of passenger traffic carried by African airlines (which is known) and to Africa's balance of trade in international air transport (which cannot be calculated from the data available), but the most significant figure is the total volume of passenger transport to, from and within Africa sold to residents and non-residents by African and non-African airlines. This is the total quantity of air travel performed relevant to the economic and social life of Africa. In 1965 the airlines of the African States members of ICAO performed 4,654 million passenger-kilometres and those of African States not members of ICAO 117 million making a total of 4 771 million passenger-kilometres -- 3 606 million on international and 1,165 on domestic services.

12. To obtain the overall total volume of scheduled air passenger transport it is necessary to add to the African airline total of 4,771 million passenger-kilometres the total traffic carried by non-African airlines on routes to, from and within Africa. This latter figure has been estimated from available traffic flow data. Deductions have been made to take account of intercontinental traffic in transit through Africa on journeys between two other regions. However, the figures, which are given in Table 4, must be regarded as simply indicating orders of magnitude with a margin of error of plus or minus 15 per cent. The estimate arrived at is that the non-African airlines carried a volume of scheduled passenger traffic of the order of 4,210 million passenger-kilometres in 1965. A very large part of this -- 89 per cent -- is attributed to European carriers; 5 and 4 per cent respectively to the carriers of North America and the Middle East; 9/ and the remaining 2 per cent to those of Oceania, Asia, and Latin America.

Table 4

Scheduled Passenger Traffic of Non-African Airlines on International Routes to, from and within Africa

Approximate Estimate - 1965

Region of Airline Registry	Passenger-kilometres Performed (millions)	Per cent of Total
Europe (incl. USSR)	3,740	89%
North America	200	5%
Middle East	180	4%
Asia and Oceania	80	2%
Latin America	10	-
Total	4,210	100%

9/ The airlines of the Middle East carried considerably more passengers than those of North America, but over a much shorter distance.

13. As shown in Table 5, the total volume of scheduled passenger traffic carried on routes to, from and within Africa in 1965 by African and non-African airlines together was of the order of 8,981 million passenger-kilometres. Of this figure, about 53 per cent was carried by the African airlines and 47 per cent by the non-African, but on the international intra-African and intercontinental services the non-African airlines carried somewhat more traffic than the African. The total volume of 8,981 million scheduled passenger-kilometres, however, still only amounted to about 4.5 per cent of the 1965 total for all airlines of all ICAO States of 198,000 million.

Table 5

Total Volume of Scheduled Passenger Traffic Carried On Routes to, from and within Africa in 1965

Airlines	Passenger-kilometres (millions)		Percentage Distribution
African airlines			
Domestic services	1,165		13%
International services	3,606		40%
Total		4,771	53%
Non-African airlines			
European	3,740		42%
Other regions	470		5%
Total		4,210	47%
Grand total		8,981	100%

14. Thus, however one makes the calculation, the total quantity of scheduled air passenger transport used for African purposes is low in relation to the size and population of the continent, but is at a level consistent with the present stage of economic development. This situation is not alleviated by the development of surface passenger transport. Because of the distances generally involved, only a small proportion of the total passenger demand can be met by inter-regional and coastal shipping services, and international rail and road facilities within Africa are for the most part less developed than air services. What has been written thus far has related to the region of Africa as a whole and it is, of course, true that within this whole the development of transport has not been homogeneous. The fact remains, however, that in general the present volume of passenger travel by all modes is consistent with, and clearly linked to, a relatively low level of economic development.

Importance of accelerating growth of air passenger transport

15. Africa is now referred to as a "developing" region. Until success has been achieved the chief objective of the majority of African States will continue to be full economic and social development or, in other words, the raising of the general standard of economic life to the level of the so-called "developed" regions of Europe and North America. To accomplish this, the rates of economic growth that may be satisfactory in the developed regions have to be consistently exceeded. One of the obstacles to growth is the existence of a transport system that in places is almost non-existent and in general is adequate only for a relatively low level of economic development. Such a system does

not permit the high degree of mobility of men, goods and services that is required for full economic and social development. An acceleration in the rate of growth of this transport system is essential and will contribute to the accelerated growth of the economy as a whole.

16. Considering the problems of African transport it is clear that air services are far more flexible and susceptible to rapid development than are the main alternatives, rail, road and river. The construction or expansion of surface transport systems is generally inhibited by such factors as the very large capital outlays required, difficult conditions of topography and climate frequently encountered in Africa, and the problems of maintaining and supporting surface networks in areas of low population density. By contrast airports, very simple ones if necessary, can be constructed, and air services inaugurated or extended, rapidly and at relatively low cost wherever the need occurs, almost without reference to topography, climate, or population density. It follows that there will, in most cases, be a far more rapid return on investment in air transport than in surface systems, and that air services, unlike the surface alternatives, can be provided as the need is defined.

17. Under these circumstances air transport offers for many areas of Africa the best immediate solution to the transportation problem. By virtue of the fact that air services can be introduced or expanded rapidly wherever there is need this mode of transport can be used as a tool in economic development. Areas can be surveyed and opened up and new industries can be constructed and supplied by air; and systems of transport that are now irrational and uncoordinated as a result of colonial patterns of development can, by the use of air links, be given a shape better designed to meet the public need and to foster economic development. Over the next few decades, therefore, air transport should play a much more important role, relative to surface transport, in Africa than it has in such "developed" regions as Europe and North America. The airlines, in other words, should be called upon to satisfy an abnormally large share of the total need for transport both of passengers and of goods, a fact that the planners both of transport and of general economic development must take fully into account.

18. Air transport cannot, however, play its potential role in African affairs to the full unless the latent need for this service can be translated into active and growing demand. The crux of the problem therefore is the stimulation of demand. This demand for air passenger transport to, from and within Africa can be divided into two principal categories. First, and by far the most important at present for the majority of African States, is the demand for business travel, that is to say for travel in connection with public or private business where the fare is paid for by governments or business enterprises or charged to operating expenses. The second category is the demand for personal travel, primarily in connection with tourism, where the fare is paid for by the individual traveller.

19. In general, business as opposed to personal demand tends to be relatively inelastic in its response to changes in the conditions of air services. Since the need to travel is objective and compelling demand will, to a considerable extent, continue regardless of any but major changes in fares, although it may be affected by frequencies. Consequently the rate of growth of business traffic is determined not so much by the conditions of air transport as by the development of economic and political activity generally. The demand for personal or tourist travel, on the other hand, tends to be far more elastic. The motivation is subjective and the individual's travel plans will be directly affected by such air transport factors as fare changes and availability of services.

Demand as a whole, but particularly personal demand, will of course also be strongly affected by a variety of local conditions including the availability of suitable accommodation and other amenities, cost of living and social conditions.

Air tourist demand the key to accelerated growth

20. It thus appears that if an attempt is to be made to accelerate the rate of growth of African air passenger travel, attention will have to be focussed primarily on the problems of fostering air tourism. 10/ At the present time, although a very few African countries such as Tunisia and the United Arab Republic in the North and to some extent Kenya in the East have had considerable success in developing their tourist industries, tourism to the region as a whole is in an early stage of development as indicated in Table 6. This lack of tourist development is naturally reflected in the tourist share of African air passenger traffic. Statistics that would permit a precise breakdown are not available, but evidence suggests that, whereas on some routes such as the North Atlantic, personal travel (predominantly tourism) accounts for about 75 per cento f all air traffic, for Africa personal travel accounts for perhaps as little as 10 per cent and business travel for about 90 per cent of the total.

Table 6

Share of International Tourist Receipts by Region 11/

Region	1950		1964		Average annual rate of increase	1964 Receipts per Capita
	(millions) (US $)	(%)	(millions) (US $)	(%)	(%)	(US $)
Europe	890	42.4	6,310	62.2	15.0	14.30
North America	668	31.8	1,707	16.8	6.9	8.10
Latin America	392	18.7	1,162	11.5	8.1	4.90
Asia and Oceania	36	1.7	475	4.5	20.2	.45
Africa	88	4.2	245	2.5	7.6	.80
Middle East	26	1.2	245	2.5	17.4	3.75
Total	2,100	100.0	10,144	100.0	11.7	4.40

21. Africa as a whole in 1964 accounted for only $245,000,000 or 2.5 per cent of all international tourist receipts. This amounts to about 80 cents per capita compared to 45 cents for Asia and Oceania, $3.75 for the Middle East, $5 for Latin America, $8 for North America and $14 for Europe. The average annual rate of increase for Africa declined from 7.6 per cent for the period 1950 - 1964 to 6.1 per cent for the period 1959 - 1964. The annual average for the world as a whole, on the other hand continued at just under 12 per cent over the shorter period. Thus with a 2.5 per cent share of all tourist receipts and an average annual growth rate about half that of the world there is scope for a radical increase in African tourism and since tourists visiting Africa will move mainly by air there is similarly scope for increasing African air tourist traffic to a point where it accounts for considerably more than the present 10 per cent of all air passenger traffic.

10/ African governments should not however lose sight of the economic benefit that can be derived from international conferences and meetings of all kinds in those locations where adequate hotel and related facilities are available.

11/ Source: Pilot Survey of Africa's Tourism Prospects, IUOTO, Geneva, Nov. 1966, page 11.

22. To achieve this expansion, however, conditions must be created that will make it possible to take advantage of the elasticity of tourist demand. These conditions, which are dealt with in detail elsewhere in this study, are, of course, not all within the control of air transport authorities. On the air transport side the most important are fares which should be kept at the lowest possible level and should include "creative" fares specially designed for the stimulation of air tourist traffic (see Section V); the introduction of new services where necessary and increased frequencies on existing services where possible. To be successfully realized these conditions must be accompanied by increased aircraft utilization at economic load factors and rationalization of airline route patterns leading to lower operating costs. Outside the sphere of air transport the most important pre-conditions for the expansion of air tourism are the availability of suitable tourist accommodation and related services and amenities; the promotion abroad of Africa as a tourist destination; and such domestic social conditions as an acceptable level of prices for tourists, political stability, and a welcoming attitude towards tourists on the part of the local population.

Development of freight and mail traffic

23. This study is concerned with the development of air passenger traffic, but for this development, it is essential to develop air freight and air mail traffic as complementary loads. Air transport always needs good revenue from all three types of traffic to operate economically without government subsidy. This is true even of routes with high passenger volume. On the North Atlantic for example, the route with the largest passenger revenue of any in the world, the removal of freight and mail revenue would cause most of the scheduled services to operate at a loss. It is even more true of routes of smaller passenger volume, such as virtually all the routes within the African continent.

24. Air freight traffic needs to be developed chiefly by energetic salesmanship on the part of the airlines, but governments can do much to encourage and support their airlines' efforts if only by removing restrictive regulations and improving facilitation. Governments also need to keep in touch with regional and sub-regional plans for all forms of transportation so as to serve the economic development generally. Air transport needs to know the future transport requirements of the new industries, and must also keep the economic planners informed of what it can do to help them.

25. This requires government and airline study in each country, as indicated in Recommendation I(c) of the Addis Ababa Conference of 1964. But a basic study of air freight development in the whole region such as that carried out by ICAO for the Latin American region (Doc 8487-AT/720) is needed and African States might request such a study pursuant to Assembly Resolution A14-34.

26. Air mail has always been one of the main economic supports of air services in early stages of development, and air mail revenue is still the balancing factor between an operating profit and an operating loss on many air services throughout the world. The development of air mail is largely a matter for postal administrations, but aviation administrations can advise on various aspects of air mail transportation, particularly in connection with rates. They need to give the matter careful consideration in consultation with their airlines and postal authorities to ensure that postal policies take into account the economics of air transport as well as those of the mail service. This is not simply a question of high mail rates, since on some routes, low rates may generate more revenue, particularly from air parcel post. The development of air mail both within, and to and from, Africa might be included in the freight study mentioned above.

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II - DEVELOPMENT OF SCHEDULED PASSENGER SERVICES AND TRAFFIC TO AND WITHIN AFRICA

General observations

1. The approach to the study of the flow of air passengers to and within Africa followed here has been to collate the information available on all non-stop flight stages with one or both terminals in Africa, and to present the results in both tabular and graphic form. The table at Appendix 14 contains such data for the year 1965, which is the latest one on which sufficient reliable information is available, and for the year 1960 which is remote enough in the past to bring out by comparison some interesting trends. Since the data is classified by flight stages and presented in the alphabetical order of stages' terminals, Appendix 14 constitutes a complete index of passenger traffic flow on all stages of international scheduled air services operated to, from and within Africa. Thus it may not only serve the purpose of the present study but, bearing in mind the inevitable limitations of such a statistical work, may be used as reference material in future research on individual African routes or route segments. Map 1 reproduces in graphic form the data tabulated at Appendix 14 for the year 1965 and gives a comprehensive view of the present state of international air passenger traffic flow in Africa. Although the situation is continually changing and it would be hazardous to draw final conclusions from a fluctuating picture, an examination of this map in conjunction with the table at Appendix 14 provides a broad indication of the main features of this traffic flow.

2. The basic observations made in the 1964 "Study of Air Transport in Africa" (Doc 8419-AT/718) with respect to the pattern of routes and the capacity offered are confirmed by this examination. The bulk of intercontinental passenger traffic moves on direct routes to and from Europe. Within Africa, the northern, western, eastern and southern sub-regions are relatively isolated from each other, and within each sub-region the level of international traffic is not high. The flight frequencies and the load factors are generally low. However, a comparative analysis of the data now compiled for 1960 and 1965 reveals extensive changes over this five-year period and some definite improvements. International air services are penetrating more deeply into the African market and connections have improved, particularly between the various sub-regions. After numerous adjustments, the intra-African traffic has tended to concentrate along certain main channels on which simultaneously the capacity offered, the flight frequencies and the load factors have increased. In spite of persistent deficiencies, a better service is available to the travelling public on a larger portion of the African air network and it seems probable that this improvement will continue as demand grows.

Traffic flow on intercontinental routes

3. The traffic flow on non-stop scheduled flight stages between African airports and points outside Africa, is estimated approximately from the data in Appendix 14 to have been about 2,500,000 passengers in both directions in 1965 as compared to approximately 2,000,000 in 1960.[1/] Table 1 indicates the distribution of such intercontinental traffic

1/ These figures exclude an estimated number of passengers who were in direct transit through Africa between Europe and Latin America (via Dakar, Monrovia or Sal Island) and between Europe and Middle East/Asia or Oceania (via Cairo).

by region according to the nearest landing point outside Africa [2] and the average annual rates of increase from 1960 to 1965. These estimates are approximate and are intended only to show orders of magnitude.

Table 1

Distribution of Intercontinental Scheduled Passengers

(thousands)

Between Africa and	1960	Per cent of total	1965	Per cent of total	Average annual rates of increase: Gross	Average annual rates of increase: Adjusted [3]
Europe	1,800	87.4%	2,100	82.2%	+ 3.1%	+ 10.5%
Middle East/Asia [4]	250	12.2%	430	16.7%	+ 11.4%	+ 11.4%
North America	3	0.1%	14	0.6%	+ 36.0%	+ 36.0%
Oceania	4	0.2%	10	0.4%	+ 20.1%	+ 20.1%
Latin America	2	0.1%	3	0.1%	+ 10.0%	+ 10.0%
Total	2,059	100.0%	2,557	100.0%	+ 4.5%	+ 11.0%

4. Table 1 shows that passenger traffic between Africa and Europe constitutes the major part of the intercontinental traffic for the African region: nearly nine-tenths in 1960 and more than four-fifths in 1965. The average annual rates of increase are not comparable between regions because of the differences in quantity, but it is interesting to note that the increase in traffic between Africa and North America, though small in absolute terms, was at an average annual rate of 36 per cent. The annual average for all intercontinental traffic, after appropriate adjustments was about 11 per cent.

Points served

5. The number of points served in Africa by international scheduled services was practically the same in 1965 as in 1960 (see Appendix 14). Taking account of political changes, it may be observed that international services have been discontinued at 13 of the 122 airports served in 1960 and have been introduced at 15 airports which were served only by domestic services in 1960. Although most of the airports at which

2/ Some traffic shown as coming from, or going to, Europe or Middle East/Asia may actually have proceeded to/or from North America or Oceania on the same aircraft in direct transit through the former regions.

3/ The average annual rates of increase shown in this column have been calculated after deduction of the numbers of passengers estimated to have travelled between Algeria and Europe. These numbers, abnormally high in the years 1960 - 1962 (about 800,000 in 1960 against approximately 450,000 in 1965), distorted the growth pattern of the intercontinental traffic for the African Region.

4/ Excluding the Peoples' Republic of China.

these changes have occurred are relatively small and were used annually by less than 10,000 passengers embarking or in direct transit on international services, they represent almost one-fifth of the airports covered by this study. This is indicative of the general re-arrangement which the African international network has undergone over the last five years.

6. Another indication of this re-arrangement is the decline in total international traffic handled at 35 of the 109 airports which were served by international services throughout this period. With the exception of 4 airports in Algeria where such deterioration was due to an abnormally heavy demand in the years 1960 - 1962 followed by a downward adjustment in 1963 - 1965, most of the airports where a decline has been observed were used in 1960 as mid-way stops on trunk routes and are now overflown by modern long-range aircraft. This change in the pattern of international traffic is common to all regions of the world, but is more apparent in Africa because the increase in local traffic has not yet offset the decline in transit traffic. It has affected particularly certain airports located along a central band across Africa such as Bangui, Fort Lamy, Kano, Khartoum, Niamey or Sal Island. On the other hand, as was the case elsewhere the advent of modern long-range aircraft has opened up new gateways for the penetration of international traffic into the continent. To 33 African airports that were already linked by direct non-stop services to Europe in 1960, 12 were added by 1965, some of them such as Conakry, Entebbe, Monrovia and Nairobi with frequencies of two to ten flights per week and a total capacity of 25,000 to 100,000 seats available per year. Thus, as might be expected, technological changes have modified to a certain extent the general pattern of international air routes to and within Africa.

General pattern of routes

7. To a greater extent perhaps, political and economic developments in Africa between 1960 and 1965 have changed the pattern by bringing about the inauguration of new international air routes or causing the elimination or displacement of old ones. Although the total number of direct flight stages within Africa has not increased by much more than 10 per cent from 1960 to 1965, 67 stages representing nearly one-third of the 229 stages operated in 1960 have been discontinued whereas 94 new stages have been introduced since 1960. Thus more than one-third of the 256 non-stop connections operated within Africa in 1965 were less than five years old. Such figures indicate again the extensive re-design to which the African network was subjected during this period and deserve more detailed examination.

8. An appreciable proportion of the 67 stages on which international operations ceased after 1960 consisted in short flights over the borders or domestic flight stages leading to these borders and forming an integral part of an international service. It may be that in some cases the exchange of traffic rights between African States has become more difficult since they became independent. It is clear that insufficient demand was not the main cause for interruption since on nearly two-thirds of the stages discontinued operations had been performed with passenger load factors of 50 per cent or more, and load factors of less than 25 per cent were very rare. Break-even load factors can scarcely have been so high on these lines as to justify interruption of service and in fact most domestic portions of international services which have been discontinued continue to be operated but only as domestic services. In all these cases, the possibility might be explored of resuming international service under co-operative arrangements between the airlines of the countries concerned. It might be useful to undertake, perhaps at the level of each sub-region, case studies of the causes and remedial measures for the interruption of international service on trans-border routes.

9. An examination of intra-African stage lengths as classified in Table 2 does not provide a definite explanation of the changes which took place in the African network but indicates some interesting trends. As a result of the introduction of modern long-range aircraft on African routes, the number of stages of more than 3,000 km has increased proportionately more than others. The growing number of stages of less than 500 km as compared to those of 500 km to 1,000 km, may be attributed to the fact that some services from outside Africa have been broken down into multiple short stages to serve points which were overflown in 1960 on the original routes. This is a sign of a deeper penetration of international air services into the African market.

Table 2

Length of Intra-African Non-Stop Flight Stages

Stage length	Number of Flight Stages: Operated in 1960	Changes after 1960: Discontinued	Changes after 1960: Introduced	Operated in 1965	Percentage increase 1960 to 1965
Less than 500 km	94	17	29	106	+ 12%
500 km - 999 km	65	22	22	65	0
1,000 km - 2,999 km	58	20	28	66	+ 14%
3,000 km or more	12	8	15	19	+ 58%
Total	229	67	94	256	+ 12%

Traffic density

10. An analysis of the number of passengers carried annually on intra-African stages shows an increasing concentration of the traffic. From Table 3, it may be observed that the number of stages on which less than 10,000 passengers were carried annually was about the same in 1965 as in 1960, whereas the stages with more than 10,000 passengers increased from 48 to 69 or about 44 per cent. A more significant fact has been the decline in the share of the total intra-African traffic carried on stages with less than 10,000 passengers per year while the proportion of traffic carried on higher density stages has substantially increased, 43 per cent of the traffic now moving on the 23 stages with over 25,000 passengers per year.

Table 3

Traffic Density on Intra-African Non-Stop Flight Stages

Annual traffic carried on each stage	Number of stages 1960	Number of stages 1965	(Percentage change)	Share of traffic in each group 1960	Share of traffic in each group 1965
Less than 10,000 passengers	181	187	+ 3%	39%	26%
10,000 to 24,999 "	33	46	+ 39%	28%	31%
25,000 to 49,999 "	12	19	+ 58%	22%	27%
50,000 passengers or more	3	4	+ 33%	11%	16%
Total	229	256	+ 12%	100%	100%

11. As a result of the political and economic developments in Africa between 1960 and 1965, the airlines operating in Africa have introduced new itineraries or modified existing ones. An examination of the data contained in Appendix 14 reveals these modifications of some of the main international passenger traffic channels:

(i) In the northern sub-region the channel from Casablanca to Tunis now by-passes Oran and Annaba but stretches through Tripoli and Benghazi to Cairo, with particularly high frequencies and large capacity offered on this new part of the channel.

(ii) In the western sub-region, instead of two distinct channels, Dakar-Abidjan-Lome-Cotonou-Niamey on the one hand, and Freetown-Accra-Lagos-Kano on the other, there is now a single high-density traffic channel, Dakar-Conakry-Freetown-Monrovia-Abidjan-Accra-Lagos-Douala, with eleven airlines now offering on the Accra-Lagos route segment, for instance, up to 30 round-trips per week and more than 200,000 passenger-seats per year.

(iii) In the eastern sub-region, the displacement of main channels is more complex to analyse because of their relative multiplicity. However, the great concentration of airlines, flights and seats available which could be observed in 1960 on the Nairobi-Entebbe-Khartoum-Cairo route has almost entirely switched in 1965 to a new channel linking Nairobi and Cairo through Addis Ababa and Asmara.

The significance of these changes may not be as great, however, as the traffic flow figures contained in Appendix 14 would seem to indicate. A more realistic picture might be drawn by differentiating between the various categories of passengers carried on these main traffic channels and determining their origin and destination. Such an analysis might help considerably in the future planning of routes and itineraries, but the collection of origin and destination statistics would be essential for this work.

Connections

12. As noted earlier, the bulk of intra-African traffic tends to move within rather than between the various sub-regions. Map 1 shows relatively few transcontinental connections and it is only by comparing in Appendix 14 the stages listed for 1960 with those listed for 1965, that one may realize how much the situation has improved. The number of non-stop transcontinental flight stages as well as the frequencies and the capacity offered on these stages have more than tripled in five years. Of the very few transcontinental connections that were operated in 1960 (the best of which offered two round-trips per week) only two have been discontinued whereas nearly twenty new ones have been inaugurated since that year, some of them such as Benghazi-Nairobi; Cairo-Kano; Dakar-Rabat; and Khartoum-Lagos with frequencies of at least three round-trips per week. Information from airline timetables and guides indicates that the situation has continued to improve in 1966. However, particularly as regards smaller airports, the quickest way to travel from one sub-region to another in Africa is often to go through Europe. In this respect again, the collection and study of origin and destination statistics would be valuable as this could lead to a more rational planning of the route network and to the establishment of the necessary additional connections across the African continent.

Flight frequencies

13. The 1964 study on "Air Transport in Africa" referred to previously indicated that frequencies were predominantly low. This is confirmed by the present analysis of traffic flow and by Table 4 in which the intra-African non-stop flight stages are classified according to the number of round-trips operated weekly on such stages. An interesting

Table 4

Frequencies Offered on the Intra-African Network

No. of round-trips per week	1960		1965	
	No. of stages	Percentage of network	No. of stages	Percentage of network
1 or less	98	(43%)	135	(53%)
2 to 5	100	(44%)	92	(36%)
6 or more	31	(13%)	29	(11%)
Total	229	(100%)	256	(100%)

feature brought out by this comparison between 1960 and 1965 is that the stages with a weekly frequency of one round-trip or less have increased considerably while those on which two round-trips or more are operated each week have decreased. The proliferation of the former stems from the opening of many new connections with initially low frequencies, whereas the decrease of the latter may be attributed to the introduction of large capacity aircraft on certain routes where the demand was not high enough to justify the maintenance of previous frequencies.

14. A more striking phenomenon is that one-third of the intra-African stages which remained in operation throughout the period saw a reduction in frequencies accompanied, in the majority of cases, by a decrease in the total capacity offered and a simultaneous decline in load factors. A definite explanation, however, cannot be offered without individual case studies and statistics on the origin and destination of passengers would seem to be essential for this purpose.

Capacity, traffic and load factors

15. As a result of the reductions in frequencies just mentioned, the capacity has not automatically increased throughout the African network with the advent of faster and larger aircraft during the 1960 - 1965 period. It has increased only on about half of the flight stages operated, most of which now form part of the main traffic channels described previously under the general pattern of routes. These main channels benefited more than other parts of the African network from the modernization of air transport equipment in that the capacities available on these channels have increased as have the number of airlines operating and the frequencies generally have not declined.

16. The actual volume of passenger traffic carried and capacity offered; the distribution of total load between passengers, freight and mail; the load factors for passengers and for total load by weight; and other related data; are given for all of the scheduled airlines of all African States[5/] for the years 1960 to 1965 in Appendix 8A (covering total international and domestic operations) and Appendix 8B (covering international operations only).

5/ Including non-Contracting States of ICAO.

17. From this material figures are presented in Table 5 to show the relationship between passenger capacity, traffic and load factors for all African scheduled airlines on their international services from 1960 to 1966. It appears that for these carriers as a whole passenger capacity, measured in seat-kilometres available, increased much more rapidly than did traffic carried in the years 1961 and 1962. As a result the average load factor fell from 57 per cent in 1960 to 49 per cent in 1962. Since 1962 passenger capacity and traffic have increased at very much the same rates so that the load factor has remained constant at 50 per cent.

Table 5

Annual Passenger Capacity and Traffic Increases and Load Factors 1960 - 1966
All African Airlines' Scheduled International Passenger Operations

	Annual Percentage Increase over previous year		
	Seat-kilometres available	Passenger-kilometres performed	Passenger Load Factor
1960	23%	29%	57%
1961	41%	27%	51%
1962	42%	35%	49%
1963	43%	45%	50%
1964	13%	13%	50%
1965	5%	5%	50%
1966 6/	18%	19%	50%

18. In Table 6 are presented, for all African airlines, average figures to show the distribution of traffic between the three categories -- passengers, freight and mail -- for the years 1960 and 1965. From this material it may be seen that the proportion of the total traffic volume occupied by passengers declined somewhat between 1960 and 1965 -- from 80 to 76 per cent on all operations and from 78 to 75 per cent on international operations. In the same period freight increased from 15 to 20 per cent of the total on all services and from 17 to 21 per cent on international services. This development follows the general pattern common to most regions where freight has been increasing more rapidly than passenger traffic. The explanation is to be found partly in an increasing awareness of the advantages of moving freight by air and more aggressive promotion of this form of transport, and partly in the greater relative capacity available for freight in large jet aircraft as compared with piston-engine equipment.

Table 6

Average Distribution of Traffic by Weight, 1960 and 1965
All African Airlines' Scheduled Services

	Total Operations		International Operations	
	1960	1965	1960	1965
Passengers	80%	76%	78%	75%
Freight	15%	20%	17%	21%
Mail	5%	4%	5%	4%

6/ Preliminary estimates for 1966.

19. Load factors for passengers and for total load by weight are given in Table 7 for the years 1960 and 1965 with preliminary estimates for 1966 and it may be seen that in this respect also the African airlines have roughly followed the general global pattern. That is to say their load factors have fallen, but their decline has extended over a longer period than for the airlines of all ICAO States. Between 1960 and 1965 the average passenger load factors for all African airlines fell 7 percentage points -- from 59 to 52 per cent on all services, and from 57 to 50 per cent on international services only. For total load by weight the load factor fell slightly more over the same period -- from 64 to 53 per cent for all services, and from 61 to 52 per cent for international services. Furthermore, preliminary estimates indicate that this decline continued through 1966 -- both passenger and weight load factors falling to 51 per cent on all services, and to 50 per cent on international services.

20. Comparison shows that the average load factors for the airlines of all ICAO States reached a similar low point in 1963, but have been rising steadily since then, the preliminary estimates for 1966 being, for passengers 58 per cent on all services and 57 on international services, and for total load 53 per cent on all services and 55 on international services. Finally it has been estimated that in 1965 the passenger load factor for all of the international services operated by non-African airlines to, from and within Africa was about 55 per cent, which may be compared with the 50 per cent achieved by the African airlines on their international passenger services.

21. The explanation for the general decline in load factors, both for passenger traffic and for all traffic by weight, is to be found largely in the re-equipment with large, fast jet aircraft undertaken by most of the world's scheduled airlines beginning in 1959. The reason that the decline has extended over a longer period for the African airlines as a whole as compared with the airlines of all ICAO States is probably that the re-equipment has taken place more slowly and that demand on routes to, from and within Africa has, as shown in Table 5, taken longer to catch up with the abnormal increase in capacity. It would appear probable, however, that load factors will soon begin to rise for the African airlines as they have for those of the world as a whole since 1963.

Table 7

Average Load Factors, 1960, 1965 and 1966 6/
African and All ICAO Airlines' Scheduled Services

	Total Operations			International Operations		
	1960	1965	1966	1960	1965	1966
African Airlines						
Passengers	59%	52%	51%	57%	50%	50%
Total weight	64%	53%	51%	61%	52%	50%
All ICAO Airlines						
Passengers	59%	56%	58%	59%	55%	57%
Total weight	55%	52%	53%	58%	54%	55%

22. The actual increase from year to year of the scheduled passenger traffic of all African airlines from 1960 to 1966 is shown in Table 8 for their international, domestic and total operations. From this it appears that the total volume of scheduled

passenger traffic rose from 2,391 million passenger-kilometres in 1960 to 5,438 million in 1966. The average annual rate of growth for this traffic over this period was about 15 per cent, but it may be observed that this rate declined somewhat for the last three years of the period. Since 1963, by which time 33 of the present 39 African States had achieved independance, the annual growth rate has been about 11.5 per cent, which, it may be noted, is very close to the 11 per cent annual rate of increase in passengers carried by African and non-African airlines on all intercontinental services to and from Africa, shown in Table 1 of this Section.

Table 8

All African Airlines' Scheduled Passenger Traffic 1960 - 1966

(millions of passenger-kilometres)

Year	Total	% change	International	% change	Domestic	% change
1960	2,391	-	1,205	-	1,186	-
1961	2,676	+ 11.9	1,536	+ 27.5	1,140	- 3.9
1962	3,273	+ 22.3	2,079	+ 35.4	1,194	+ 4.7
1963	3,918	+ 19.7	3,016	+ 45.1	902	- 24.4
1964	4,447	+ 13.5	3,424	+ 13.5	1,023	+ 13.4
1965	4,771	+ 7.3	3,606	+ 5.3	1,165	+ 13.9
1966 6/	5,438	+ 14.0	4,096	+ 13.6	1,342	+ 15.1

23. When, as in Table 8, these scheduled passenger traffic statistics are broken down between the international and domestic services of the African airlines, the readjustment that has taken place as a result of political changes between 1960 and 1966 is clearly seen. Thus traffic on the international services multiplied by nearly three and a half while on domestic services it remained at almost the same level. This relationship is illustrated in Chart 1 and it may be seen there that the readjustment appears to have been more or less completed by 1963, since when international and domestic traffic have increased in roughly parallel fashion. In 1960, international passenger traffic represented about 50 per cent of the total whereas from 1963 to 1966, it was about 75 per cent.

24. Individual African airlines have, of course, followed diverse patterns of development as may be seen from the figures in Appendices 8A and B. To illustrate this, the total passenger traffic carried on both international and domestic scheduled services by the 13 largest African carriers has been plotted on Chart 2 for the years 1960 to 1966. From this, it may be seen that of these 13, one -- Air Algérie -- has shown a considerable decline; three -- Air Afrique, Air Congo, and Air Madagascar -- have grown rapidly; and the other nine -- South African, United Arab, East African, Royal Air Maroc, Ethiopian, Nigeria Airways, Ghana Airways, Tunis Air and Sudanair -- have grown at approximately the same rates.

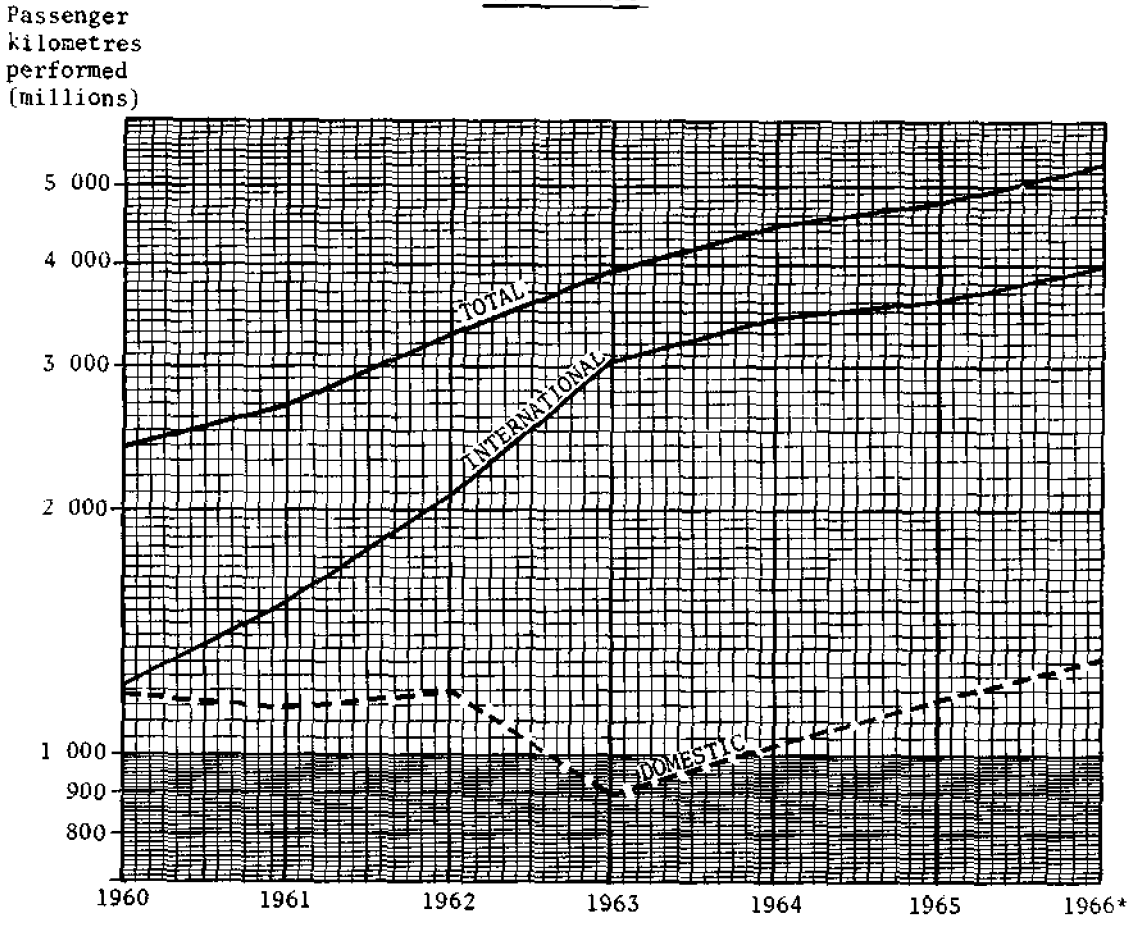
25. As was mentioned in Section I (paragraphs 12 and 13) available statistics do not permit a detailed analysis to be made of capacity, traffic and load factors for the non-African airlines that operate on international routes to, from and within Africa. What has been written in paragraphs 1 to 15 of this Section II relates to the services provided by African and non-African carriers together, without distinction being made

CHART 1

DEVELOPMENT OF SCHEDULED PASSENGER TRAFFIC

ALL AFRICAN SCHEDULED AIRLINES

1960 - 1966*



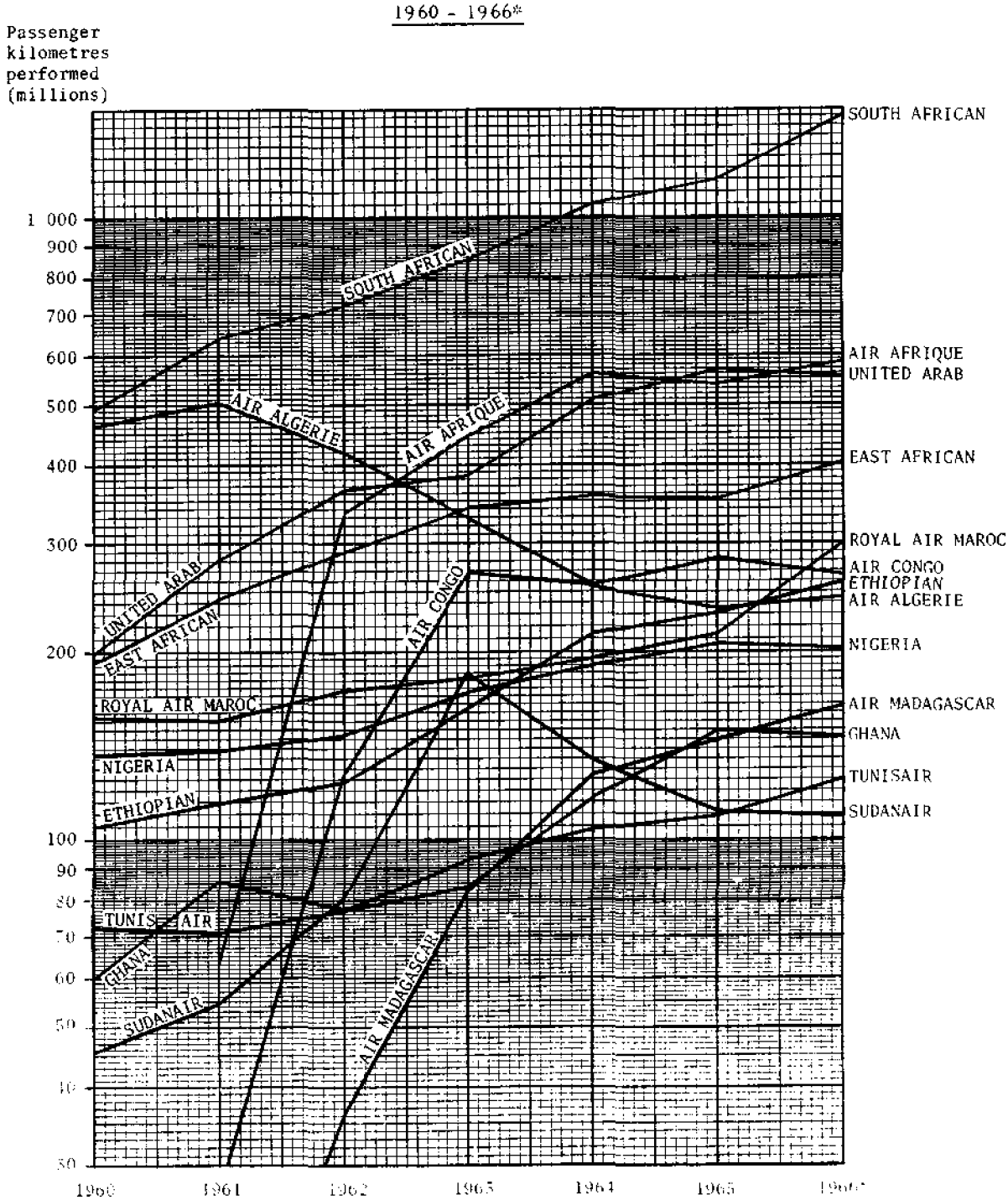
Notes: 1. For basic data see Appendix 8.
2. Drawn to logarithmic scale to show rates of change.
* Preliminary estimates for 1966.

CHART 2

DEVELOPMENT OF SCHEDULED PASSENGER TRAFFIC

13 AFRICAN AIRLINES - ALL SCHEDULED SERVICES

1960 - 1966*



Notes: 1. The airlines shown are those performing more than 100 million pass.-km. in 1966.
2. For basic data see Appendix 8 A.
3. Drawn to logarithmic scale to show rates of change.
* Preliminary estimates for 1966.

between the two groups. On the other hand, paragraphs 16 to 24, which analyse the growth of capacity and traffic in more precise terms, relate only to the African carriers. Regarding the operations of the non-African scheduled airlines it has been estimated (Section I, paragraph 12) that in 1965 their total scheduled international passenger traffic on all routes to, from and within Africa amounted to approximately 4,210 million passenger-kilometres. This figure was about 16 per cent in excess of the 3,606 million passenger-kilometres performed by the African carriers on their international routes, regional and intercontinental, in the same year. It has also been estimated that on the same services in the same year the non-African carriers achieved a 55 per cent passenger load factor, against 50 per cent for the African carriers (see paragraph 20 above).

26. Figures for other years relating to these operations of the non-African carriers are not available, but some rough estimates can be made on the basis of not unreasonable assumptions. First it should be recalled that about 89 per cent of this traffic was carried by European airlines (see Section I, paragraph 12) and with this should be considered the fact that in 1965 the load factor achieved by all European airlines on all of their scheduled international passenger services throughout the world was 55 per cent -- the same figure as recorded by the non-African airlines on their African services. Perhaps therefore it can be assumed that the African operations of the non-African scheduled airlines as a whole follow roughly the pattern of the European airlines on their international operations. That is to say, scheduled passenger traffic has increased from 1960 to 1965 at an average annual rate of just over 15 per cent (very slightly more than the total traffic of the African carriers). In the same period passenger load factors on international services of European airlines fell from 58 per cent in 1960 to 52 per cent in 1961 to 1963 and then rose to 55 per cent in 1964 and 1965. One conclusion that can be based on these assumptions is that in the period 1960 to 1965 the passenger traffic of the non-African carriers on their African routes has maintained a roughly constant relationship with the international passenger traffic of the African carriers -- approximately 15 per cent higher. Over the same period the load factors realized by the non-African carriers have also been somewhat higher.

States' views on present air services and future development

27. States were asked in the questionnaires shown in Appendix 2 whether they considered that the present inadequacies in African air services or restrictions in the granting of traffic rights constituted an obstacle to the accelerated development of air passenger travel. Among the 13 African States that replied there was general agreement that flight frequencies were often undesirably low, and that connections between the sub-regions and between Africa and other regions (except Europe and the Middle East) were inadequate, but only one State -- the United Arab Republic -- felt that this situation hindered development, the others being of the opinion that both frequencies and connections would automatically be increased as demand required. On the subject of traffic rights, however, 3 of these States -- Ethiopia, Mali and the United Arab Republic -- felt that there was an obstacle to development in the restrictions imposed by some States, particularly with regard to frequencies and capacity and the granting of fifth freedom rights. Among the 16 non-African States that replied there was generally little concern that present inadequacies in air services might hinder future development. However, 6 European States -- Italy, Netherlands, Sweden, Switzerland, United Kingdom and Yugoslavia -- did express the view, with varying degrees of force, that greater liberalism in the granting of traffic rights by African States was desirable or, some felt, essential for accelerated development.

III - GROUP CHARTER AND INCLUSIVE TOUR OPERATIONS

General description of group charter and inclusive tour operations

1. For Africa as for other regions the major part of international air passenger traffic is carried on scheduled services at regular first class, economy or excursion fares established through IATA. A smaller, but significant part of this traffic, however, is carried in other ways, in aircraft of both scheduled airlines and non-scheduled operators (the latter sometimes being referred to as air charter companies). The types of operation that are of particular interest in this study are group charter flights and inclusive tour air services, both of which are sold at prices well below the regular fares on scheduled services. Because of the increase in tourist traffic between Europe and North Africa it seems probable that these operations, and particularly the non-scheduled inclusive tour air services, will undergo a considerable development in the next few years.

2. Group charter flights may be performed with aircraft of the international scheduled airlines or of non-scheduled operators and are for the most part available only to so-called "affinity groups", that is, to members of some club, firm, or other organization that exists independently of the trip in question.

3. A definition of an inclusive tour, given in a study on this subject published by ICAO in 1962 1/, reads as follows:

> "An air inclusive tour consists of a round-trip performed in whole or in part by air for a comprehensive price which includes accommodation for the period the participants are away from the starting point of their journey. It may also provide for additional facilities and may be undertaken either on normal scheduled air services or on aircraft especially hired for the purpose. A tour is normally for a predetermined period and to an announced destination or destinations."

4. The fare for the air transport component of an inclusive tour is not offered to individual members of the public but to tour operators who combine it with the cost of the other components and offer the complete package for sale to the public. In the case of inclusive tour traffic carried on scheduled services (sometimes referred to as ITX traffic) the conditions of carriage are determined in detail through IATA and cover such matters as fare level and complete tour price (usually in relation to the round-trip or one-way economy fare), areas of origin and destination, duration, stop-over, and whether the fare is to be available for constructing individual or group tours. In the case of inclusive tours on non-scheduled services where the aircraft may be chartered to or owned by a tour operator, the conditions of service are determined by the governments of the countries of origin and destination and vary accordingly.

Availability of statistical information

5. The greatest difficulty in dealing with this general category of international air passenger transport arises from the lack of comprehensive and comparable statistical data. No statistics relevant to this subject are filed on a regular basis with

1/ Inclusive Tour Services, Doc 8244-AT/717, page 3.

ICAO, and the questionnaire addressed to all interested States in connection with this study produced a limited amount of information on charter flights and inclusive tour air services. As was pointed out in the Foreword, less than half of the States replied and of these only a few submitted data, frequently non-comparable, on this category of operations. A second questionnaire, sent to fifteen air charter companies, had equally poor results. Nevertheless some interesting impressions can be gained from the material that has been gathered from these and other sources, including a study published by the Institut du Transport Aérien. 2/

Non-scheduled passenger traffic: volume and importance

6. Concerning the volume of traffic carried, it is generally necessary to consider all non-scheduled operations together since the statistics available do not, except between North Africa and Europe (see paragraph 9 below) distinguish between the sub-divisions of these operations: group charter flights performed with aircraft of scheduled or non-scheduled operators, and non-scheduled inclusive tour air services. No traffic statistics are available for inclusive tour passengers carried on scheduled services. Non-scheduled traffic statistics are available for six African airports - three in the East, one in the West and two in the North. Table 1 shows the number of international passengers arriving at these airports by non-scheduled air services together with the percentage that these represent of passengers arriving at these airports by scheduled services.

Table 1

International Passenger Arrivals by Non-Scheduled Services

(in brackets () non-scheduled as a percentage of scheduled passengers)

	1962	1963	1964	1965
Nairobi	4,193 (5.2)	5,864 (6.6)	7,506 (7.8)	7,903 (7.2)
Entebbe	1,594 (10.7)	2,069 (14.8)	1,693 (17.2)	2,240 (13.2)
Dar-es-Salaam	576 (4.6)	149 (1.0)	661 (4.5)	1,033 (5.7)
Abidjan	2,543 (5.9)	2,001 (4.8)	4,817 (10.4)	5,040 (10.2)
Cairo	35,283 (11.1)	50,400 (14.1)	78,312 (17.0)	69,746 (14.3)
Tunis	4,339 (5.6)	7,821 (8.6)	11,178 (10.5)	25,167 (20.4)
	48,528 (8.9)	68,304 (11.2)	104,167 (14.1)	111,129 (13.8)

7. The sample is too small to serve as a basis for definite conclusions. Nevertheless these six airports are located in three different sub-regions of Africa and are probably sufficiently important and typical to indicate certain general trends As one would expect for non-scheduled traffic, growth is somewhat irregular, but for the centres included there is clearly an overall increase from year to year not only in the absolute number of international passengers arriving by non-scheduled service but

2/ Institut du Transport Aérien, Volume and Main Traffic Flows of Charter ITs in the Europe-Mediterranean Area, R. Peladan, 66/10-E, Paris, 1966.

also in the percentage that these figures represent of arrivals by scheduled service. The average annual rate of increase since 1962 has been 33.3 per cent and in relation to scheduled traffic, non-scheduled arrivals increased from about 9 per cent in 1962 to 11 in 1963 and 14 in 1964 and 1965. In other words non-scheduled passenger traffic appears, at least at these six airports, not only to be growing but to be increasing in importance in relation to scheduled traffic. For Africa as a whole, from all of the indications available, it seems probable that non-scheduled passenger traffic now represents about 8 per cent of international scheduled traffic, perhaps 15 per cent for the northern sub-region and about 5 per cent for the remainder of the continent.

Table 2

Non-Scheduled Passenger Traffic to and from Africa

(in brackets ( ) non-scheduled as a percentage of scheduled passengers)

	1962	1963	1964	1965
Austria	-	-	-	1,401 (34.4)
Netherlands	-	-	10,735 (37.0)	22,133 (69.5)
Spain	8,157 (15.0)	4,739 (6.3)	17,726 (20.6)	21,177 (17.0)
United Kingdom	21,600 (10.0)	23,400 (10.5)	27,000 (10.4)	36,400 (12.4)

8. Table 2 presents data submitted by four European States on their non-scheduled passenger traffic to and from Africa. Again definite conclusions cannot be drawn from the sample which is small and does not include several of the more important European sources of air travellers to Africa such as France, Germany, Scandinavia and Switzerland. Nevertheless, as with Table 1, it is apparent that non-scheduled traffic has grown in absolute terms and as a proportion of scheduled traffic. For the four States represented non-scheduled passenger traffic in 1965 amounted to nearly 18 per cent of their scheduled traffic to and from Africa. Also of interest is the distribution of this non-scheduled passenger traffic between four European States and the sub-regions of Africa. From Table 3 it may be seen that in 1965 over 70 per cent of this traffic was between Europe and North Africa.

Table 3

Distribution of Non-Scheduled Passenger Traffic, 1965

	North	West	East	South	Unclassified	Total
Austria	1,401	-	-	-	-	1,401
Netherlands	17,282	125	2,439	2,287	-	22,133
Spain	13,117	7,325	15	720	-	21,177
United Kingdom	27,000	1,600	2,600	3,500	1,700	36,400
Sub-Totals	58,800	9,050	5,054	6,507	1,700	81,111
Per cent of Total	72.5	11.2	6.2	8.0	2.1	100

Non-scheduled IT traffic

9. Only for North Africa are there statistics available to indicate the volume of non-scheduled inclusive tour traffic as distinct from the other categories of non-scheduled operation. This material, which is given in Table 4, refers only to 1965 thus giving no clue as to growth. However, the facts revealed are interesting. More than half this traffic originated in Germany and Switzerland, the rest in France, the Netherlands, Scandinavia and the United Kingdom, and nearly 80 per cent of it had Tunisia as destination. When the figure for Tunisian traffic in Table 4 is halved to give the number of arrivals in Tunisia by inclusive tour this will be seen to correspond closely to the total number of non-scheduled passenger arrivals at Tunis airport in 1965, shown in Table 1, -- about 25,000. In other words nearly all of the non-scheduled arrivals in Tunisia came from Europe by inclusive tour air services.

10. The figures for Tunis in Table 1 show that between 1962 and 1965 this traffic multiplied nearly five times. If an average journey distance of 1,500 kilometres is assumed then in 1965 the non-scheduled inclusive tour traffic between Europe and Tunisia amounted to about 78 million passenger-kilometres, and between Europe and North Africa as a whole about 100 million. It is apparent from these figures that the build-up of non-scheduled inclusive tour traffic from Europe -- particularly from Germany, Switzerland, Scandinavia, France and the United Kingdom -- is well under way for Tunisia and has begun for Morocco and the United Arab Republic. Other sources of information indicate that the build-up has begun for Kenya as well, particularly from Germany and Switzerland -- the traffic in 1966 amounting to about 100 passengers a week on a year-round basis.

Table 4[3/]

Non-Scheduled Inclusive Tour Traffic Flow, Europe - North Africa, 1965

Between	and	Number of Passengers	Totals
Libya	Scandinavia	80	
			80
Morocco	France	4,000	
	United Kingdom	2,500	
			6,500
Tunisia	France	5,000	
	Germany	21,000	
	Netherlands	2,500	
	Scandinavia	3,700	
	Switzerland	15,000	
	United Kingdom	5,500	
			52,700
United Arab Republic	Germany	600	
	Scandinavia	7,000	
	United Kingdom	250	
			7,850
			67,130

3/ Notes: 1) Source: ITA Study 66/10 - E (See Appendix 3).
2) Passengers are counted once in each direction so that arrivals in each African country are half the totals given.
3) The figures are approximate.

The sources of non-scheduled air passenger traffic

11. African non-scheduled air passenger services are used mainly by special groups of individuals travelling for either business or personal reasons and by operators of inclusive tours. The special groups include non-Africans employed in Africa going home on leave usually in June and July and returning in September and October; Moslem pilgrims travelling to Mecca; African students moving to and from their places of study abroad; personnel of foreign companies travelling between their headquarters and their places of work in Africa; delegates to conferences; and members of clubs or other "affinity" groups travelling as tourists to Africa. The direction of travel is for the most part north and south between Africa and Europe with a much smaller flow between Africa and the Middle East. The volume of international non-scheduled traffic moving between Africa and other regions or between the States of Africa is extremely small, although a small part of the flow from Europe originates in the United States.

12. Excluding the tourists from consideration for the moment, it may be said that the other special groups mentioned in the last paragraph generate traffic in varying amounts to and from all the sub-regions of Africa. Amongst them probably the most important overall source at present is the non-Africans travelling on leave, but this may be expected to decline gradually as africanization proceeds. The pilgrimage to Mecca also produces a significant volume of non-scheduled traffic particularly in those countries bordering the Sahara with large Moslem populations. The other groups are less important as traffic generators. Altogether these non-tourist sources are responsible for a volume of international non-scheduled traffic that probably represents about 5 per cent of African scheduled passenger traffic.

13. Tourism is clearly the most important source of African international non-scheduled passenger traffic in the forms of "affinity" group charter travel and inclusive tours, being responsible probably for a larger volume of traffic than all of the non-tourist sources combined. Furthermore this non-scheduled tourist traffic, because of low fares, is able to increase more rapidly than other forms of passenger traffic, scheduled and non-scheduled, provided that government restrictions are not too limiting. However, this development has so far reached significant proportions in only a few parts of the continent - particularly in North Africa, and to a lesser degree in East and South Africa (especially Kenya and the Republic of South Africa).

Limitations on the growth of non-scheduled traffic

14. There are three important factors that tend to check the growth of international non-scheduled passenger traffic: the problem of restationing aircraft; and insufficiency of hotel accommodation; and government restrictions. The first of these, restationing, arises when there is no return load available for an aircraft chartered for an affinity group and the operator must ferry the aircraft empty in one direction. Where distances are long, as from Europe to any part of Africa south of the Sahara this appreciably increases the cost of the charter per passenger and thus reduces the price advantage against the scheduled service. Where the charter market is small, as it is generally except in North Africa, this problem is a significant deterrent to the growth of group charter traffic.

15. The second difficulty mentioned is the shortage of hotel accommodation that is common over large parts of Africa. The problem arises particularly in connection with tourism by non-scheduled service because with this form of air transport tourists are moved by the plane-load, varying from eighty-eight passengers in a Douglas DC-7C

to 183 in a Boeing 707. Since there are few centres in Africa that have accommodation available for such sudden influxes, tourism by non-scheduled flights, whether group charter or inclusive tour, tends to be limited to a few well-known centres in North Africa and to some extent in East and South Africa where there is sufficient hotel accommodation. In other parts of the continent the need is for smaller groups of tourists, perhaps fifteen to twenty, who must be carried on the scheduled air services, either at regular fares or as inclusive tour (ITX) traffic.

16. The third difficulty mentioned for non-scheduled operations is government restriction imposed at the points of origin or destination. These restrictions are intended to protect the operators of scheduled services on the routes in question who must operate on a timetable regardless of the traffic available for any particular flight. In the case of group charter flights they normally take the form of limiting the sale of seats to a closed or "affinity" group.

17. In the case of non-scheduled inclusive tour air services, however, the restrictions, which may be applied by the government of the country of origin or of destination, or by both, vary from time to time and from country to country. For example, to be financially interesting for the air charter company or tour operator inclusive tour flights usually need to be arranged in a series, but some States grant permission for inclusive tour operations to Africa only for single round-trip flights where the aircraft stays with the group throughout the tour. Since such restriction involves high lay-over costs for the operator, the development of inclusive tour services is effectively discouraged. Other governments limit non-scheduled inclusive tour operations by fixing a price (usually as a percentage discount on the lowest IATA fare) below which travel agents cannot offer flights for sale. There are also governments that apply very few restrictions to non-scheduled inclusive tour flights. Where restrictions are applied they can be lifted, however, (as they were for many intra-European tour operations in the years from 1953 to 1958) whenever governments decide that it is in the public interest to grant authorizations to their own or foreign operators for series of inclusive tour flights at prices below those offered on scheduled services.

Inclusive tours by scheduled service

18. To meet the competition from European non-scheduled inclusive tours, regulations were adopted by IATA in 1959 permitting inclusive tours on scheduled services (ITX fares) to be offered at prices substantially below the regular fares within Europe and the Middle East. By 1967, however, a number of inclusive tours on scheduled services were available for Africa as shown in Table 5. It should be noted that according to IATA terminology Europe includes Morocco, Algeria and Tunisia; the Middle East includes the United Arab Republic and Sudan; and Africa includes all other African States and territories.

19. From Table 5 it may be seen that in 1967 there will be no ITX fares available for individual inclusive tours from Europe to some countries in West Africa or from North America to Africa except North Africa or for group inclusive tours from North America to Africa as a whole. Although, as was mentioned earlier, there are no traffic statistics available for this category of service, there is sufficient information to indicate that scheduled inclusive tour traffic has up to the present reached a significant volume only between Europe and North Africa. The future development of this type of inclusive tour service will depend on the availability of hotel accommodation and other essential services at African centres, the extent to which tour operators succeed in developing non-scheduled inclusive tours, and the conclusions reached by IATA member airlines on the tourist demand.

Table 5

Availability of ITX Intercontinental Fares 1967
(inclusive tours on scheduled services)

A. for constructing individual inclusive tours:

Originating Area	Destination Area
Europe/Middle East	- North, East, Central and South Africa
	- West Africa: Gambia, Ghana, Liberia, Nigeria and Sierra Leone
North America	- Europe/Middle East (including Morocco, Algeria, Tunisia, United Arab Republic, Sudan)
Australasia	- Africa

B. for constructing group inclusive tours:

Originating Area	Destination Area
Europe/Middle East	- East, Central and South Africa
	- West Africa
Japan/Hong Kong	- Africa
Africa	- South America
Africa	- Orient/Australasia

Relationship between scheduled and non-scheduled inclusive tour traffic

20. There is evidence that inclusive tour air services, both scheduled and non-scheduled, are developing, particularly between Europe and Africa, but also from other regions to Africa. Such development, if it continues and spreads, may turn out to be of great importance in fostering the growth of air tourism to Africa and of African air passenger travel generally. Such has certainly been the case with respect to the development of intra-European air tourism and it may be of interest here to note certain observations and conclusions on the European situation that were recorded in the ICAO study on inclusive tour services[4/] referred to earlier.

21. In that study it was observed that:

a) The total number of passengers carried on non-scheduled inclusive tour services in Europe in 1959 (prior to the introduction of IATA ITX fares) amounted to only about 5 per cent of the passengers carried on the ordinary scheduled services.

4/ ICAO Doc 8244-AT/717, pp. 7 - 10.

b) When European scheduled services were permitted to carry inclusive tour passengers at approximately the same price as the non-scheduled inclusive tour services, they rapidly developed a new traffic of their own, of the same order of volume, without greatly reducing the traffic of the non-scheduled inclusive tour services.

c) A substantial proportion of passengers on non-scheduled inclusive tour services had never previously travelled by air, and it seems probable that if they had not used these services many would not have used air transport at all.

d) Those who utilize the non-scheduled inclusive tour services tend to come from sections of the population with income below the average of those utilizing the scheduled services and from a rather younger age group.

On the basis of these observations the study concluded that non-scheduled inclusive tour services are not necessarily detrimental to the scheduled carriers and have on the contrary, in some cases at least, been the forerunner of new scheduled services, thus generating new traffic for the scheduled carriers.

22. Attention was drawn to the fact, however, that this conclusion was only that non-scheduled inclusive tour services are not "necessarily" detrimental to the scheduled services and it was not recommended that they be granted general freedom of operation (without prior permission). Furthermore the conclusion was related to non-scheduled inclusive tour services as they had developed in Europe where authorization was, as a general rule, granted only on routes where either there was no direct scheduled service operating or where it was believed that the non-scheduled inclusive tour service would not damage the scheduled service for some other reason. It was suggested that, if precautions of this kind were not taken, non-scheduled inclusive tour services open to the public, at prices lower than could be offered by the scheduled services, would be likely to take substantial traffic from the latter.

23. From the point of view of the present study, these observations and conclusions would seem to suggest that non-scheduled inclusive tour services, provided they are wisely regulated, can be expected to play an extremely important role in the development of air tourism to Africa and of African air passenger travel generally, without being detrimental to the scheduled services. At the same time inclusive tours on scheduled services can play an equally important role. Indeed, to some extent, the two forms of inclusive tour service can be complementary in their contribution to the growth of African tourism with plane-loads of tourists moving by non-scheduled flight to those centres where they can be accommodated, and smaller groups moving by scheduled service to both large and small centres.

IV - PERIODIC VARIATIONS IN PASSENGER DEMAND

Variation in demand; nature, causes and remedies

1. The nature of the phenomenon. - Variation in the demand for air passenger services leads to serious problems that must be faced by virtually all air transport operators in all parts of the world. This phenomenon is of course not peculiar to the air transport industry, but it is particularly acute here. Variations tend to occur in more or less regular patterns on a daily, weekly and annual basis, that is to say there are certain hours of each day, certain days of each week and certain seasons of the year when passenger demand reaches a peak and, conversely, certain hours, days and seasons when this demand is at its lowest level. As a result air carriers have serious problems of scheduling and fleet utilization and they must seek to alleviate the situation in order to maximize their average passenger load factors and the general economy of their operations.

2. Daily and weekly variation and remedies. - The most effective method of dealing with this general problem is the use of special promotional fares designed to persuade passengers to choose to travel at slack rather than peak periods. By this means carriers have had some success in counteracting the tendencies to daily and weekly variations. Because the motives that lead passengers to prefer to travel during daylight hours and at weekends are generally related to convenience, it is possible to persuade many of them to choose other hours and days by offering special low night and mid-week fares.

3. Seasonal variation. - The tendency for passenger demand to vary with the season of the year is, however, much more difficult to combat because it is tied to the pattern of holidays in the major traffic generating regions. In Europe and North America, the main traffic sources for African travel, as in the northern hemisphere generally, the holiday periods are from June to September and again to a lesser extent in December. This holiday pattern is dictated by the school year and by the consequent practice adopted by many business and industries of arranging their activities to allow for a slack period in the summer when employees are encouraged to take their vacations. There is a second holiday period from Christmas to New Year's Day.

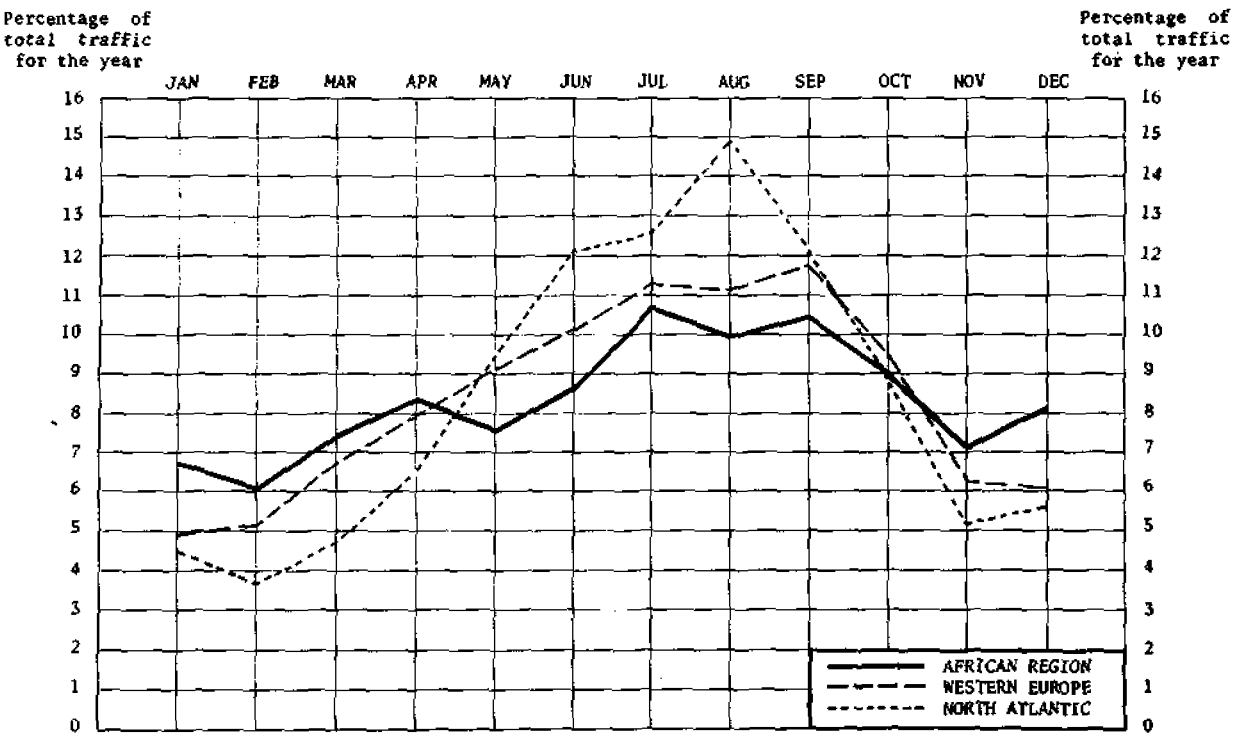
4. Limited effectiveness of off-season fares. - Against this general tendency low off-season fares designed to promote an increase in passenger traffic between October and May have so far had only limited success. A large proportion of passengers, particularly those travelling for personal reasons, including tourists, are obligated to travel during the established holiday periods and for them the pattern of demand can be modified only by the traffic originating States introducing a system of staggering holiday periods. This has been discussed in some States, but up to the present it has been attempted hardly at all. There is of course a smaller proportion of those travelling for personal reasons who, because they do not have children or because they are retired or otherwise independent of the system, may be persuaded by promotional fares and effective publicity to travel during the off-season. It is also true that those travelling for business rather than personal reasons tend to be much freer in selecting the season of their travel. For this latter reason routes where travel is predominantly for business reasons, such as the routes to Africa from Europe and North America, show a much less marked seasonal variation in demand than do those routes where travel is predominantly for personal reasons as for example the North Atlantic.

CHART 3

AVERAGE SEASONAL TRAFFIC VARIATIONS IN THE AFRICAN REGION COMPARED WITH THE WESTERN EUROPEAN AND NORTH ATLANTIC REGIONS

Average percentages of passengers monthly embarked on and disembarked from international scheduled and non-scheduled air services at 40 African airports* during the period 1962-1965, compared with corresponding percentages for 10 typical airports of Western Europe** and for passenger crossings of the North Atlantic on scheduled air services in 1965

(*Sources:* ICAO Airport Traffic Digests, and IATA Monthly Traffic Summaries)



* Selected airports for which monthly data covering at least a full year are available (see list at Appendix 11).

** Athens, Barcelona, Brussels, Dublin, Geneva, Frankfurt, Paris-Orly, Rome, Vienna and Stockholm-Arlanda.

5. Seasonal variation on African routes[1]. - The extent to which passenger demand for African travel follows the seasonal pattern set for intra-European and North Atlantic travel, but in a less pronounced fashion, is indicated in Chart 3. In all three cases traffic is above average from June to October and shows a minor up-surge at the year-end. The reason that African travel follows this pattern in spite of the fact that a large part of the continent is in the southern hemisphere and that for many African States travel might be more pleasant between October and May is, of course, that a large proportion of travellers on African routes come from the northern hemisphere. The fact that African travel is at present predominantly the result of business demand is reflected in the relatively moderate variation in demand on African routes compared with intra-European and particularly North Atlantic routes.

Data on demand variation on African routes

6. There is no statistical information available to ICAO that would permit an analysis of daily or weekly variation in demand on African routes. Such information is available only to individual civil aviation administrations and airlines and it is therefore only they who can study the problem and its remedies. With regard to seasonal variation, however, ICAO does have a limited amount of relevant and comparable data in the form of the airport traffic statistics filed with the Organization on a monthly basis from 1962. These statistics show (with some gaps and inconsistencies) passenger embarkations and disembarkations at forty African airports in each month for the four-year period 1962 to 1965, and since the airports are reasonably representative a meaningful picture of monthly variation in African passenger travel can be obtained.

7. This material, which covers international scheduled and non-scheduled operations is presented in Appendix 11 and illustrated in Chart 3. In order to lessen the effect of inconsistencies in the figures for some airports the monthly totals have been averaged for the four-year period. These monthly averages have then been shown as percentages of the average annual total. If there were no variation each month would represent about 8.3 per cent of the annual total. As it is, however, for the forty African airports, January and February each represent between 6 and 7 per cent while July and September are between 10 and 11 per cent. In Chart 3 these monthly average passenger traffic figures for forty African airports are plotted against similar figures for ten typical Western European airports and for North Atlantic crossings.

Effect of seasonal variation on load factors

8. Although complete information on the monthly variations of passenger load factors on African routes is lacking, the contrast between load factors reported in the ICAO Traffic Flow Digests for March and September respectively seems to indicate that, despite the suspension of certain flights during slack periods and the introduction of extra flights during peak months, the load factors follow broadly the same seasonal variations as the total airport traffic. In Africa as in Western Europe and in the North Atlantic, but to a lesser extent, load factors fall during the off-season from November to March. This situation must be taken into account in the planned development of

1/ It may be noted here that, as explained in paragraph 10 below, seasonal variation in passenger traffic follows essentially the same pattern in the various sub-regions of Africa.

passenger travel in the African region and calls for more detailed consideration of other related questions: the seasonal imbalance in the direction of traffic, the variations within sub-regions, and the main causes of seasonal variations in Africa.

Directional imbalance of traffic

9. In many parts of the world, particularly those where traffic is highly seasonal, the predominent direction of passenger movements also tends to vary from month to month and measures have to be taken both to accommodate the excess of passengers travelling in one direction and to seek a better balance. In Africa, however, a comparative analysis of airport traffic figures shows no significant imbalance between the numbers of passengers embarked and disembarked each month, and the larger the airport the smaller the difference between arrivals and departures. It does not seem therefore that it is necessary to introduce in Africa, as has been the case in certain other regions, incentives to encourage travel in one direction rather than the other at certain times of the year.

Variation in the sub-regions

10. The diversity of climatic, social and economic conditions in Africa calls for the examination of the seasonal variation phenomenon on a sub-regional as well as regional basis. Appendix 12 shows in graphic form the seasonal variations of passenger traffic on international scheduled and non-scheduled services at African airports grouped in four sub-regions. It may be seen that seasonal variations are somewhat more pronounced in the Northern and Western than in the Eastern and Southern sub-regions. However, there is a basic similarity between the sub-regions since they all tend to have peaks in July and September and valleys in February and November although to a different degree. Even in the Southern sub-region, where the inversion of seasons with the northern hemisphere might be expected to produce opposite seasonal variations, the peaks occur also in the July - September period and the valleys in February and November. A comparison of the seasonal variations in each sub-region with those at airports in other parts of the world presenting broad geographical and climatic similarities, brings out a striking resemblance of patterns between the Northern sub-region and a European-Mediterranean airport, and between the Eastern sub-region and a South American airport near the Equator. On the other hand there is no analogy between the Western sub-region and the airport in South East Asia nor between the Southern sub-region and the Australian airport. This seems to support the suggestion made earlier (see paragraph 5) that under present circumstances, the seasonal variations of international passenger traffic in Africa are governed not so much by geography and climate as by the travel patterns established in Europe and North America.

Climate and the seasonal variation in traffic

11. The relationship or lack of relationship between passenger demand and climate is illustrated in Appendix 13. In this chart monthly averages of scheduled and non-scheduled passenger arrivals and departures are shown with corresponding climatological data for those African airports for which the information is available. It may be seen that at most of these airports there is little or no relationship between the maxima and minima of temperature and precipitation on the one hand and highs and lows of passenger traffic on the other. As has been pointed out (paragraph 5 above) this passenger traffic follows the European and North Atlantic pattern of seasonal variation and in many cases African traffic is low when climate is best which suggests that attempts should be made to encourage tourist travel during the present slack period - October to May.

V - AIR TRANSPORT FARES AND COSTS

Relationship of fares, traffic, and costs

1. Current fares are clearly one of the important factors to be examined in any consideration of measures to further the development of African air passenger travel. The extent to which traffic volume will be affected by changes in fares will vary from route to route, and between one category of traffic and another. For example, over many African routes, because of the terrain or distance involved, or the low population density or other factor, there are no suitable alternatives to air travel and accordingly the influence of price on demand is reduced. Regarding the categories of traffic, the very high proportion of African travel that is for business purposes is relatively less elastic in its response to fare changes than is the small proportion that is for tourist purposes. Tourist demand, however, may, if other conditions are right, be highly elastic.

2. The fare level itself, on the other hand, is influenced by air transport operating costs. This influence may be obscured where prices are internationally controlled, as are those for international scheduled air services, and in any case it is never direct, with fares exactly following cost variations. The international fare structure for an area is established by the airlines, but these airlines themselves will exhibit a wide range of operating costs, and the fares which in one case may easily cover costs, in another may result in an operating loss. Also scheduled airlines are seldom if ever operated solely for profit. Their fare determinations are subject to government approval, and governments must consider the public interest. Sometimes the airlines must operate on routes where costs are higher than the revenues resulting from the established fare structure. Nevertheless, it is true in general that in areas where the average level of costs is high so too is the average fare; and, in the contrary sense, where costs are low fares tend to be low.

Operating revenue rates on scheduled passenger services

3. On the international and domestic scheduled services of the airlines of ICAO Contracting States in 1965, the last year for which the global figure is available, the average revenue earned for carrying one passenger one kilometre was 3.7 United States cents. This average is the result of all the fares charged on scheduled services -- first class, economy and special creative fares -- and covers a wide variety of individual averages for each of the airlines concerned and for each route. The average unit passenger revenue achieved by any one airline on its scheduled services will depend on several factors. One of these is the proportion of first class, economy class and special creative fare passengers that the airline carries. Another important factor is the make-up of the airline's route pattern. A high level of traffic and flight frequency and long average stage length tend to result in low airline unit operating costs and revenues while opposite conditions tend to result in high unit costs and revenues.

4. Financial statistics for 1965 are available for only ten of the twenty-seven African scheduled international carriers listed in Appendix 4. These ten, however, account for about 75 per cent of the scheduled passenger traffic of all African carriers and thus constitute a significant group. Table 1 shows financial data for these ten airlines whose average operating revenue rate from their scheduled passenger services

may be seen to be 4.5 cents per passenger-kilometre, or about 18 per cent above the world average. The individual airline averages which combine to produce this figure vary, however, from 3.5 to 6.3 cents per passenger-kilometre. Rates for individual routes vary still more widely, routes to and from Africa, for example, having, in general, lower rates than routes within Africa.

Table 1

Financial Data for 10 African Airlines, 1965

(for basic data see Appendix 9)

Airline	Operating revenue per passenger-kilometre performed	Operating cost per seat-kilometre available	Break-even passenger load factor	Actual passenger load factor
	(US cents)	(US cents)	(%)	(%)
Air Afrique	5.5	3.0	56	54
Air Congo	6.3	3.9	62	66
Air Madagascar	5.0	2.5	50	54
Central African Airways	4.4	2.6	59	62
East African Airways	5.0	2.4	48	50
Ethiopian Airlines	5.6	1.7	30	34
Royal Air Maroc	4.7	2.6	55	60
South African Airways	3.5	1.9	54	57
Tunis Air	4.3	2.4	56	67
United Arab Airlines	4.0	1.8	45	48
10 African airlines	4.5	2.3	51	53
World average	3.7	1.9	51	56

Regular passenger fares on international scheduled services [1/]

5. One of the important questions raised in the discussions leading to this study was whether a reduction in passenger fares on international scheduled services would be desirable and feasible. To examine this question it is necessary to go behind the average operating revenue rates for passengers (which in any case cannot be broken down between international and domestic services) to the actual, current fares on scheduled services. For this purpose there is presented in Appendix 10 a selection of the lowest fares (economy and excursion) available to the public in May 1966. To facilitate comparison, distances also have been given, together with the base rates in terms of United States cents per passenger-kilometre. Four groups of fares are given: (A) intercontinental from Europe to Africa and other regions; (B) intercontinental from New York to Africa and other regions; (C) African intra-regional; and (D) European intra-regional.

1/ Inclusive tour (ITX) fares on scheduled services are dealt with later in this Section. See paragraph 28-30.

6. Unit fare levels. - It should perhaps be said here that international air fares on scheduled services are not calculated from base rates common to a whole IATA Traffic Conference area. Many factors applicable to particular routes are taken into consideration such as unit costs on the route in question; competition from other modes of transport; the need to stimulate demand; and the public interest. Nevertheless when a number of fares are reduced to their base rates certain general regional patterns do begin to appear.

7. For example, the economy rates between Europe and Africa vary from about 4 to 6 cents per kilometre but are generally close to 5 and in fact the random selection averages just over 5 cents. There are few excursion fares except to North Africa, but when these are taken into consideration the average lowest available fare is just under 5 cents per kilometre. Between Europe and other regions, on long-haul operations, the base rate for economy fares averages generally about 4.5 cents with only slight fluctuations. There are, however, excursion fares available across the Atlantic and when these are taken into account (over the North Atlantic they are as low as 2.7 cents) the average lowest base rate available drops to just over 3.5 cents per kilometre. This places Africa (except North Africa) at a disadvantage in relation to the Caribbean area, for example, when competing for European travellers.

8. From New York the base rates for economy fares to Africa and to other continents work out generally between 4.5 and 5 cents per kilometre with very few varying far from this range. However, from New York there are also excursion fares generally available to other continents and for these fares the base rates work out between 3 and 3.5 cents per kilometre, again with very few varying far from this range. It thus appears that on a unit basis, because of the excursion rates offered, the lowest fares available to the public for flights to Africa are approximately 50 per cent lower from New York than they are from Europe. Moreover, as far as the base rates are concerned, Africa is not at a disadvantage in relation to other regions in the competition for tourists from New York.

9. Intra-regional air services are generally operated over shorter average stage lengths than are intercontinental services and, as might be expected, unit fares for the former tend to be higher than for the latter. International fares for scheduled services between African points, when reduced to their base rates, vary rather widely from 4.5 cents per kilometre in North Africa to 8 cents in Equatorial Africa. There are few scheduled service excursion fares and the lowest unit fares available average just under 6 cents, or about 20 and 80 per cent above the intercontinental unit fares to Africa from Europe and New York respectively.

10. These intra-African scheduled service international unit fares may appear to be high, but in fact they are at very much the same level as comparable intra-European unit fares. The latter, between points in Europe, again vary widely from just under 4 cents to just over 9 cents per kilometre. There are a number of excursion fares available in Europe, particularly on the north-south routes, and when these are taken into consideration the lowest unit fares available average, as within Africa, just under 6 cents. The general situation that has been described with respect to intercontinental and intra-regional unit fares on scheduled services is summarized in Table 2.

Table 2

Lowest Available Scheduled Fares on a Unit Basis, May 1966 2/

(for basic data see Appendix 10)

	Approximate range	Approximate average
	(cents/km)	(cents/km)
Europe - Africa	3.5 - 6.5	5.0
New York - Africa	3.0 - 3.5	3.25
Intra-African	4.5 - 8.0	6
Intra-European	3.75 - 9.0	6

11. Actual fares. - One effect of considering fares in terms of their base rate or value per kilometre, of course, is that distances are disregarded. New York, however, is very much farther from Africa than is Europe although the actual differences vary from one sub-region of Africa to another as is shown in Table 3. From Africa south of the Sahara, New York is about twice as far as Europe. From North Africa, the difference is more like five times.

Table 3

Comparison of Route Distances

(for basic data see Appendix 10)

Between / and	Europe	New York
	(km)	(km)
North Africa	1,000 - 3,000	6,000 - 9,000
West and Central Africa	3,500 - 6,500	6,000 - 10,500
East and South Africa	3,500 - 9,500	10,500 - 14,500

2/ When comparing these lowest available fares, expressed on a unit basis, with the operating revenue rates or yields given in Table 1, it should be remembered that the latter are decreased by the carriage of regular reduced fare passengers such as children, of inclusive tour passengers and probably also of an abnormally large proportion of special concession passengers classified as revenue traffic.

12. When the two factors -- distance and base fare rate -- are combined to produce the actual fares, the result, as shown in Table 4, is that for Africa south of Sahara the effect of the greater distances to New York is counteracted by the lower base fare rates (resulting from the general availability of excursion fares from New York) to such an extent that the lowest available fares from New York and from Europe are at a similar level. However, in the case of North Africa (which for purposes of IATA fare setting is grouped with Europe and the Middle East) the distance differential is greater and the base fare rate differencial less with the result that the lowest available fares from New York are more than double those from Europe.

Table 4

Comparison of Actual Return Fare Levels, May 1966

(for basic data see Appendix 10)

Between / and	Europe	New York
	(US $)	(US $)
North Africa	100 - 200	400 - 500
West and Central Africa	450 - 650	500 - 650
East and South Africa	600 - 900	700 - 900

13. From the point of view of encouraging air tourism to Africa from North America this equalization of European and New York regular scheduled fare levels, at least for Africa south of the Sahara, by the introduction of excursion fares, is important. However, the fact remains that, in absolute terms, because of the distances involved, even the lowest fares available to the public from Western Europe and North America, which areas together produce over 80 per cent of all international tourist expenditure, are high (except between Europe and North Africa). They are high, that is, in comparison with the fares available to Europeans for travel within Europe (including North Africa) and to North Americans for travel across the Atlantic to Europe, the most important destination area for international travel. The lowest regular return fares on scheduled services in the European/North African region are generally less than $200. Over the Atlantic to Western Europe they are about $300. Whereas comparable return fares to parts of Africa other than North Africa range from $400 to over $900.

14. High fares an obstacle to air travel. - This disparity in the level of actual return fares on scheduled services is of major significance in an analysis of the prospects of air travel to and from Africa. The international tourist industry is highly competitive with many countries striving to increase their share of the market. If the countries of Africa, which up to now have gained only a very small per cent of the total, are to increase appreciably their share, they must do so by persuading a larger number of tourists to visit them rather than countries in other regions, particularly the most important tourist destination: Europe. In this competition for tourists many factors play a part, but one of the most important is transportation cost so that, even with all other conditions favourable, if transportation cost is relatively high for a particular area, that area will be at a serious disadvantage. It would seem clear, therefore, that the growth of air travel to Africa will be favoured by the lowest possible air fares, particularly from Western Europe and North America.

Feasibility of reducing regular fares on routes to, from and within Africa

15. On the question of fare reduction, ICAO can do no more than offer general comments, leaving the airlines and their national aviation administrations, to take such action as may be feasible. The process whereby international air fares are set is of considerable complexity involving intricate negotiations in which consideration must be given to many factors that vary from route to route even within one traffic area. Among these variable factors that enter the fare equation are the public interest, the extent of competition from surface transport, the elasticity of demand, and operating costs on the route in question. To give values to these variables it is necessary to have access to a great volume of specific route data that is open only to the airlines themselves and their national administrations. The information available to ICAO on matters such as the public need, competition, elasticity of demand and operating costs is more general or global in nature and not, as a rule, broken down on a route basis.

16. Operating costs on scheduled passenger services. - Perhaps the most important single factor in the equation is operating costs, but the statistics filed with ICAO under this heading give only total figures for the various cost items covering the whole operation of each reporting airline: domestic and international, scheduled and non-scheduled. From such data it is not possible to estimate the airline's operating costs on a particular route, and even for particular categories of operation, such as the carriage of passengers on scheduled services, only rough, hypothetical estimates can be calculated. As mentioned earlier 3/, the available financial data for ten African airlines and for the airlines of ICAO States as a whole are given in Appendix 9 and summarized in Table 1 of this Section. The comments on this data that follow are, for the reasons given above, intended to be of general application only.

17. For the ten African airlines in 1965, the average operating cost for providing one seat-kilometre of capacity on scheduled passenger services was about 2.3 cents. This figure was the product of averages for the individual airlines that varied from 1.7 to 3.9 cents per seat-kilometre. By way of comparison it may be noted that the African average of 2.3 cents was about 20 per cent above the world average of 1.9 cents which in turn was the product of individual airline figures varying from about 1.2 to 4.0 cents per seat-kilometre. However, it should be borne in mind that the level of the world average unit operating cost figure was strongly affected by a small group of relatively large airlines (predominantly North American) that operate over routes with long stage lengths and good traffic density and had average operating costs below 1.9 cents per seat-kilometre. If this group were excluded from consideration, the average for the ten African airlines would probably be close to that for the world as a whole. In Table 5 these average unit operating cost figures are set against the average unit operating revenue or yield figures described earlier in this Section. 4/

3/ See paragraph 4 of this Section.

4/ See paragraphs 3 and 4.

Table 5

Average Unit Operating Costs and Revenues on Scheduled Passenger Services, 1965

	10 African Airlines		Airlines of ICAO States	
	Range	Average	Range	Average
Operating Costs (cents/seat-km.)	1.7 - 3.9	2.3	1.2 - 4.0	1.9
Operating Revenues (cents/pass.-km.)	3.5 - 6.3	4.5	2.5 - 7.0	3.7

18. Selective rather than general approach to fare reduction. - It will be seen from the the comparison shown in Table 5 that, in general for African airlines as for those of other regions the average operating cost per seat-kilometre was about half the average yield per passenger-kilometre, thus producing an average break-even passenger load factor on scheduled services of 51 per cent.[5/] At the same time the actual passenger load factor was 53 per cent for the 10 African airlines and 56 per cent for all ICAO scheduled carriers. This situation might suggest that some overall reduction of fares should be feasible since aircraft have only to be operated at slightly more than half their passenger seat capacity to produce a profit. In practice, of course, the situation is not so simple.

19. If fares are reduced, unit yield will decline, and as long as unit operating costs remain constant, break-even load factors will rise. Profitability will then require that traffic increase enough to bring realized load factor above the break-even level. Unless there are overriding reasons of policy the decision to reduce fares must accordingly depend upon estimates of the elasticity of demand and this is known to be low on African routes owing to the high proportion of business traffic. Furthermore

5/ The break-even load factor is the load factor at which an aircraft must be operated in order exactly to cover costs at prevailing revenue rates. In other words if unit costs are exactly half unit revenues these costs will be covered when half the aircraft's capacity is sold, the break-even load factor will be 50 per cent, and profit or loss will result when the actual load factor exceeds or falls short of this figure. Theoretically the costs considered should be all costs, both operating and non-operating; the capacity should be the whole capacity of the aircraft, available for passengers, freight and mail; and the revenue the total revenue, operating and non-operating. In practice, however, to obtain a rough approximation, the calculation is often based, as it is here, on unit operating costs and revenues for the passenger traffic and on passenger seat capacity, it being assumed that all other costs will be covered by the revenue from freight and mail.

it is difficult under conditions encountered in modern air transport for an airline to realize an annual average passenger load factor much over about 56 per cent for its whole route network. This is because of the fact that many airlines must operate at least some services where traffic is light, and also because of the general problem of seasonal traffic variation. For these reasons it seems improbable that there can be, in the near future, any region-wide reduction of regular scheduled international passenger fares on routes to, from and within Africa of a magnitude sufficient to affect materially the overall volume of traffic. This does not mean, of course, that it may not be possible to reduce fares on certain routes or for certain types of traffic.

20. What has been written in the foregoing paragraphs has referred only to general or overall situations, to average unit operating costs and revenues, to average load factors, and to the feasibility of area-wide fare reductions. It must be remembered, however, that these averages cover a variety of local situations. On particular route segments the public interest may require that fares be set below the level of profitability; competition from surface transport may be such as to call for lower air fares; or the elasticity of demand on a particular route may be estimated to be such that a reduction in fares would lead to an increase in traffic sufficient to increase total revenue. Moreover certain types of passenger demand, for example, tourist as compared with business, are known to be more elastic than others and hence more suitable for selective fare reductions. This variety in the fabric of air transport calls for studies by national administrations and airlines of the feasibility of selective fare reductions on certain routes and for certain types of traffic.

21. As has already been said, ICAO, because of the general nature of the information available to the Organization, is not in a position to indicate on which routes specifically fares might be reduced, nor is this ICAO's function. This must be done by the airlines and national administrations on the basis of the detailed local information available to them. ICAO can, however, urge these airlines and administrations to keep those scheduled air services that concern them under continuous examination with a view to introducing fare reductions wherever these seem feasible and likely to bring about an increase in the volume of African air passenger travel. In particular it would seem that such reductions are most likely to be feasible and effective in relation to tourist traffic to Africa.

22. Objection to reduction of regular fares.- The composition of scheduled air passenger traffic moving to, from and within Africa is not known with any exactitude, but it has been estimated that for the continent as a whole, allowing for sub-regional variations, the demand is predominantly, perhaps as much as 90 per cent, for business purposes. Personal travel, mainly tourism, is then only about 10 per cent. (This division may be contrasted with, for example, international air travel out of New York which is estimated to be over 75 per cent for personal reasons, 25 per cent business.) Considering first the major sub-division, business demand is relatively inelastic in its response to fare changes and, for this reason, all but two of the national administrations and airlines that have given their views to ICAO are opposed to any reduction of regular first class or economy fares on their intercontinental services to and from Africa. They believe that any reduction of these fares, which are used primarily for business travel, would not produce a compensating increase in traffic and hence would result only in a diminution of revenue.

23. The opposition to fare reduction that has been expressed with respect to regular first and economy class on intercontinental services also applies to fares on intra-African regional and domestic services. Domestic services are normally outside the scope of this study, but in this instance the same reasoning applies to them as to intra-African international services. The objection to fare reduction on these services is based on the facts, first, that they are at present used almost exclusively for business traffic which, as has been said, is relatively inelastic; second, that the tourist traffic that it is desired to attract must, for some years, come almost entirely from other regions (primarily from Europe and North America) and hence must use intercontinental services; and third, that many African intra-regional and domestic services are now operating at fares that are below the level of profitability Since purely intra-African demand is considered to be relatively inelastic, it is felt that any fare reduction would simply dilute revenues and worsen present operating margins. On the other hand, where travel on these intra-African services is a continuation of intercontinental travel the applicable fares would be set to correspond with the relevant intercontinental fares.

Creative fares on intercontinental scheduled services

24. The consensus seems to be that tourist demand can best be stimulated by the use on intercontinental services, on a selective basis, of low "creative" or "promotional" fares. These IATA approved, so-called "creative" fares have as their purposes: (a) to create traffic on a particular route or section of a route where available capacity is not salable at normal first or tourist/economy class fares; (b) to encourage vacation travel; and (c) to fill up available capacity during off-hours or off-periods when traffic is regularly light. They often represent considerable reductions -- varying from 10 to 50 per cent -- on regular economy fares and take such forms as excursion, special "non-affinity" group, and family fares, all offered for sale to the public; and inclusive tour (ITX) fares offered to tour operators only. The characteristic of these creative fares that makes it possible for the IATA carriers to offer them on the same services as the regular first and tourist/economy class fares is that they are restricted in such a way as to make them uninteresting to most users of the regular fares. This is done for example, by limiting the maximum and minimum duration of the round-trip; forbidding stop-overs; allowing travel on certain days or seasons only: and fixing the size of the group. By these and other means the carriers hope to retain their revenue from their existing business traffic and at the same time to create new personal demand, mainly from tourists.

25. Excursion fares on scheduled services. - Excursion fares are offered to the public with restrictions on the duration of the round trip (for example, from 14 to 21 days); on the days of the week on which travel may be undertaken (usually mid-week); and on the season of validity (usually not available during maximum summer peaks). As has been pointed out 6/ these excursion fares are normally offered on intercontinental services out of New York at a base rate of about 3.25 cents per passenger-kilometre. If this practice were extended to services between Europe and Africa where excursion fares are now uncommon (except to North Africa) and the base rate were thus lowered from the present level of about 5 cents per passenger-kilometre to 3.25 cents, the current range of return fares would be lowered by about one-third from the figures shown in Table 4 so that they would be within the general range from Europe to North Africa $65 - $135; to West and Central Africa $300 - $450; and to East and South Africa $400 - $600.

6/ See paragraph 8 of this Section.

26. "Non-affinity" group fares. - Non-affinity group fares are offered at a discount on the regular economy fares to individual members of the public who form or are placed by a travel agent in a group of specified minimum size, the group having no existence apart from the trip in question. These group fares are normally restricted as to duration, period of validity, and stop-over.

27. Family fares. - Special family fares are offered at a discount on the regular fare when more than one member of a family travel, with restrictions usually on the days of the week on which travel can be undertaken. This last type of creative fare might be of particular interest in the African context since, as has been remarked, about 90 per cent of air travel to, from and within Africa is for business purposes. If family fares were offered at a sufficient discount men travelling to and from Africa on government or private business might be encouraged to take one or more members of their families with them as tourists.

28. Inclusive tour (ITX) fares on scheduled services. - The other main type of creative fare offered on scheduled services, and probably in the development of air tourism it is the most important, is the inclusive tour on ITX fare. As has been mentioned already in this study 7/ this type of fare was developed and has been used chiefly in the Europe/Middle East area 8/, but is now spreading to other IATA traffic areas. For North Africa ITX fares are available from North America and from the other States of the Europe/Middle East area of which it is a part. For the remainder of the continent -- East, Central, South and West Africa -- there are no ITX fares available from North America, but from the Europe/Middle East area a new set of ITX fares, as summarized in Table 6, was approved by IATA in Rome in December 1966.

7/ See Section III, paragraphs 18-23.

8/ The Europe/Middle East area, as defined by IATA, includes the North African States: Morocco, Algeria, Tunisia, Libya, United Arab Republic and Sudan.

Table 6

IATA Inclusive Tour (ITX) Fares Available 1967
To East, Central, South and West Africa
From Europe/Middle East (including North Africa)

Destination	Expiry Date	Description	Fare	Time Limit	Tour Price Minimum
East, Central and South Africa (a)	31 Mar'69	Individual IT	33.3% off round trip economy fare	14-45 days, all year	IT Package not less than 100% of round trip economy fare
Gambia, Ghana, Liberia, Nigeria, Sierra Leone	31 Mar'69	Individual IT	30% off round trip economy fare	10-30 days, between 1 Nov. and 30 Apr.	IT package not less than 105% of round trip economy fare
(From Scandinavia and Finland only for those holding passports from these States) Kenya Uganda Tanzania Ethiopia	31 Mar'69	Group IT, minimum 15 passengers	50% of one-way economy fare for each leg of the round trip	14-30 days, 1 Oct. to 31 Mar.	Minimum $7 per day for other expenses
East, Central and South Africa (b)	31 Mar'69	Group IT, minimum 12 passengers	55% of one-way economy fare for each leg of the round trip	14-30 days, all year	Minimum $7 per day for other expenses
West Africa (c)	31 Mar'69	Group IT, minimum 4 passengers	33.3% off round trip economy fare	12-30 days, 1 Nov. to 30 Apr.	IT package not less than 100% of round trip economy fare

Notes:

(a) To points in the provinces of Orientale, Kivu, Katanga of Congo (Kinshasa), Rwanda, Burundi, Sudan, Ethiopia, Kenya, Uganda, Tanzania, Zambia, Rhodesia, Malawi, Malagasy, Reunion Island, Mauritius, South Africa, South West Africa, Botswana, Lesotho, the Protectorate of Swaziland, and Mozambique.

(b) Same as (a) excluding Congo (Kinshasa), Rwanda and Burundi.

(c) To points in Gambia, Ghana, Ivory Coast, Liberia, Sierra Leone, Nigeria, Dahomey, Gabon, Guinea, Portugese Guinea, Upper Volta, Mali, Mauritania, Niger, Senegal, Chad, Togo, Cameroun, Central African Republic.

29. The present situation therefore is that inclusive tour fares are available from the Europe/Middle East area to most parts of Africa, and from North America to North Africa, at discounts varying from 30 to about 50 per cent of the regular economy fare. Moreover, while the North American ITX fares are available only to North Africa, it should be remembered that there are excursion fares, available to individual members of the public, from New York to all parts of Africa at a 33.3 per cent discount on the regular economy fare. One effect of the ITX fares is that for purely tourist traffic the average base fare rate between Europe and Africa is brought down from the 5 cent level shown in Table 2 of this Section to approximately the same level as between New York and Africa, that is about 3.3 cents per kilometre. In some cases the base rate is now even lower as shown in the comparisons given in Table 7.

Table 7

Comparison of Old and New ITX and Economy Fares from Stockholm to Nairobi

	Fare (US $)	Base Rate (cents/km.)	21-Day Tour Price (US $)
Regular economy return	793	5.5	-
Old individual ITX (discount 33% off round trip; total 105%)	528	3.7	832
New group ITX (discount 50% of one way for each leg + $7 per day)	417	2.9	557

30. In general it may now be said that tourists from northwest Europe can have a three-week vacation in East Africa for about $600 (apart from personal expenditures on items other than transportation and accommodation). This represents a reduction of about 30 per cent on the former ITX fare and roughly half the cost of a three-week holiday using the regular economy fare. As a result East Africa now becomes competitive from the cost point of view with the Caribbean area as a destination for European tourists. Similar percentage reductions may be seen from Table 6 to apply to tourist travel from Europe to South and Central Africa. New low ITX fares are also available between Europe and most of West Africa, but the discount on the economy fares is less than for East, Central and South Africa. However, in this connection it should be noted that the tourist industry is generally less developed in West Africa than in East and South Africa particularly in the matter of available accommodation and related tourist services and amenities.

31. The size of the international tourist market, its 12 per cent average annual rate of growth, and Africa's small share of the total 9/ suggest that these new "creative" fares should produce a significant volume of new tourist traffic, provided only that this development is not discouraged by local conditions outside the sphere of air transport. For fare reductions to have their desired effect, it is of course absolutely essential that there exist in the areas of tourist destination, adequate accommodation and other essential tourist facilities and amenities in an atmosphere attractive to the tourist, and and that effective publicity be given to the local attractions and to the fare reductions themselves. To achieve this each State must have a well co-ordinated plan for the development of tourism and tourist facilities.

Costs and fares on non-scheduled services

32. Certain categories of non-scheduled operation have, as was pointed out in Section III, already come to play a significant role in the development of African air passenger travel. In particular, non-scheduled charter and inclusive tour services have developed in the carriage of tourist traffic between Europe and North and East Africa. Their attraction for the tourist, of course, is their low fares, but because of the fact that they bring tourists by the plane load, that is to say from 85 to 185 at a time, these services are suitable only for those centres that have accommodation and other amenities for large numbers. At such centres their development will depend largely on the degree of freedom they are permitted by the governments concerned.

33. Non-scheduled operating costs. - Very little specific information is available on the operating costs of the non-scheduled carriers. It can be deduced, however, that their direct operating costs per seat-kilometre are now similar to those of the scheduled airlines with the same aircraft types. In the past the non-scheduled carriers used older piston and turbo-prop equipment acquired from the scheduled airlines and their direct unit operating costs were as a result somewhat higher than those that can be achieved with the newer jet equipment. Recently, however, the larger non-scheduled carriers have started to re-equip with modern jet aircraft, and their direct unit costs must be falling. As for their indirect unit costs it may be estimated that because of lower overheads for administration, ticket offices and sales and promotion, these are appreciably below the level of the scheduled airlines. Overall then, it may be assumed that per seat-kilometre the unit costs, direct and indirect, of the non-scheduled carriers are now probably lower than those of the scheduled airlines.

34. The great competitive advantage that the non-scheduled carriers enjoy over the operators of scheduled services and the reason why the latter, who are obligated to operate their established services regardless of load factor or profitability, must be protected by their governments is that the non-scheduled carriers operate only with very high load factors often approaching 100 per cent. This means that the fares they charge have only to cover seat-kilometre cost plus a reasonable percentage for profit.

9/ See Table 6, Section I.

35. The average unit operating cost for all of the airlines of ICAO States on their scheduled passenger services was, it will be recalled, (see Table 5) 1.9 cents per passenger-kilometre in 1965, and is not much less today. This is a global figure, however, that covers individual airline averages ranging from about 1.2 to about 4.0 cents. For the year ending 30 June 1966 in United States domestic operations the average direct unit cost for long range jets was about 0.8 cents per passenger-kilometre with some airlines recording figures as low as 0.6 cents. Allowing for indirect costs at 45 per cent the overall unit figures would be about 1.5 cents average and 1.1 cents at the lowest. These unit cost figures suggest that the non-scheduled operators with their lower indirect costs under most favourable operating conditions (including good aircraft utilization) might, achieve overall unit costs approaching 1 cent per passenger-kilometre with late model, long range jets, and probably as low as 1.5 cents even with piston or turbo-prop equipment (when depreciation and hence utilization are relatively less important).

36. Group charter fares. - As an example of current non-scheduled fares, the National Air Carrier Association (NACA), which represents eight of the thirteen United States supplemental airlines [10], has made estimates of typical per passenger fares for charter transportation from New York to six selected cities in Africa based on the tariff rates filed by one of its members, World Airways, Inc. These estimates, which are shown in Table 8 with the regular scheduled fares for comparison, assume full utilization of the 183 passenger Boeing 707 aircraft. The charter rate works out at 1.86 cents per passenger-kilometre, plus 1.02 cents per kilometre for ferrying to or from Paris [11] where this is required. The unit cost is not stated, but it may be seen that the charter rate *per passenger, even with ferrying, is 25 to 30 per cent below the scheduled* excursion fare which in turn is 33 per cent below the economy fare.

Table 8

Comparison of 1966 One-Way Fares New York to Africa

Between New York and	Regular Economy (US $)	Half Excursion (US $)	Charter without ferry (US $)	Charter with ferry (US $)
Algiers	325.60	200	121.33	134.97
Cairo	465.00	268	168.58	201.22
Dakar	390.00	246	114.57	157.29
Johannesburg	595.00	392	239.60	328.12
Lagos	454.70	292	163.86	211.61
Nairobi	595.00	392	227.45	293.45

10/ Non-scheduled operators.

11/ When an empty aircraft is not available at a point in Africa it may, to economize, be ferried from a base in Paris rather than from New York.

37. Non-scheduled inclusive tour fares. - The non-scheduled inclusive tours offered in various European countries have been of greater significance than group charters, however, in the development of air tourism. The prices quoted for some of these tours suggest that the air transport component is, sometimes based on very low unit costs, occasionally approaching 1 cent per passenger-kilometre. Some examples of these tour prices quoted in the IUOTO Pilot Survey 12/, with hypothetical base rates calculated on the assumption that other costs amount to $7 per day, are given in Table 9.

Table 9

1966 Non-Scheduled Inclusive Tour Prices

From	To	Duration of Tour (days)	Tour Price (US $)	Transport Base Rate Assuming Other Cost $7/day (US Cents/Km.)
Zurich	Bangkok	21	525	1.9
Frankfurt	Beirut	15	146	.8
Frankfurt	East Africa	14	368	2.2
Paris	East Africa	17	430	2.4
Malmo	Athens	7	116	1.4
Stockholm	East Africa	21	695	3.8

38. Starting from actual tour prices such as those given in Table 9, it is possible to construct, hypothetically, the sort of prices that could be offered for tours from any European to any African city, provided only that adequate tourist facilities were available and that permission for the flights was granted by the governments concerned. A set of such hypothetical prices, constructed in the IUOTO Pilot Survey, is given here in Table 10. The starting point for these tours is taken as London and the duration as 14 days. The method then followed is to assume an air transport cost of 1.45 cents per passenger-kilometre and add to this a standard charge for hotel accommodation, transfer charges, administration and sales costs, and profit.

12/ Pilot Survey, page 16.

Table 10 [13]

Hypothetical Prices for Non-Scheduled Tours to Africa

Starting point - London. Duration - 14 days

(Tour price based on air transport cost of 1.45 cents per passenger-kilometre plus a standard addition for accommodation and other costs and profit)

To	Tour Price (US $)	To	Tour Price (US $)
Algiers	218	Accra	330
Tunis	224	Douala	339
Casablanca	232	Addis Ababa	356
Tripoli	241	Brazzaville	370
Dakar	305	Nairobi	386
Khartoum	325	Dar-es-Salaam	409
Conakry	325	Lusaka	431
Lagos	328	Mauritius	484

39. Non-scheduled inclusive tour prices of this order are now being made available from many European points to North Africa and from points in Germany and Switzerland to East Africa. Such prices are considerably lower than those offered on scheduled service inclusive tours (about 30 per cent less in the case of East Africa) and can potentially place Africa very much in competition in the travel market. If governments authorize this type of air transport activity on an increasing scale there is no reason to doubt that air tourism can increase rapidly in those African centres -- particularly in the North, East and South -- where there are sufficient accommodation and related services and amenities to handle the plane loads of tourists that arrive by non-scheduled flight.

13/ Source: IUOTO Pilot Survey, Appendix 8.

VI - FACILITATION OF AFRICAN AIR PASSENGER TRAVEL

General

1. Facilitation can play an important part in the development of air passenger travel. Other things being equal, a traveller is more likely to visit a country which makes his path easy than one which places obstacles in his way. He is also more likely to pay another visit to a country where he was treated as a welcome visitor. More importantly, he will tell his friends of his experiences, both good and bad. Travel agents too will get to know and will advise others accordingly.

2. Facilitation starts before the traveller begins his journey (e.g. if he is required to obtain a visa), continues when he arrives at the airport in the country he is visiting, also while he is in the country (e.g. if he has to report to the police or obtain an exit permit) and ends at the airport at the time of his departure.

3. The need to reduce formalities to the minimum and to do everything possible to facilitate air travel was considered to be sufficiently important to be the subject of several articles (notably Articles 22 and 23) in the Convention on International Civil Aviation - Chicago 1944. Over the years, these articles have led to the development of International Standards and Recommended Practices on Facilitation which are contained in Annex 9 (5th Edition) to that Convention and all Contracting States of ICAO have undertaken to do their best to comply with the provisions of Annex 9.

4. With respect to the state of Facilitation in Africa generally, the situation, although improving in a number of countries, cannot be said to be satisfactory at this juncture. There are a number of reasons for this state of affairs, some of them political or economic in nature and not immediately correctable; but others which can be overcome with a little effort and goodwill on the part of those concerned.

5. In a large area like Africa, with different cultures, countries in different stages of development, large countries and small ones, some with well-developed civil aviation and some in the infant stages, there are bound to be many differences. The comments in the following paragraphs therefore do not apply to each and every country in the region, but probably all of them would benefit from some critical self-examination if they wish to woo the air traveller and have him and his friends come again.

Requirements for visas

6. Perhaps the most important obstacle in the Facilitation field to the development of international air travel is the requirement that temporary visitors must first obtain entrance visas. Most countries in Africa require such visas from nationals of many other States. It is not only paradoxical that a country wishing to attract tourists should first insist upon them obtaining visas, but it is not generally appreciated what a burden this places on the tourist and even less is it realized how many tourists are lost to a country because of the visa requirement.

7. To obtain a visa for one country may not be particularly bothersome but to obtain visas for six or seven countries will be too time-consuming and troublesome, apart from the costs involved. As a result, the traveller will probably visit some

other States which don't require visas. Even in cases where a visa is issued, it is frequently limited to one visit only so the traveller proceeding onwards cannot make a second visit to the country concerned on his way back.

8. *Each State is the best judge of its own vital interests and, if a State* considers that the situation is such that the visa requirement has to be maintained for nationals of a large number of other countries then this will tend to discourage tourism. A solution favoured by some States is to issue visas to bona fide travellers on request after they arrive at the airport in the country concerned, thus saving them the time of getting visas before they start their journeys. Where this practice is followed it is desirable that the procedures be kept simple and that there be no requirement for photographs.

Formalities on arrival

9. The impression an air traveller obtains when he arrives in a country is important. If there is overcrowding and confusion and lengthy scruitiny of passports, other documents and baggage, he is bound to get irritated. On the other hand, if clearance is carried out rapidly and smoothly, and he is treated with courtesy, he is left with a good impression.

10. Disinsecting of aircraft - The first formality to be encountered in a number of States is disinsecting the interior of aircraft. In a number of *ICAO States the* "blocks-away"* method of disinsecting, recommended by the World Health Organization, is not accepted and quarantine officials board the aircraft on arrival and spray it with insecticide while the passengers and crew are still on board. This operation takes about 15 minutes and during that time the ventilation is turned down, or off, and in hot climates this can be a stifling experience. It can, and should, be avoided by acceptance of the "blocks-away" method.

11. Health control - The next step in the clearance procedure is the health check of individual passengers. This is usually done in the terminal building but it is sometimes done on board the aircraft before passengers disembark and this latter practice should be discontinued. There are also cases when only one public health official is available to check the vaccination certificates of a plane-load of passengers and delays and irritation inevitably result. Two officials may be enough if e.g. a visual inspection of passengers is merely being performed while they file past either of two health control points en route to any one of four immigration control points, but it is not adequate if a large number of vaccination certificates have to be thoroughly examined. The International Sanitary Regulations of the World Health Organization clearly state the health formalities that may be performed in respect of arriving passengers. However, in some African countries, these regulations appear to be exceeded.

12. Police/immigration control - Police and immigration control is slow in many places. This is partly because of shortage of trained staff but is also due to the very detailed scrutiny of documents, often accompanied by questioning, by the authorities

* The "blocks-away" method of disinsecting is performed before the aircraft enters the country. It is carried out on departure from the last airport prior to entry by means of a "single-shot" aerosol dispenser, the entire contents of which are sprayed within the aircraft while it is taxiing from the ramp to the runway for take-off.

concerned. In addition, various forms of landing cards have to be completed for immigration, police and statistical purposes and it would be a great improvement if States would use the standard international Embarkation/Disembarkation Card prescribed in the 5th Edition of Annex 9. It is also important that these cards be completed by the passenger before he arrives, otherwise delays and inconvenience result.

13. Customs control - Like police/immigration control, customs control is a lengthy process in a number of countries. Again, this is partly due to shortage of trained staff and partly due to the detailed examination of baggage. Baggage examination should, as a rule, be performed on a sampling or selective basis and only a small percentage of the bags should actually be opened. A particular cause of delay is the requirement for arriving passengers to complete baggage declaration forms, some of which are quite detailed. These forms should be abolished, as they have been in many countries in the world. An extra formality in several African States is currency control and the requirement for passengers to complete currency declaration forms on arrival; presumably, however, these are only temporary controls which will be abolished at the earliest opportunity.

Airport terminal buildings -- facilities and services

14. Inadequate airport terminal buildings can be a major cause of delay in processing passengers and baggage. When the building is properly laid out and provided with an adequate number of control channels for public health, police/immigration and customs controls, handling and clearance can be accomplished with speed and efficiency (much depends upon the amount of traffic, e.g. it is generally conceded that any layout with less than 2 channels for health, 4 for immigration and 8 for customs is inadequate to clear the load of any present long-range aircraft). The layout should, among other things, be such as to make sure that arriving passengers cannot enter the country without going through the controls. When this is done it is no longer necessary for police and immigration authorities to have to rely upon documentary control (e.g. passenger manifests) to ensure that all passengers have been checked. Baggage should be moved rapidly to the baggage claim area and, when necessary, the building should be equipped with mechanical or other means (e.g. conveyor belts). There should also be simple arrangements whereby passengers can identify and claim their baggage. In addition, there should be ample counter space in the customs hall and a sufficient number of customs officials so that the baggage can be cleared quickly. Plans are being made in a number of African States for the construction of new terminal buildings and if these are properly laid out, handling and clearance of passengers and their baggage should be much simpler and greatly expedited. A further important point is the provision of rapid transportation services between the city and the airport.

Passengers in transit

15. A passenger in direct transit on the same aircraft, or transferring from one aircraft to another, should not have to go through any controls. Unfortunately, this is not the case in many States in the area. It is not necessary to have completely separate transit areas for transit passengers and, here again, if the building is properly laid out, transit passengers can be allowed to remain in the departure lounge and use all the same facilities as departing passengers who have already gone through controls. Transit passengers themselves, however, should not have to go through controls unless, of course, they wish to leave the airport.

Formalities on departure

16. Ideally, travellers leaving a country should not have to go through any controls because the main security aspect to a country is in respect of travellers coming in from other countries. However, so long as currency restrictions and other special conditions exist, some degree of control on departing passengers will continue to be exercised. Such controls should nevertheless be kept to the minimum. At the present time there are a number of countries in the region where outbound baggage is examined fairly thoroughly and where travellers have to make written declarations regarding such things as currency and payment of taxes. Also there are several countries which require exit permits or exit visas in respect of their own nationals, foreign residents and, in some cases, even temporary visitors. Outbound health checks are also a common feature in Africa and valid vaccination certificates are frequently insisted upon. These countries invariably have health checks on arrival also so that many passengers are obliged to have two health checks within a short period. Efforts should be made to eliminate these double health formalities.

Ways and means of improving Facilitation in Africa

17. First and foremost, the responsibility for improving facilitation for air passengers lies with the individual State, but a great deal of progress can also be achieved through concerted efforts by African States as a whole. The services of ICAO experts may be made available to States, at their request, in order to solve facilitation problems connected with air transport.

18. With respect to individual efforts by a State itself, each State should make internal arrangements to promote facilitation and these arrangements should be effective. One method, which has been successful in many countries is to establish a National Facilitation Committee. A number of National Facilitation Committees have been established in the region in the past few years but more than half of the countries still do not have such Committees. Even where they have been established, these Committees do not always function properly, e.g. they do not meet sufficiently often; are not fully attended, or not attended by officials of sufficiently high rank to assure the success of the Committee's work; are not given adequate support by the international carriers whose local committee should point up the problems and offer agreed-upon suggested solutions.

19. An important feature of National Facilitation Committees is that they bring regularly together senior officials from the various government departments concerned, i.e. immigration customs, public health, consular (passport/visas) etc. to discuss aviation facilitation problems with the civil aviation, airport management and tourist authorities in an aviation atmosphere with advice from representatives of the international operators serving the country. The essential functions of such Committees are: a) to identify the differences that exist between the national regulations and practices and the provisions of Annex 9; b) to eliminate as many of those differences as possible; and c) to notify to ICAO such differences as cannot be immediately eliminated. The continuing work of the Committee is to seek ways and means of eliminating the remaining differences, handle current FAL problems as they arise and generally to endeavour to improve facilitation matters in the country.

20. With respect to concerted action by the States of the African Region, experience has shown that such regional efforts can be most successful and not only complement the work of National Facilitation Committees but encourage those

Committees to take continuing action. In Europe, for example, substantial progress on facilitation matters has been made through the work of the Facilitation Commission of the European Civil Aviation Conference and any similar body established for Africa should include in its work programme all aspects of facilitation. ICAO has already given special attention to achieving implementation of ICAO's Annex 9 in Africa and visits to several States to assist them in facilitation matters have been carried out by ICAO experts in the years 1964 to 1966. Such visits will be continued.

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VII - FUTURE PROSPECTS FOR AIR PASSENGER TRAVEL ON AFRICAN ROUTES

Requirement for forecast

1. The need for forecasts of future trends and developments in civil aviation was specified by the ICAO Assembly, not in Resolution A15-17 calling for this study of measures to further the development of international air passenger travel to and within Africa, but in Resolution A15-6 in which it was indicated that such forecasts should be undertaken, where possible, on a regional as well as a global basis. A global forecast for the period up to 1975 was published in June 1965 in "A Review of the Economic Situation of Air Transport" 1/, and this was followed in March 1966 by "North Atlantic Traffic Forecasts" 2/ also for the period up to 1975. To use available resources most economically it is deemed appropriate, in conjunction with the present study of African Air Passenger Travel, to attempt now to prepare a regional forecast of air passenger traffic growth on African routes.

Problems of forecasting for the African region

2. Any forecast of African civil aviation developments must, however, be of an extremely tentative nature. The future, of course, is by its nature uncertain and the forecaster always risks error, but the degree of uncertainty and risk varies. The probability of relative accuracy depends on the availability of data sufficient to permit a clear understanding of past developments over a number of years with respect to such air transport factors as the annual rate of traffic increase, unit operating costs and revenues, load factors, technological changes, the composition of the market, and competition from other modes of transport, and such general socio-economic factors as population, economic growth, consumer prices and disposable personal income. When sufficient information is available trends for the various factors can be established and projected and the effects of their interaction estimated. Even on such a basis the forecast will remain valid, however, only so long as there are no major, unexpected political or economic disruptions during the period covered. For regions such as the North Atlantic, North America and Western Europe, the prerequisites for forecasting can be fulfilled. Even for ICAO Contracting States as a whole, because of the statistical dominance of a relatively small number of major airlines and of Europe and North America as traffic generating areas, and the availability of comprehensive data on these airlines and areas, it is possible to make a general forecast with reasonable confidence. For the African Region, however, the prerequisites are only partially fulfilled.

3. The initial fact to be borne in mind in this context is that over the past decade Africa has undergone profound political changes. Between 1955 and 1966 the number of independent African States increased from five to thirty-nine. This fact, with all the economic and social readjustments flowing from it, makes it difficult to establish meaningful trends. Beyond this, however, much of the basic statistical information required for forecasting is available only partially or not at all.

1/ ICAO Circular 73-AT/10.

2/ ICAO Circular 76-AT/11.

4. Traffic and capacity statistics, for example, are available by airline broken down only between international and domestic services, or by stage but without passenger origin or destination. It is therefore possible to analyse traffic growth only for the whole network of an airline or group of airlines or, in other words, to say that the total volume of scheduled passenger traffic carried by the airlines of Africa on all their international (both regional and intercontinental) or domestic services has increased or will increase by a certain amount. It would, however, be more meaningful and useful to be able to analyse traffic growth by routes showing, for example, the past or expected increase in the total scheduled passenger traffic carried by all airlines, whether African or non-African, on routes between, say, Europe or North America and the various sub-regions of Africa. With regard to airport traffic statistics which might provide a basis for useful trend projections, although twenty-four African States have filed some data only seven of these have provided complete series for five or six years.

5. Financial statistics on which might be based estimates of operating cost and revenue trends are similarly incomplete. In the first place financial data is available for only ten African airlines (see Appendix 9). These ten do indeed account for about 75 per cent of the traffic of all scheduled African operators, but as with all airline financial statistics filed with ICAO no differentiation is made between the various routes and services operated. This being the situation it is not possible to estimate cost or revenue trends on particular regional or intercontinental routes. All that can be said is that the average unit operating cost and revenues of ten important African carriers in 1964 and 1965 were both about 20 per cent above the averages for all ICAO carriers. These averages, however, encompass a wide range of variations between airlines and between routes.

6. Concerning the composition of the air transport market for African routes, that is for example, the split between scheduled and non-scheduled traffic; between first, economy, excursion and ITX class scheduled passengers; and between business and personal travel, there is in general little statistical information available to ICAO, and such estimates as are made are of an approximate nature. Competition from surface modes of transport is a significant factor only on routes between North Africa and Europe. The socio-economic factors to be considered in the preparation of forecasts for international traffic to, from and within Africa are related mainly to Europe, North America and other regions outside Africa for the reason that most travellers on these international services are non-Africans. 3/

Nature of the forecast

7. With such limited information it is possible only to attempt to forecast in the most tentative way what the general development of air passenger traffic may be on all international routes to, from and within Africa, taken as a whole, over the fifteen year period 1965 to 1980. It may also be possible to suggest broadly where variations from the probable average growth rate are likely to occur. In considering the course of future trends and developments on African international routes it will be necessary often to base conclusions on world-wide trends qualified in the light of such information as may be available on the African situation.

3/ Including non-Africans resident in Africa travelling on business or home leave.

Air passenger traffic trends

8. This study is concerned primarily with scheduled international passenger traffic, whether it be intra-African or intercontinental, but the growth of this international traffic over the past fifteen years has been distorted by the political evolution of Africa. The distribution of the scheduled passenger traffic of African airlines between international and domestic services has changed radically as more and more States have become independent. In the twelve years from 1951 to 1963 the proportion of scheduled traffic carried on international services rose from about 30 to 75 per cent, where it has remained up to 1966. The growth trend of these international services has thus been unnaturally high and cannot serve as an indication of future development. On the other hand, the average annual rate of growth for all scheduled passenger traffic (international and domestic) of all African carriers (of both contracting and non-contracting States of ICAO) has been relatively steady. From 1951 to 1966 the average annual increase was just over 15 per cent falling to just under 15 per cent in the shorter period 1960 to 1966.

9. Since 1963, by which time nearly all of Africa had achieved independence, and the distribution of traffic between international and domestic services had apparently stabilized, the average annual growth rate has been about 12 per cent on all scheduled passenger services of the African airlines and 11 per cent on their international services. For the future it will be assumed that the volume of scheduled international passenger traffic of these African airlines will continue to amount to about 75 per cent of the total and that the annual average growth rate for international traffic will tend to remain close to that for total traffic.

10. So far reference has been made only to the traffic of African airlines, but they carry at present only about 46 per cent of all the scheduled passenger traffic moving on international routes to, from and within Africa. The other 54 per cent is carried by non-African, chiefly European, airlines. In 1965 the total volume was about 7,800 million passenger-kilometres, 3,600 million performed by African carriers and 4,200 by non-African. The average annual rate of growth of this traffic of non-African airlines from 1960 to 1965 was probably also close to 15 per cent 4/. A further indication of the growth trend of passenger traffic on African routes may be seen in the number of passengers carried on direct flights between Africa and other regions by all airlines, which increased at an average annual rate of about 11 per cent from 1960 to 1965 5/. Over the same period, however, the average trip distance increased by about 30 per cent so that the average annual traffic increase in terms of passenger-kilometres was probably close to 15 per cent. From this evidence it is estimated that from 1960 the scheduled passenger traffic of all airlines operating on international routes to, from and within Africa has been increasing at an average annual rate of nearly 15 per cent. Since 1963 it has probably been closer to 13 per cent.

4/ See Section II, paragraphs 25 and 26.

5/ See Section II, Table 1.

Airline operating cost and revenue trends

11. The average unit operating cost for all passenger services (international and domestic) 6/ operated by the scheduled airlines of ICAO States fell from 2.3 cents per seat-kilometre in 1960 to 1.9 cents in 1965, an average annual decline of about 4 per cent. Over the same period unit operating revenues from passengers for the same airlines fell from 3.9 cents per passenger-kilometre to 3.7 cents, an average annual decline of 1 per cent. For 10 major African airlines similar declines occurred, but in 1965 their average unit operating cost, at 2.3 cents per seat-kilometre, and average unit revenue, at 4.5 cents, 7/ were both about 20 per cent above the world averages. Statistics for other African airlines and for the operations of non-African airlines on routes to and within Africa are not available, but it appears probable that in both cases unit costs and revenues were above the world averages. This discrepancy between African and world levels is explained at least in part by the fact that the world figures are reduced by the inclusion of a relatively small number of very large, low cost, chiefly North American airlines. If these were excluded the discrepancy would largely disappear. 8/

12. The trend therefore has been for unit operating costs to fall about four times as fast as unit revenues which has resulted in the break-even load factor falling from about 59 per cent in 1960 to 51 per cent in 1965. During the same period the passenger load factor for all services 6/ fell from 59 to 52 per cent in the case of the African airlines and from 59 to 56 per cent in the case of all ICAO airlines. 9/ The operating margin has thus improved appreciably for world's airlines as a whole, but much less for the African airlines. In this situation, in spite of the low break-even load factor there is a natural reluctance on the part of the African airlines in general to reduce regular scheduled fares, at least until unit costs have fallen further or load factors have risen.

Other air transport trends

13. Apart from these traffic and financial trends the most important developments in the field of air transport have flowed from the introduction into service of steadily increasing numbers of jet aircraft. It is this fact, of course, that has been the chief cause of the 4 per cent annual decline in unit operating costs and the accompanying fall in break-even load factors. Beyond these results, however, the much increased speed and payload, and resulting productive capacity, of these aircraft have lead to a number of other developments.

6/ With the data available it is not possible to show separately unit costs and revenues for international services. It is probable, however, that for African airlines these are appreciably lower than for their domestic services.

7/ See Appendix 9.

8/ See Section V, paragraph 17.

9/ See Section II, Table 7.

14. The average number of seats per aircraft on international services increased from 1960 to 1965 for African airlines from 55 to 85 seats, or 54 per cent. In the same period the world average increased about the same percentage from 67 to 103 seats. Again in the same period the average number of kilometres travelled per passenger on international services increased for African airlines from 1540 to 2020 kilometres or 31 per cent. The increase in the world average figure was only about 11 per cent, from 1815 to 2020 kilometres. Along with these developments the jets also brought problems in such areas as aircraft utilization, scheduling and flight frequencies, and the average load factor declined. As the number of jets in service continues to increase and as new larger aircraft appear it seems probable that some of these trends will continue, though somewhat abated. The average number of seats per aircraft will increase, but more slowly. Unit operating costs on routes to and within Africa will continue to fall, but also more slowly. As the pace of re-equipment slows, however, the problems of utilization and scheduling should lessen, and load factors may rise somewhat. If fares continue to fall slowly break-even load factors should remain at approximately their present level, that is about 50 per cent.

Development of world tourism

15. In 1963 it has been estimated by IUOTO 10/ that the total expenditure on world tourism was of the order of $53,000 million of which about one-quarter or $13,000 million was on foreign tourism, the other three-quarters being domestic. Of this $13,000 million about $4,000 million was spent on all forms of transportation and $9,000 million on other items of tourist expenditure, chiefly accommodation. Since 1950 this expenditure has been steadily increasing at an average annual rate of about 12 per cent. This rate of increase, it may be noted, is of the same order as for air transport and much higher than for most other economic activities. The world gross domestic product, for example, has been increasing at only about 5 per cent per year. However the growth rate of tourist expenditure varies considerably from region to region. It has been considerably above the world average for Europe, the Middle East and Asia/Oceania, and below for North America, Latin America and Africa. The annual rate for Africa as a whole has been only about 6 per cent, though of course it has been higher for some sub-regions, particularly North Africa, and lower for others, particularly Central and West Africa.

16. Foreign tourism in fact in 1963, amounting to $9,000 million, was the most important single item on international trade. Moreover in 24 of the 60 countries considered by IUOTO for 1963, foreign tourist receipts were among the top three export items. Only four of those States, however, were African: Ethiopia, Ghana, Libya and Morocco; but since 1963, foreign tourism has become of increasing importance in other African States, notably Tunisia and Kenya, and it seems clear that this trend will continue in the future. The regional distribution of international tourist receipts and expenditures is shown in Table 1 where it may be seen that North America had a large adverse balance, and Europe and Latin America favourable balances, and that there was a heavy concentration of foreign tourist activity in these three regions.

10/ Economic Review of World Tourism, IUOTO, Geneva, 1966.

Table 1

Regional Distribution of Tourist Receipts and Expenditures, 1963

Region	Expenditures		Receipts	
Europe	50%)		60%)	
North America	37%)	90%	16%)	90%
Latin America	3%)		14%)	
Asia/Oceania	5%		5.5%	
Africa	3%		2.5%	
Middle East	2%		2%	
	100%		100%	

17. In 1963 indeed 82 per cent of all foreign tourist expenditures and 79 per cent of all foreign tourist receipts were attributed to two groups of 12 States, 9 States being common to both groups, as shown in Table 2. In the same year only 3 African

Table 2

Leading States in Foreign Tourist Activity, 1963

State	Expenditures ($ Millions)	State	Receipts ($ Millions)
United States	2.070.0	United States	934.0
Germany	1.197.0	Italy	931.6
United Kingdom	678.3	Mexico	882.3
France	595.0	France	716.8
Canada	545.0	Spain	679.0
Belgium	220.0	Germany	611.0
The Netherlands	215.0	United Kingdom	557.5
Italy	182.8	Canada	548.9
Switzerland	165.0	Austria	426.5
Sweden	156.0	Switzerland	419.0
Denmark	121.0	The Netherlands	214.0
Austria	110.3	Japan	190.0

States (the United Arab Republic, Morocco and South Africa) had tourist receipts of over $20 million. Since then, however, at least 3 other States (Tunisia, Kenya and Ethiopia) have appreciably increased their tourist receipts.

18. Finally, in considering the development of world tourist activity and the future prospects for Africa in this field it is important to note that tourist expenditure is highly income elastic and also price elastic. To illustrate the concept of income elasticity in this context it has been estimated 11/ that as annual personal consumption expenditure per capita increases twenty times from $100 to $2000 tourist expenditure per capita increases three hundred and sixty times from $0.33 to $120. This relationship has profound implications for the future development of tourism. If the relative economic affluence now found in North America and Western Europe continues to increase and spread both vertically and horizontally on the basis of an average annual increase in gross domestic product of 5 per cent it seems probable that world foreign tourist expenditure will continue to increase at something like its current rate of 12 per cent per year. The reference to price elasticity simply repeats what has been stated several times in this study; any reduction in the unit price of and hence the unit revenue from transportation or accommodation will, (if other conditions are right) produce a more than compensating increase in tourist demand or total revenue.

General socio-economic trends

19. In addition to the trends and developments in the fields of air transport and foreign tourism that have been described there are a number of general socio-economic trends that are relevant to the future prospect for air passenger travel. The more important of these include world population growth which has been at the average annual rate of about 2 per cent; total gross domestic product which has grown at about 5 per cent per year; gross domestic product per capita which has grown at about 3 per cent; and consumer price inflation which has been about 1 per cent per year. Furthermore there have been general trends towards increasing leisure and paid holidays resulting in growing opportunity for air travel; towards increasing urbanization which freeds the desire for travel and change in the urban population; and toward rising educational standards which also fosters the desire to travel. For the purposes of this study it will be assumed that all of these trends will continue to operate over the next 15 years and that there will be no major wars or economic depressions.

Forecast of future developments

20. The future development of international air passenger travel on routes to, from and within Africa will depend on how the various trends and developments that have been described continue over the next 15 years. In order to arrive at a forecast of passenger traffic growth it will therefore be necessary to make a number of assumptions which may be tabulated as follows:

a) Socio-economic factors. - As suggested in paragraph 19, world population, gross domestic product, consumer price inflation, leisure time, urbanization and education will all continue to develop at approximately the same rates as they have over the past five years and there will be no major war or economic depression.

b) World foreign tourist activity. - The growth of foreign tourist expenditure, being based on a demand that is both income and price elastic, will continue at an annual rate of at least 10 per cent.

11/ IUOTO, Economic Review of World Tourism, p. 11.

c) Airline re-equipment. - The re-equipment of the airlines operating scheduled passenger services to and within Africa with the latest short, medium and long range jet aircraft, including some of the larger types becoming available will continue up to 1980, but at a somewhat reduced pace.

d) Unit operating costs. - World unit operating costs for all scheduled passenger services (international and domestic) fell about 2 per cent per year from 1950 to 1965 or 4 per cent per year from 1960 to 1965. On international services alone the decline was more rapid 12/ and will probably continue, at least on these services, to fall at an average annual rate of about 2 per cent until 1980. The average decline on routes to and within Africa will be of the same order.

e) Unit operating revenues. - Unit operating revenues for all scheduled passenger services fell about 1 per cent per year from 1960 to 1965, but on international services alone the decline was closer to 2 per cent. 12/ On international services to and within Africa the decline in unit passenger revenues will probably be about 2 per cent per year until 1980 provided that sufficient accommodation for travellers is available and that the proportion of tourists travelling on "creative" fares increases steadily.

f) Break-even load factors. - If both unit costs and unit revenues fall at 2 per cent per year the average break-even load factor on services to and within Africa will remain until 1980 at about its present level - 51 per cent.

g) Passenger load factor. - As the pace of re-equipment eases and traffic builds up the average passenger load factor on scheduled international services to and within Africa operated by African airlines should rise gradually to about the 57 per cent average achieved by the non-African airlines in 1966.

h) Tourist accommodation. - The availability of sufficient tourist accommodation and related services is essential to the growth of air passenger travel to and within Africa, and there is no doubt that, up to the present, there has been a widespread shortage of such facilities. Statistics indicating growth trends in accommodation are not generally available, but activity now taking place in many parts of Africa, and particularly in such countries in the North and East as Morocco, Tunisia, the United Arab Republic, Kenya and Ethiopia, suggests that over the next 15 years the accommodation problem will cease to exist in some countries and will become steadily less critical in the continent as a whole.

12/ ICAO Circular 73-AT/10, pp. 33-34.

i) Proportion of personal travel. - As accommodation and related services become more generally available it should be possible on the basis of the new creative fares (especially the inclusive tour fares) approved by IATA, for airlines and travel agents, by vigorous promotion of Africa as a desirable destination for tourists, to take advantage of the elasticity of personal demand. As this happens personal travel should increase more rapidly than business travel, amounting by 1980 to perhaps as much as 25 per cent of total scheduled passenger traffic as compared to the present 10 per cent.

j) "Natural" growth of scheduled traffic. - It is assumed that scheduled international air passenger traffic on routes to, from and within Africa will have a "natural" growth rate of about 10 per cent per year. That is even with no reduction in fares the traffic will grow at this rate as a result of trends in such factors as population, gross domestic product, leisure time, urbanization, education and foreign tourist expenditure.

k) Elasticity of demand. - It is assumed that the elasticity of demand for scheduled passenger travel on international routes to, from and within Africa will be about 2:1. In other words a 1 per cent fall in passenger fares will result in a 2 per cent increase in traffic over and above the "natural" increase of 10 per cent, or a 2 per cent fall in fares will produce a 4 per cent additional increase in traffic.

l) Non-scheduled traffic. - Again assuming that adequate accommodation and services become available in at least the major tourist centres and assuming that governments are reasonably liberal in granting permission for non-scheduled operations, especially non-scheduled tour services, this form of air passenger traffic should grow somewhat more rapidly than scheduled traffic so that by 1980 it might amount to about 14 per cent of scheduled traffic instead of about 8 per cent as in 1965.

21. On the basis of the various assumptions tabulated in paragraph 20 it is suggested that the scheduled international passenger traffic of all airlines operating on routes to, from and within Africa should grow at an average annual rate of about 14 per cent up to 1980 with the traffic of the African airlines growing slightly more rapidly than that of the Non-African (about 14.5 per cent compared to 13.5). The situation on these routes would then develop approximately as shown in Table 3.

Table 3

Development of Air Passenger Traffic on International Routes to, from and within Africa 1965-1980
(millions of passenger-kilometres)

	1965	1970	1975	1980
African Airlines	3,600 (46%)	7,000 (47%)	14,000 (48%)	28,000 (50%)
Non-African Airlines	4,200 (54%)	8,000 (53%)	15,000 (52%)	28,000 (50%)
Total Scheduled Traffic	7,800	15,000	29,000	56,000
Business Share	90%	85%	80%	75%
Personal Share	10%	15%	20%	25%
Non-Scheduled as percentage of Scheduled	8%	10%	12%	14%
Non-Scheduled Total	620	1,500	3,500	7,800

22. The pattern of development suggested in Table 3 is, of course, tentative and subject to error if some of the assumptions described in paragraph 20 prove unwarranted. The assumed "natural" growth rate of 10 per cent per year, for example, may be reduced if gross domestic product grows at appreciably less than 5 per cent, if there is a continuing acute shortage of accommodation in Africa, or if there should be major political disturbances. On the other hand it could be augmented if accommodation and other tourist facilities become generally available and there were a series of really intensive campaigns to promote the countries of Africa as tourist destinations.

23. If the average passenger fare on scheduled international air services to and within Africa falls by only 1 per cent annually over the next fifteen years instead of 2 the additional traffic increase over the "natural" rate will be 2 per cent instead of 4. Conversely, if the decrease in average fare is greater than 2 per cent the additional increase in traffic will be greater than 4. The average fare level, it is important to note, will be affected by the relative growth of personal, as distinct from business traffic. The reason for this is that the lowest fares will be the "creative" fares (especially inclusive tour fares) made available for tourist travel and restricted in such a way as to be unsuitable for most business travel. As more use is made of these fares and tourist traffic comes to account for more than the present 10 per cent of total scheduled traffic the average fare level will be reduced.

Sub-regional variations from the forecast

24. It must also be emphasized that the assumptions and traffic development described in paragraphs 20 to 23 relate to all passenger services on international routes to and within Africa considered as a whole. Clearly there will be important variations between the sub-regions. In Central and West Africa, for example, the shortage of tourist accommodation and related services is more general and constitutes a far more acute problem than in the other sub-regions. Furthermore tourism is only just beginning to be developed and personal travel accounts for much less than 10 per cent of the total passenger traffic. For these reasons the "natural" annual growth rate of air passenger travel is less than 10 per cent and the potential elasticity of demand cannot be fully realized. It seems probable therefore that over the next 15 years the average annual growth rate for scheduled international passenger traffic to and within these sub-regions will not be more than 10 per cent.

25. In East and South Africa, on the other hand, and to an even greater extent in North Africa (partly because of its relative proximity to Western Europe) there are countries where the tourist industry has been developing for some years and where accommodation poses less of a problem. In these sub-regions it seems probable that the suggested average annual growth rate of 14 per cent will be generally realized and it may well be exceeded in such countries as Morocco, Tunisia, the United Arab Republic, Kenya and Ethiopia.

Presuppositions of the forecast

26. Finally, it remains to be said that the future growth of air passenger travel on international routes to, from and within Africa, suggested in this section, presupposes a considerable degree of implementation by all concerned of the measures designed to further the development of air passenger travel that are described in Section VIII-B. To realize the forecast level of air transport growth governments and private business must become thoroughly convinced of the importance of tourism and air transport to national economies and must ensure that national plans for the development of these activities are drawn up and vigorously pursued, on the basis of comprehensive statistical information, and sometimes in co-operation with other States. As an essential prerequisite for the accelerated growth of air travel the infrastructure for tourism -- accommodation, local transport, trained personnel, and a welcoming public attitude -- will have to be provided or extended as rapidly as possible.

27. In addition, if there is to be sound economic operation of air transport services to, from and within Africa, it will be necessary to ensure that air freight and mail services are developed simultaneously with passenger services. Sympathetic consideration will need to be given to applications for traffic rights received from non-scheduled operators. Border crossing by international passengers will have to be facilitated to the greatest possible degree. And, even if all other conditions are fulfilled, the development of air passenger travel will be less rapid than it should be if strong and concerted action is not taken to dispel the ignorance that exists in many parts of the world concerning Africa as a travel destination.

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VIII - CONCLUSIONS

A - PRINCIPAL FACTORS AFFECTING THE DEVELOPMENT OF AIR TOURISM

1. Appreciation of the economic importance of tourism

The development of a significant national tourist industry cannot begin until the appropriate departments of government and sectors of private business have become convinced of the important contribution that tourism can make to the national economy. Not until this first stage has been attained will the necessary plans and priorities be established and maintained for action in such fields as tourist accommodation and services; development of air transport; preparation of domestic public opinion towards tourists; promotion abroad; and simplification of customs and immigration procedures.

2. Appreciation of the essential role of air transport in the development of tourism

Since the development of African tourism depends primarily on bringing tourists from Europe and North America, the principal and, apart from North Africa, almost the only mode of transport is the air services. Accordingly development can proceed rapidly only when this fact is recognized in government planning circles. Only then will the requisite action be taken with respect to such matters as airports, airline re-equipment, air fares, traffic rights, authorization of non-scheduled operations and the facilitation of international air travel.

3. Availability of statistical information for national planning

The satisfactory development of a tourist industry with all of its ramifications requires that studies be undertaken and plans formulated at the national or sub-regional level. Such work, however, can be successfully completed only on the basis of comprehensive statistical data on such matters as available accommodation, tourist movements, and all aspects of air passenger transport, including traffic flow, traffic carried, airport traffic, the composition of passenger traffic, airline financial operations, and non-scheduled operations.

4. Availability of tourist accommodation and services

Tourism can develop only to the extent that satisfactory arrangements have been made for the reception, accommodation, service, and entertainment of tourists during their stay in a country. These requirements are generally beyond the competence of the civil aviation authorities but until they have been met air transport cannot play its proper role.

5. Level of air fares for tourists

When the required accommodation and services are available the growth of tourism will depend to a considerable degree on the level of air fares. This special importance of fares results from the distances that separate all parts of Africa, except the North, from the main sources of tourists -- Europe and North America --, and from the elasticity of tourist demand. The extent to which the effect of these distances on fares can be overcome and the elasticity of tourist demand can be activated will be governed by the level of special creative fares designed to stimulate travel on scheduled services and by the volume of low cost non-scheduled charter and inclusive tour operation that is permitted.

6. Awareness of tourist attractions abroad

Another determining factor in the development of tourism, once the basic infrastructure has been provided, is the extent to which a country's tourist attractions are known abroad. When comparable accommodation and transport are available, the tourist will choose between one country and another in accordance with the extent to which his interest has been aroused. For this reason much will depend on the active promotion abroad, through airline channels, travel agents, tour operators, official tourist offices, and the press, of an awareness of each country's tourist assets.

7. Availability and quality of air services

The growth of air tourism will be affected by the ease with which the prospective tourist can travel from his place of origin, through his intended stop-overs to his final destination. This factor involves such matters as frequency and time of service, availability of flights to smaller centres, co-ordination of airline timetables to facilitate connections, and availability of seats on the desired flight (sometimes difficult when load factors are high). The quality of the service received by the passenger from the airline on the ground and in the air may also affect the build-up of tourist traffic.

8. Facilitation of international air travel

The degree to which the tourist's entrance into and departure from a country is facilitated by the various customs, immigration and health officials concerned may have an important effect on the development of that country's tourist industry. Tourists will communicate their reactions to other prospective tourists and travel agents will become aware of the situation and act accordingly.

9. Cost of living

The build-up of a country's tourist industry will be affected by its cost of living since, other factors being equal, the tourist will naturally be attracted by a low cost of living and discouraged by a high one. The weight of this factor will, however, tend to vary inversely with the trip distance since the greater the distance the greater will be the proportion of the total cost of the trip attributable to transportation and the less will be the relative significance of the local cost of living. Where necessary the adverse effect of a high cost of living can be reduced by special measures such as block bookings at hotels, government control of hotel rates and other prices affecting tourists, or special exchange rates for tourists.

10. Climate

Such climatological factors as clear skies and pleasant warmth on the one hand, or rainfall, high temperatures and humidity on the other may have a pronounced effect on the development of tourism. Indeed in many African countries, the conditions of climate may be expected to have a strongly discouraging effect on the European or North American tourist during certain limited seasons (usually from June to September), but during other seasons to be a positive advantage.

11. Other factors

Important, but less tangible in their effect on the development of tourism are those factors that may be grouped under the term "social conditions". For example tourism will be encouraged where the population has a welcoming attitude towards tourists and discouraged where there is a fear, justified or not, of political instability.

B - MEASURES TO FURTHER THE DEVELOPMENT OF AFRICAN AIR PASSENGER TRAVEL

Civil aviation administrations and airlines of African and interested non-African States might consider adopting, as appropriate, some or all of the following measures in order to bring about an acceleration in the development of international air passenger travel to, from and within Africa:

1. IMPORTANCE OF TOURISM AND THE ROLE OF AIR TRANSPORT IN ITS DEVELOPMENT

Seek, by appropriate means and to the extent necessary, to convince interested departments of government and sectors of private business of:

a) the potential importance of tourism to the national economy;

b) the essential role to be played by air transport in the development of tourism;

c) the need for a national plan, where none exists, prepared from detailed and reliable information on all relevant aspects of the tourist industry and establishing priorities for action in this field; and

d) the desirability of international and inter-airline co-operation and co-ordination on such matters as, for example, promotion abroad, facilitation of international travel, and the development and improvement of air services.

2. PREREQUISITES FOR TOURISM (APART FROM AVIATION)

Take all necessary and appropriate action to promote the development, by government and private interests, of the essential (non-aviation) prerequisites for tourism, including such items as:

a) suitable accommodation and related services for tourists at the various centres of attraction;

b) local transport (taxi, bus, rail and river boat);

c) trained personnel for employment in the tourist industry;

d) domestic public opinion welcoming the arrival of foreign tourists;

e) measures to counteract the effects of a high cost of living;

f) effective presentation of national tourist attractions; and

g) detailed statistical information on all aspects of the tourist industry.

3. AIR TRANSPORT STATISTICS

Arrange, where this is not already done, to collect and disseminate, to the fullest extent possible, statistics on all aspects of air transport, including:

a) as a first step, the completion and filing of ICAO Air Transport Reporting Forms, particularly on Traffic Flow, Airport Traffic and Financial Data;

b) collection, on an ad hoc basis, as may be necessary for specific studies, of statistics on the origin and destination of tourists, and the purposes of passenger travel; and

c) collection of statistics on non-scheduled operations.

4. REGULAR AND CREATIVE PASSENGER FARES ON SCHEDULED SERVICES

Examine the air fare situation on those international scheduled services that connect the main sources of tourists (Europe and North America) with the States of Africa, with a view to maintaining all fares at the lowest possible level and to introducing, wherever desirable and feasible, new low creative fares (excursion, non-affinity group, family, and inclusive tour). This examination might include joint consultation between the administrations and airlines of tourist originating and destination States. Particular attention should be given to the use of creative fares to encourage the development of tourist traffic during the off-season (October to May) when in many African States the climate is suitable for tourism.

5. NON-SCHEDULED CHARTERS AND INCLUSIVE TOURS

Consider, on the basis of joint consultation between the administrations of originating and destination States, the desirability and feasibility of permitting, with appropriate regulation, the operation to those African centres where adequate accommodation and services exist of non-scheduled charter and inclusive tour flights, particularly from Europe and North America.

6. AVAILABILITY AND QUALITY OF SCHEDULED INTERNATIONAL AIR PASSENGER SERVICES

Keep under continuous review, both at the national level and through international consultation (as suggested in Recommendation No. 1 of the African Air Transport Conference, Addis Ababa, November 1964), all aspects of African international scheduled air services in order to ensure the optimum availability and quality of these services. This review should cover, in particular, such matters as flight frequencies, scheduling, introduction of new services, co-operative arrangements between airlines including co-ordination of timetables, and the granting of traffic rights.

7. SCHEDULED AIR FREIGHT AND MAIL SERVICES

Foster and plan for the development of scheduled international air freight and mail services to, from and within Africa at the same time as passenger services since sound economic operation requires the parallel growth of all three categories of load.

8. PROMOTION IN OTHER REGIONS OF TOURIST TRAVEL TO AFRICA

Take all possible steps, when an adequate infrastructure for tourism has been created, to promote the countries of Africa as destination areas for tourists and sites for international conferences, particularly in the main travel originating areas -- Europe and North America. If large numbers of tourists are to be attracted to Africa it will be necessary (through airline channels, travel agents, tour operators, official travel organizations, the press and other media of mass communication) to inform the potential tourist of the attractions that exist in various African States, such as: novelty, local colour, natural beauty, beaches, wild life, photography, hunting, fishing and antiquities.

9. FACILITATION OF INTERNATIONAL AIR TRAVEL

Take the following action to facilitate international air travel in the African region:

a) since the development of tourism in Africa depends to a very large extent on travel by air, and since ICAO's Annex 9 is specifically designed to facilitate the development of air transport, African States should make special efforts to put into effect the relevant International Standards and Recommended Practices of Annex 9;

b) in each State, the Government Aviation Department should take the initiative in keeping the governmental control authorities, i.e. immigration, customs, public health, consular (passports/visas) etc., continually aware of the problems and should seek their co-operation in eliminating them, thereby encouraging the development of tourism for the benefit of the country as a whole; one of the best ways of eliminating these problems is through an active and efficient National Facilitation Committee (composed of the aviation and non-aviation authorities involved) with local Airport Facilitation Committees (aided by Operators' Committees) at their international airports;

c) African States should co-operate with each other so as to improve Facilitation in the African region and should ensure that Facilitation subjects form part of the work programme of any regional civil aviation body which may be established in Africa.

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APPENDICES

APPENDIX 1

RESOLUTION A15-17: Development of International Air Passenger Travel

WHEREAS there is universal recognition of the importance of accelerated development of the air passenger market;

WHEREAS increased international air travel in the future will largely result from the growth of tourism; and

WHEREAS studies designed to further the development of international air tourist travel especially in the developing States would be beneficial to Contracting States;

THE ASSEMBLY RESOLVES that the Council undertake studies with the objective of exploring, analyzing and determining measures to further the development of international air passenger travel. These studies should be conducted on a worldwide basis or by regions, with priority given to regional studies to meet the needs of developing nations, in the first instance the region of Africa. The studies should consider the relative importance of air tourist traffic to the economies of the Contracting States, the economic environment for air tourist travel, the relationship of increased travel to scheduled and non-scheduled carriers engaged in the transportation of international air traffic in terms of capacity, schedules, traffic flow, fares and costs, anticipated technological developments, and any significant problems or obstacles which may be hindering the development of international air tourist travel. In carrying out these studies, the Council should, as appropriate, consult with Contracting States, IATA and other international organizations, and forward copies of the completed studies to these entities for consideration and action.

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APPENDIX 2A

QUESTIONNAIRE

To: *National Administrations of African States*

Notes: 1) The following questionnaire, which is designed to supplement and confirm data now on hand in ICAO, deals only with matters of an air transport (i.e., economic, commercial and administrative) nature. Technical or air navigation matters are dealt with by ICAO's technical machinery. Non-aviation questions related to the development of tourism in Africa are being handled by IUOTO in its preliminary survey of African tourism, and later by *UNCTAD in studies of tourism in developing countries.*

2) Where appropriate, cross references are given to the relevant parts of the Study of Air Transport in Africa (ICAO Doc 8419-AT/718) published in July 1964 as basic documentation for the African Air Transport Conference, Addis Ababa, November 1964.

QUESTION I: RECOMMENDATIONS OF THE AFRICAN AIR TRANSPORT CONFERENCE

It will be recalled that the African Air Transport Conference held in Addis Ababa in November 1964, adopted five recommendations, all of which were directed toward the development of air transport in Africa (see Report of the Conference, ICAO Doc 8462-AT/719). Three of these recommendations called for action by African States on air transport matters. Concerning these three, which are listed below, please indicate what obstacles to implementation exist, and what measures might expedite implementation:

A. Sub-Regional Airlines - Recommendation No. 1 (Doc 8419, paras. 32, 33 f);

B. Tourism - Recommendation No. 2 (Doc 8419, paras. 33c, 79-80);

C. Facilitation - Recommendation No. 5 (Doc 8419, paras. 120-136).

QUESTION II: OBSTACLES TO THE DEVELOPMENT OF AIR TRAVEL

What obstacles or problems hinder the development of air passenger travel to, from and within the region of Africa in general and your country in particular? Do you consider, for example, that such obstacles or problems exist under some

or any of the following headings? (If your reply is in the affirmative, please explain your views and, if possible, suggest what measures you consider would help.)

A. Inadequate air services (Doc 8419, paras. 16, 18, 21-24, 30, 33d, 33f, 50-56, 71i, 81-89):

1) insufficient frequency of service on existing routes (specify routes, explain, and suggest possible changes),

2) lack of connections with potential traffic points both within and outside Africa (specify which points),

3) too many indirect services providing inadequate links between points that should have direct connections (specify points, explain, and suggest possible measures),

4) too few long-haul services offering the possibility of low-cost operation with good aircraft utilization (specify points between which such services might be operated),

5) insufficient use of modern high-speed aircraft with potentially low operating costs (specify routes on which such aircraft might be operated with economic utilization rates and load factors),

6) insufficient offers of inclusive tours on charter flights (suggest points between which such tours might be operated);

B. Inadequate facilitation: Incomplete implementation of the Standards and Recommended Practices established by ICAO in Annex 9 for the facilitation of passengers entering, leaving, and in transit through, your country, or other countries in the Region (Doc 8419, paras 120-136). Please explain and, if possible, suggest remedies, e.g.:

1) Does clearance of inbound baggage take too long? If so, is this because of slow handling procedures, insufficient staff, or is the examination itself too detailed?

2) Is checking of passports of inbound passengers carried out as quickly as possible, or should it be speeded up?

3) Health checks should be performed strictly within the limits of the International Sanitary Regulations of the World Health Organization; is this the case?

4) There should be very little examination of outbound passengers and baggage; is this the case?

5) Transit passengers and their baggage should be as free as possible of all formalities; is this the case?

C. Insufficient traffic rights: Insufficient traffic rights to permit the development of sound route structures on which economic operations can be conducted (specify the points at which rights are needed) (Doc 8419, paras. 32, 33a):

1) within Africa,

2) to and from Africa;

D. Other obstacles: Other obstacles to the development of air passenger travel (the problem of air fares is dealt with under Questions III and IV)?

QUESTION III: FARE REDUCTIONS - NATIONAL AIRLINES

For those routes on which the airlines of your State operate or are contemplating operation, whether domestic, regional, or intercontinental:

A. Need for fare reductions: Do you consider that air fares should be reduced and, if so, on what routes, for what reasons and by what percentages: 1) intercontinental, 2) regional, 3) domestic (Doc 8419, paras. 16, 25-26, 33f, 58-61, 71ii, 79-80);

B. Types of fare reduction: If reply to A is affirmative, what types of fare reductions would you suggest, on what routes and why, e.g.:

1) lower economy fares,

2) special excursion fares,

3) low seasonal fares,

4) inclusive tours,

5) group fares,

6) other;

C. Effect of fare reduction on traffic: If reply to A is affirmative, what order of traffic increase would you expect to result from such reductions, in other words, what is your estimate of the elasticity of demand on such routes: 1) intercontinental, 2) regional, 3) domestic (Doc 8419, paras. 17, 27, 62-64, 79-80);

D. Effect of fare reduction on operating margin: If reply to A is affirmative, do you consider that such fare reductions would reduce the operating margin of your airlines: 1) intercontinental, 2) regional, 3) domestic (Doc 8419, para. 72);

E. Fare reduction and subsidy: If reply to D is affirmative, would you favour some form of subsidy (suggest how this might be effected) (Doc 8419, paras. 26, 32, 33b, 73-78);

F. Fare reduction and tourist accommodation: If reply to A is affirmative, are the hotels and other tourist facilities, existing or planned, in your country adequate to meet the increase in tourists that would result from the proposed fare reduction (relate to reply to C)?

QUESTION IV: FARE REDUCTIONS - FOREIGH AIRLINES

With regard to air services operated to your State by foreign airlines, African or non-African, considering the probable effects on traffic, tourist accommodation and airline economics, would you favour fare reductions? If your reply is affirmative please explain, taking into account the relevant items under III.

QUESTION V: TRAFFIC ESTIMATES AND FORECASTS

Please give statistics or estimates for:

A. Passenger traffic 1955-65: The number of passengers entering and leaving your country during the years 1955 to 1965, or other available years indicating trends:

1) by air: a) by scheduled service, b) by non-scheduled flight,

2) by surface transport;

B. Nature of air passenger travel: The percentage of these passengers travelling for:

1) business purposes (governmental or private),

2) personal reasons (tourism or other);

C. Passenger traffic 1965-70: The trend in air passenger travel to and from your country from 1965 to 1970 by scheduled and by non-scheduled services, assuming (1) no change in air fares, (2) reductions in fares (see also Question III C) (Doc 8419, paras. 17, 27, 62-64, 79-80);

D. Importance of air tourist travel to national economy: The relative importance of air tourist traffic to the economy of your country (Doc 8419, para. 80)?

QUESTION VI: OTHER SUGGESTIONS OR INFORMATION

Do you have any other suggestions or information, including published studies, relevant to the development of air passenger travel to or within the African region?

APPENDIX 2B

QUESTIONNAIRE

To: National Administrations of non-African States with airlines operating or proposing to operate to the African region.

Notes: 1) The following questionnaire, which is designed to supplement and confirm data now on hand in ICAO, deals only with matters of an air transport (i.e., economic, commercial and administrative) nature. Technical or air navigation matters are dealt with by ICAO's technical machinery. Non-aviation questions related to the development of tourism in Africa are being handled by IUOTO in its preliminary survey of African tourism, and later by UNCTAD in studies of tourism in developing countries.

2) Where appropriate, cross references are given to the relevant parts of the Study of Air Transport in Africa (ICAO Doc 8419-AT/718) published in July 1964 as basic documentation for the African Air Transport Conference, Addis Ababa, November 1964.

QUESTION I: OBSTACLES TO THE DEVELOPMENT OF AIR PASSENGER TRAVEL TO AFRICA

What obstacles or problems hinder the development of air passenger travel between your country and the African region? Do you consider, for example, that such obstacles or problems exist under some or any of the following headings? (If your reply is in the affirmative please explain your views and, if possible, suggest what measures you consider would help).

A. Inadequate air services (Doc 8419, paras. 16, 18, 21-24, 30, 33d, 33f, 50-56, 71i, 81-89):

1) insufficient frequency of service on existing routes (specify routes, explain, and suggest possible changes),

2) lack of connections with potential traffic points both within and outside Africa (specify which points),

3) too many indirect services providing inadequate links between points that should have direct connections (specify points, explain, and suggest possible measures),

A. Inadequate air services (Cont'd)

4) too few long-haul services offering the possibility of low-cost operation with good aircraft utilization (specify points between which such services might be operated),

5) insufficient offers of inclusive tours on charter flights (suggest points between which such tours might be operated);

B. Inadequate facilitation: Incomplete implementation of the Standards and Recommended Practices established by ICAO in Annex 9 for the facilitation of passengers entering, leaving and in transit through, countries in the African Region or between your country and the African Region (Doc 8419, paras. 120-136). Please explain and, if possible, suggest remedies, e.g.:

1) Does clearance of inbound baggage take too long? If so, is this because of slow handling procedures, insufficient staff, or is the examination itself too detailed?

2) Is checking of passports of inbound passengers carried out as quickly as possible, or should it be speeded up?

3) Health checks should be performed strictly within the limits of the International Sanitary Regulations of the World Health Organization; is this the case?

4) There should be very little examination of outbound passengers and baggage; is this the case?

5) Transit passengers and their baggage should be as free as possible of all formalities; is this the case?

C. Insufficient traffic rights: Insufficient traffic rights to permit the development of sound route structures on which economic operations can be conducted (specify the points at which rights are needed) (Doc 8419, paras. 32, 33a):

1) within Africa,

2) to and from Africa;

D. Other obstacles: Other obstacles to the development of air passenger travel (the problem of air fares is dealt with under Question II)?

QUESTION II: FARE REDUCTIONS

For those routes to and within Africa on which the airlines of your State operate or are proposing to operate,

A. Need for fare reductions: Do you consider that air fares should be reduced and, if so, on what routes, for what reasons and by what percentages?

B. Types of fare reduction: If reply to A is affirmative, what types of fare reductions would you suggest, on what routes and why, e.g.:

1) lower economy fares,

2) special excursion fares,

3) low seasonal fares,

4) inclusive tours,

5) group fares,

6) other;

C. Effect of fare reduction on traffic: If reply to A is affirmative, what order of traffic increase would you expect to result from such reductions, in other words, what is your estimate of the elasticity of demand on such routes (Doc 8419, paras, 17, 27, 62-64, 79-80)?

D. Effect of fare reduction on operating margin: If reply to A is affirmative, do you consider that such fare reductions would reduce the operating margin of your airlines: (Doc 8419, para. 72)?

E. Fare reduction and subsidy: If reply to D is affirmative, would you favour some form of subsidy (suggest how this might be effected) (Doc 8419, paras. 26, 32, 33b, 73-78);

QUESTION III: TRAFFIC ESTIMATES AND FORECASTS

Please give statistics or estimates for,

A. Passenger traffic 1955-65: The number of passengers travelling between your country and particular African States during the years 1955-1965, or other available years indicating trends:

1) by air: a) by scheduled service, b) by non-scheduled flight,

2) by surface transport;

B. Nature of air passenger travel: The percentage of these passengers travelling for:

1) business purposes (governmental or private),

2) personal reasons (tourism or other);

C. Passenger traffic 1965-70: The trend in air passenger travel between your country and particular African States from 1965 to 1970 by scheduled and non-scheduled services, assuming (1) no change in air fares, (2) reductions in air fares (see also Question II C) (Doc 8419, paras. 17, 27, 62-64, 79-80).

QUESTION IV: OTHER SUGGESTIONS OR INFORMATION

Do you have any other suggestions or information, including published studies, relevant to the development of air passenger travel to or within the African region?

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APPENDIX 4

COUNTRIES AND TERRITORIES IN THE CONTINENT OF AFRICA AND THEIR SCHEDULED AIRLINES

AS OF AUGUST 1966

Country or Territory	Date of Independence	ICAO Contracting State-Year of Membership	Classification and number of national scheduled airlines		Airline Name	Type of Scheduled Operation		
						International		Domestic
			International	Domestic		Intercontinental	Regional	
Algeria	Jul. 1962	1963	1	-	Air Algerie (Compagnie Générale de Transport Aériens Air Algérie)	x	x	x
Burundi	Jul. 1962	-	-	-	a/			
Cameroon	Jan. 1960	1960	1 + (1)	1	∅ (Air Afrique) Air Cameroun (S.A. des Avions Mayer et Cie) Cameroons Air Transport Ltd.	(x)	(x) x	(x) x x
Central African Republic	Aug. 1960	1961	(1)	-	∅ (Air Afrique)	(x)	(x)	(x)
Chad	Aug. 1960	1962	(1)	-	∅ (Air Afrique) b/	(x)	(x)	(x)
Congo (Brazzaville)	Aug. 1960	1962	1 + (1)	-	∅ (Air Afrique) Lignes Nationales Aériennes Congolaises (LINA-CONGO)	(x)	(x) x	(x) x
Congo (Democratic Republic of) c/	Jul. 1960	1961	1	-	Air Congo Sarl.	x	x	x
Dahomey	Aug. 1960	1961	(1)	-	∅ (Air Afrique)	(x)	(x)	(x)
Ethiopia	-	1947	1	-	Ethiopian Airlines, S.C. (EAL)	x	x	x
Gabon	Aug. 1960	1962	(1)	2	∅ (Air Afrique) Air Gabon Compagnie Aérienne Gabonaise (TRANS GABON)	(x)	(x)	(x) x x
Gambia	Feb. 1965	-	-	-	d/			
Ghana	Mar. 1957	1957	1	-	Ghana Airways Corporation	x	x	x
Guinea	Oct. 1958	1959	-	1	Air Guinée		- e/	x
Ivory Coast	Aug. 1960	1960	(1)	1	∅ (Air Afrique) Air Ivoire	(x)	(x)	(x) x
Kenya	Dec. 1963	1964	(2)	-	† (Caspair Ltd.) † (East African Airways Corporation, EAAC)	(x)	(x) (x)	(x)
Liberia	-	1947	1	-	Liberian National Airlines Inc.		x	x
Libya	Dec. 1951	1953	1	-	Kingdom of Libya Airlines (KLA)	x	x	x
Malagasy Republic	Jun. 1960	1962	1	-	Société Nationale Malgache de Transports Aériens (AIR MADAGASCAR)	x	x	x
Malawi	Jul. 1964	1964	1 + (1)	-	Air Malawi † (Central African Airways Corporation (CAA)		x (x)	x (x)
Mali	Sep. 1960	1960	1	-	Société Nationale Air Mali	x	x	x
Mauritania	Nov. 1960	1962	1 + (1)	-	∅ (Air Afrique) Air Mauritanie	(x)	(x) x	(x) x
Morocco	Mar. 1956	1956	1	-	Compagnie Nationale de Transports Aériens Royal Air Maroc	x	x	x
Niger	Aug. 1960	1961	(1)	-	∅ (Air Afrique) f/	(x)	(x)	(x)
Nigeria	Oct. 1960	1960	1	-	Nigeria Airways (WAAC Nigeria Limited)	x	x	x
Rwanda	Jul. 1962	1964	-	-				
Senegal	Jul. 1960	1960	(1)	1	∅ (Air Afrique) Compagnie Sénégalaise de Transports Aérien (AIR SENEGAL)	(x)	(x)	(x) x
Sierra Leone	Apr. 1961	1961	1	-	Sierra Leone Airways Ltd.	x	x	x
Somalia	Jul. 1960	1964	1	-	Somali Airlines	x	x	x
South Africa (Republic of)	-	1947	1	3	Commercial Air Service (Pty) Ltd. Namakwaland Lugdiens (Edms) Beperk South African Airways (SAA) Suidwes Lugdiens (Edms) Beperk g/	x	x	x x x x
Sudan	Jan. 1956	1956	1	-	Sudan Airways (SUDANAIR)	x	x	x
Tanzania (United Republic of) h/	(Apr. 1964h/)	1962	(2)	-	† (Caspair Ltd.) † (East African Airways Corporation, EAAC)	(x)	(x) (x)	(x)

For notes see page 90.

Country or Territory	Date of Independence	ICAO Contracting State-Year of Membership	Classification and number of national scheduled airlines		Airline Name	Type of Scheduled Operation		
			International	Domestic		International		Domestic
						Intercontinental	Regional	
Togo	Apr. 1960	1965	1	-	Air Togo		x	x
Tunisia	Mar. 1956	1957	1	-	Société Tunisienne de l'Air (TUNIS AIR)	x	x	x
Uganda	Oct. 1962	-	(2)	-	(Caspair Ltd.)		(x)	
					† (East African Airways Corporation, EAAC)	(x)	(x)	(x)
United Arab Republic	-	1947	2	-	Misrair	x		x
					United Arab Airlines (UAA)	x	x	
Upper Volta	Aug. 1960	1962	(1)	-	ϕ (Air Afrique)	(x)	(x)	(x)
Zambia	Oct. 1964	1964	1 + (1)	-	† (Central African Airways Corporation (CAA))		(x)	(x)
					Zambian Airways		x	x
France :								
Comoros Islands	-	-	-	-				
Réunion	-	-	-	-				
French Somaliland	-	-	1	-	Air Djibouti	x		x
Portugal :								
Angola (Portuguese West Africa including the enclave of Cabinda)	-	-	1	-	Direcçao de Exploração dos Transportes Aéreos de Angola (DTA)		x	x
Cape Verde Islands	-	-	-	-				
Madeira	-	-	-	-				
Mozambique (Portuguese East Africa)	-	-	1	-	Direcçao de Exploração dos Transportes Aéreos (DETA)		x	x
Portuguese Guinea	-	-	1	-	Transportes Aéreos da Guine Portuguesa (TAGP)		x	x
Principe Islands	-	-	-	-				
Sao Tomé	-	-	-	1	Serviço de Transportes Aéreos (STA)			x
Spain :								
Ceuta	-	-	-	-				
Ifni	-	-	-	-				
Melilla	-	-	-	-				
Spanish Guinea	-	-	-	-				
Spanish Sahara	-	-	-	-				
United Kingdom :								
Basutoland i/	4 Oct. 1966	-	-	-				
Bechuanaland j/	30 Sep. 1966	-	1	-	Bechuanaland National Airways		x	x
Chagos Archipelago	-	-	-	-				
Mauritius	-	-	-	-				
Seychelles	-	-	-	-				
Southern Rhodesia	-	-	1 + (1)	-	Air Rhodesia		x	x
					† (Central African Airways Corporation (CAA))		(x)	(x)
St. Helena (including Ascension)	-	-	-	-				
Swaziland	-	-	1	-	Swazi Air Ltd.		x	
Airlines operated by countries in partnership k/ :								
ϕ Yaoundé Treaty States - (Cameroon, Central African Republic, Chad, Congo (Brazzaville), Dahomey, Gabon, Ivory Coast, Mauritania, Niger, Senegal, Upper Volta)			1	-	ϕ Air Afrique	x	x	x
† Central Africa - (Malawi, Southern Rhodesia (United Kingdom), Zambia)			1	-	† Central African Airways Corporation (CAA)		x	x
† East Africa - (Kenya, the United Republic of Tanzania, Uganda)			2	-	† Caspair Ltd.		x	
					† East African Airways Corporation, EAAC	x	x	x
37 Countries, 24 Territories			34	10		19	31	41

NOTES: a/ Royal Air Burundi, formed in February 1963, operated non-scheduled flights only to Europe.
b/ Air Chad, formed in February 1966, commenced domestic operations September 1966 taking over the routes formerly operated by Air Afrique.
c/ Congo (Léopoldville) became the Democratic Republic of Congo February 1966.
d/ Gambia Airways, formed December 1964, plans to operate international services at some future date.
e/ Air Guinée suspended international services.
f/ Air Niger commenced domestic services 1 May 1966 taking over the routes formerly operated by Air Afrique.
g/ Suidwes Lugdiens is an airline of South West Africa.
h/ Tanganyika, which became independent December 1961, and Zanzibar, which became independent December 1963, merged to form the United Republic of Tanzania April 1964.
i/ Basutoland became Lesotho an independent country 4 October 1966.
j/ Bechuanaland became Botswana an independent country 30 September 1966.
k/ Three airlines Air Afrique, Central African Airways Corporation (CAA) and East African Airways Corporation (EAAC) are operated in partnership. For reference purposes, each airline is shown in brackets opposite the country in partnership, but is counted only once under the group of countries operating the airline. CASPAIR operates services in East Africa only in association with EAAC and is therefore regarded as an airline of East Africa.

APPENDIX 5

SELECTED MAJOR ECONOMIC INDICATORS FOR AFRICAN STATES

1964

Country or Territory	Population Mid-Year Estimate	Population Increase Annual Rate 1958-1964	Area	Population Density 'per sq km'	Energy Consumption a/ 'per capita'	External Trade Imports c.i.f.	External Trade Exports f.o.b.	Gross Domestic Product 'per capita' at factor cost 1958	Gross Domestic Product 'per capita' at factor cost 1964	Railways Passenger-Kilometres	Railways Pass-km 'per capita'	Road Transport Passenger Cars in use	Road Transport Passenger Cars 'per 10 000' population	Air Transport Total Scheduled Capacity Total Seat-km Available	Air Transport Total Scheduled Capacity 'Per capita' Seat-km Available
	000	%	000 km²	number	kg	000 000 U.S. $		U.S. $		000 000	tkp	000	number	000	kms
	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13	Col. 14	Col. 15
Algeria	10 975	0.9	2 382	5	275	1 024b/	368b/	220	...	556	51	207.0	189	477 210	43.48
Burundi	2 500	2.5	28	90	14	...	...	40	...	...	...	...	...	-	-
Cameroon	5 103	2.1	475	11	71	116	122	92	109d/	112	22	12.5	25	136 320i/	26.71i/
Central African Republic	1 320	2.2	623	2	29	30	29	90	...	...	...	3.7k/	28	91 244j/	69.12j/
Chad	3 300	1.5	1 284	3	15	34	27	59	...	...	...	2.3	7	91 244j/	27.65j/
Congo (Brazzaville)	826	1.6	342	2	157	65	47	113	...	98	119	...	...	112 519l/	135.98l/
Congo (Democratic Republic of)	15 300	2.1	2 345	7	79	285	337	87	68	261g/	17	42.5	28	413 434	27.02
Dahomey	2 300	2.9	113	20	30	31	13	60	...	79	34	5.9	26	91 244j/	39.67j/
Ethiopia	22 200	1.8	1 222	18	10	124	106	40	...	72h/	3	14.0	6	617 452	27.81
Gabon	459	1.6	268	2	196	56	90	240	353d/	...	...	3.2	70	109 479i/	238.52i/
Gambia	324	2.4	11	29	31	12	9	71	...	...	...	1.0	31	-	-
Ghana	7 537	2.7	239	32	120	340	292	157	232	392	52	27.4	36	289 165	38.37
Guinea	3 420	2.8	246	14	101	49	43	86	...	47h/	14	8.1	24	44 230	12.93
Ivory Coast	3 750	3.3	322	12	107	238	302	129	206	460	123	28.1	75	96 751i/	25.80i/
Kenya	9 104	2.9	583	16	129	214	150	76	85	...	...	61.6	68	220 522j/	24.22m/
Liberia	1 041	1.4	111	9	231	117	143	163	250	...	...	...	...	6 090*	5.85
Libya	1 559	3.6	1 760	1	324	292	709	116	212	...	...	35.0	225	27 900*	17.90
Malagasy Republic	6 180	3.1	596	10	37	136	92	87	...	150	24	29.5	48	245 268	39.69
Malawi	3 900	2.8	119	33	36	20	28	40	43d/	49d/	13	8.0	21	23 606k/	6.05n/
Mali	4 485	2.3	1 202	4	20	37	17	60	...	...	...	2.9	6	120 716	26.92
Mauritania	900	2.2	1 086	1	56	16	46	70	...	...	...	0.2	2	94 354i/	104.84i/
Morocco	12 959	2.8	445	29	149	456	432	159	172	524	40	157.9	122	322 294	24.87
Niger	3 250	3.4	1 267	3	13	33	21	68	...	...	...	2.2	7	91 244j/	28.06j/
Nigeria	56 400	2.0	924	61	38	710	602	48	...	775	14	46.0	8	372 010	6.60
Rwanda	3 018	3.1	26	115	14	...	...	40	...	...	...	...	...	-	-
Senegal	3 400	2.3	196	17	136	172	123	160	168	284	84	27.1	80	94 494i/	27.79i/
Sierra Leone	2 200	0.9	72	31	70	100	95	64	...	43	20	8.8	40	58 670*	26.67
Somalia	2 350	2.9	638	4	25	...	...	51	...	...	...	4.2	18	4 991	2.12
South Africa (Republic of)	17 474	2.4	1 221	14	2 576	2 150c/	1 456	380e/	507e/	...	...	1 015.0	581	1 795 185	102.73
Sudan	13 180	2.8	2 506	5	60	274	198	81	91d/	...	...	20.5	16	368 527	27.96
Tanzania (United Republic of)	10 325	1.9	940	11	50	134	208	52f/	68g/	..	..	31.3h/	30	220 522j/	21.36m/
Togo	1 603	2.8	57	28	41	42	30	71	77d/	77	48	0.5	5	-	-
Tunisia	4 565	2.0	164	28	244	244	127	153	184	461	101	51.1	112	165 797	36.32
Uganda	7 367	2.5	236	31	36	92	186	65	77	...	...	28.5	39	220 524j/	29.93m/
United Arab Republic	28 900	2.7	1 000	29	321	883	539	110	...	5 231	181	84.5	29	1 168 044	40.42
Upper Volta	4 750	2.5	274	17	11	37d/	8d/	40	...	469	99	3.4	7	91 244j/	19.21j/
Zambia	3 600	2.9	753	5	431	120	441	130	187	...	...	37.5	104	106 227k/	29.51m/
France : Réunion	382	3.2	3	152	162	91	37	220	...	14g/	37	10.0	262	-	-
French Somaliland	81	2.8	22	4	383	48g/	22g/	...	...	..h/	..	3.3	407	885*	10.93
Portugal : Angola	5 084	1.4	1 247	4	98	164	204	58	...	122	24	38.8	76	69 517	13.67
Cape Verde Islands	220	2.1	4	55	100	7	12	...	...	...	...	...	...	-	-
Mozambique	6 872	1.3	783	9	132	156	106	44	...	231d/	34	36.9g/	54	70 735	10.29
Portuguese Guinea	525	0.2	36	15	63	15	5	40	...	...	...	...	...	2 380	4.53
Principe Is. & São Tomé	56	-2.0	1	58	...	5d/	6d/	...	...	...	...	0.7g/	125	761	13.59
Spain : Canary Islands	...	...	...	...	...	...	...	...	...	...	...	18.5	...	-	-
United Kingdom: Basutoland	733	1.7	30	24	...	...	...	..	..	...	...	...	...	-	-
Bechuanaland	543	3.1	570	1	...	...	...	..	..	...	...	...	...	-	-
Mauritius	722	2.9	2	387	151	82	77	216	226	...	...	12.2	169	-	-
Southern Rhodesia	4 140	3.3	389	11	577	238	253	205	217	...	...	94.7	229	107 926k/	26.07m/
Swaziland	288	2.5	17	17	...	...	...	..	..	...	...	...	...	-	-
Other territories	1 346	...	1 122	1	...	...	...	...	...	...	...	...	...	-	-
TOTAL - AFRICA	303 000	2.3	30 258	10	306	9 490	8 140	105	...	(10 507)	(50)	2 250	74	8 640 525	28.52

NOTES: - No scheduled airline in 1964. ... Data not available. .. Data not reported separately but combined with other information. * Estimated by ICAO.

Cols. 1-4: UN Statistical Yearbook 1965, Tables 2 and 19.
Col. 5 : UN Statistical Yearbook 1965, Table 142.
Cols. 6,7: UN Statistical Yearbook 1965, Table 148.
Cols. 8,9: UN Yearbook of National Accounts Statistics 1965, Part D, Table 9A.
Col. 10 : UN Statistical Yearbook 1965, Table 153.
Col. 12 : UN Statistical Yearbook 1965, Table 154.
Col. 14 : ICAO Traffic Digest of Statistics No. 113, Series T-No. 23.

a/ Quantity in kilogrammes of coal equivalent per capita.
b/ 1961.
c/ Imports f.o.b.
d/ 1963.
e/ Includes data for Basutoland, Bechuanaland, South West Africa and Swaziland.
f/ Data for Tanganyika only.
g/ 1962.
h/ Data for 1962; includes traffic for French Somaliland portion of Djbouti-Addis Ababa.
i/ Includes the apportionment (1/11) of the capacity available for the multi-national airline 'Air Afrique'.
j/ Includes the apportionment (1/3) of the capacity available for the airlines EAAC and CASPAIR which perform services on behalf of East Africa.
k/ Includes the apportionment of the capacity available (45% each for Zambia and Rhodesia and 10% for Malawi) for Central African Airways Corporation.
l/ The per capita figure calculated on the basis of the 11 partner States of Air Afrique is 37.47.
m/ The per capita figure calculated on the basis of the 3 partner States of EAAC is 24.69.
n/ The per capita figure calculated on the basis of the partners 2 States and 1 Territory of CAA is 20.43.

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APPENDIX 6

AIRLINES OPERATING SCHEDULED SERVICES TO AFRICA FROM OTHER REGIONS DURING AUGUST 1966

From Region of Airline Registration	Total Number	Airline Name (and abbreviation)
EUROPE	22	Air France Alitalia Austrian Airlines (AUA) British European Airways Corp. (BEA) British Overseas Airways Corp. (BOAC) British United Airways (BUA) Bulgarian Civil Air Transport (TABSO) Ceskoslovenské Aerolinie (CSA) Cyprus Airways Ltd. Deutsche Lufthansa (DLH) Hungarian Airlines (MALEV) Iberia Interflug Jugoslovenski Aerotransport (JAT) Olympic Airways Polskie Linie Lotnicze (LOT) Royal Dutch Airlines (KLM) SABENA Scandinavian Airlines System (SAS) Swissair Transportes Aéreos Portuguesos (TAP) Union des Transports Aériens (UTA)
MIDDLE EAST	8	Aden Airways Iraqi Airways Israel Airlines (EL AL) Kuwait Airways Middle East Airlines Air Liban (MEAL) Royal Jordanian Airlines (ALIA) Saudi Arabian Airlines Yemen Airways
SOUTH AMERICA	2	Aerolíneas Argentinas Empresa del Estado Empresa de Viaçao Aérea Rio Grandense (VARIG)
NORTH AMERICA	2	Pan American World Airways (PAA) Trans World Airlines (TWA)
USSR	1	Aeroflot
ASIA	4	Air India Garuda Indonesian Airways, (GARUDA) Japan Air Lines (JAL) Pakistan International Airlines (PIA)
OCEANIA	1	Qantas Empire Airways (QEA)
From All Regions	40 Non-African airlines.	

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ATTACHMENT 1

AFRICAN AIRLINES OPERATING INTERNATIONAL SCHEDULED SERVICES TO AFRICAN AND OTHER COUNTRIES OF THE WORLD

IN AUGUST 1966

Region	Country	Airline
NORTHERN	Algeria	AIR ALGERIE
	Libya	LAA
	Morocco	ROYAL AIR MAROC
	Tunisia	TUNIS AIR
	United Arab Republic	MISRAIR
		UAA
EASTERN	Ethiopia	EAL
	Somalia	SOMALI AIRLINES
	Sudan	SUDANAIR
	East Africa a/	EAAC
	France - French Somaliland	AIR DJIBOUTI
WESTERN	Ghana	GHANA AIRWAYS
	Liberia	LIBERIAN NATIONAL
	Mali	AIR MALI
	Mauritania	AIR MAURITANIE
	Nigeria	NIGERIA AIRWAYS
	Sierra Leone	SIERRA LEONE AIRWAYS
	Togo	AIR TOGO
	Portugal - Portuguese Guinea	TAGP
CAM	Yaoundé Treaty States b/	AIR AFRIQUE
CENTRAL	Cameroon	AIR CAMEROUN
	Congo (Brazzaville)	LACA - CONGO
	Congo (Democratic Republic of)	AIR CONGO
	Central Africa a/	CAA
SOUTHERN	Malagasy Republic	AIR MADAGASCAR
	Malawi	AIR MALAWI
	South Africa	SAA
	Portugal - Angola	DTA
	Portugal - Mozambique	DETA
	United Kingdom - Southern Rhodesia	AIR RHODESIA
	United Kingdom - Swaziland	SWAZI AIR
	United Kingdom - Bechuanaland c/	BECHUANALAND NATIONAL
	Zambia	ZAMBIA AIRWAYS

INTER-AFRICAN SERVICES TO	INTERCONTINENTAL SERVICES TO
NORTHERN REGION: Algeria, Libya, Morocco, Tunisia, United Arab Republic, Portugal - Cape Verde Islands, Spain - Canary Islands	NORTH AMERICA: United States
EASTERN REGION: Ethiopia, Kenya, Somalia, Sudan, Swaziland, Tanzania, Uganda, France - French Somaliland	EUROPE: Austria, Belgium, Cyprus, Czechoslovakia, Denmark, Germany (Fed. Rep. of), Greece, Hungary, Italy, Malta, Portugal, Spain - Balearic Islands, Sweden, Switzerland, United Kingdom, U.S.S.R., Yugoslavia
WESTERN REGION: Dahomey, Gambia, Ghana, Guinea, IVORY COAST, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Togo, Upper Volta	MIDDLE EAST: Afar, Iraq, Jordan, Lebanon, Saudi Arabia, Qatar, Yemen
CENTRAL REGION: Burundi, Cameroon, Central African Republic, Chad, Congo (Brazzaville), Congo (Democratic Republic of), Gabon, Rwanda, Zaire	FAR EAST: India, Pakistan
SOUTHERN REGION: Malawi, South Africa(Republic of), Zambia, France - Comoros Islands, Portugal - Angola, Portugal - Mozambique, United Kingdom - Mauritius, United Kingdom - Southern Rhodesia, United States - Swaziland	SOUTH-WEST PACIFIC: Australia, Australia - Cook Islands

Note: Airlines operated in partnership - a/ East African Airways Corporation (EAAC) with headquarters in Kenya performs operations on behalf of Kenya, the United Republic of Tanzania, and Uganda.
- b/ AIR AFRIQUE with headquarters on the Ivory Coast is operated in partnership with 11 States signatories to the Yaoundé Treaty, Cameroon, Central African Republic, Chad, Congo (Brazzaville), Dahomey, Gabon, Ivory Coast, Mauritania, Niger, Senegal, and Upper Volta.
- c/ Central African Airways Corporation (CAA) is jointly owned and operated by Malawi, Southern Rhodesia (United Kingdom), and Zambia.

d/ Bechuanaland became Botswana an independent country 30 September 1966, and Bechuanaland National Airways became Botswana National Airways.

See also APPENDIX 4

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PASSENGER TRAFFIC ON SCHEDULED SERVICES 1960-1965

for African airlines

TOTAL OPERATIONS

COUNTRY OR TERRITORY	AIRLINE	YEAR	Passengers Carried	Passenger-Kilometres Performed	Available Seat-Kilometres	Passenger Load Factor	Pass-Km Percentage Change Over Previous Year	Average: Kilometres Flown per Passenger	Average: Number of Passengers per aircraft	Average: Number of Seats Available per aircraft	Tonne-Kilometres Performed: Percentage Distribution: Passengers	Tonne-Kilometres Performed: Percentage Distribution: Freight	Tonne-Kilometres Performed: Percentage Distribution: Mail	Tonne-Kilometres Performed: Total	Weight Load Factor
			number	thousands		%	%	number			%	%	%	thousands	%
			Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13
AIRLINES OPERATED IN PARTNERSHIP															
Yaoundé Treaty States (Cameroon, Central African Republic, Chad, Congo (Brazzaville), Dahomey, Gabon, Ivory Coast, Mauritania, Niger, Senegal, and Upper Volta)	AIR AFRIQUE 1/	1961 1/	103 775	63 206	139 162	45	.	613	19.8	43.7	44	53	3	12 981	57
		1962	297 477	338 359	563 245	60	+432.2	1 170	33.0	55.2	60	34	6	50 460	64
		1963	371 292	447 229	634 752	63	+ 32.5	1 643	38.6	72.4	60	34	6	67 261	59
		1964	381 121	559 245	1 003 638	56	+ 25.4	1 989	42.8	76.9	61	32	7	82 252	66
		1965	371 184	536 502	994 133	54	- 4.1	1 979	41.4	76.7	59	34	7	81 853	64
Central African (Malawi, Southern Rhodesia (United Kingdom), and Zambia, as of 1964) *Includes traffic for AIR MALAWI, ZAMBIA AIRWAYS and AIR RHODESIA, subsidiary companies of CAA	CAA 2/	1960	191 741	141 552	219 524	65	.	738	24.3	37.5	87	10	3	13 686	65
		1961	199 308	121 205	208 400	58	- 14.5	607	21.7	37.4	86	12	3	11 862	59
		1962	201 784	132 913	220 644	56	+ 1.6	609	22.0	39.5	86	11	3	11 959	57
		1963	210 951	123 903	223 945	58	+ 4.9	611	23.5	40.2	86	11	3	12 506	60
		1964	235 209	139 797	256 060	59	+ 8.4	594	24.2	40.8	86	11	3	13 499	60
		1965	264 386	168 443	256 384	62	+ 17.4	599	25.3	42.6	87	11	2	15 267	63
East Africa (Kenya, the United Republic of Tanzania, and Uganda, as of 1964)	EAAC 3/	1960	148 414	194 466	316 069	62	.	1 625	26.2	42.6	78	16	6	21 724	62
		1961	177 811	244 435	409 711	60	+ 25.7	1 676	28.6	47.9	81	13	6	26 455	60
		1962	188 241	282 960	538 914	54	+ 18.2	1 866	29.1	52.3	81	13	6	31 323	54
		1963	229 670	341 217	662 794	51	+ 18.1	1 942	28.4	55.2	79	15	6	37 764	56
		1964	236 477	355 735	660 231	54	- 4.2	1 505	28.1	52.1	76	18	6	41 235	56
		1965	241 512	351 461	705 243	50	- 1.1	1 457	26.0	52.1	77	17	6	38 876	55
	CASPAIR 3/	1960	2 269	519	1 104	47	.	230	28.2	60.0	100	0	0	45	47
		1961	2 181	495	1 122	44	- 4.6	226	26.5	60.0	100	0	0	45	44
		1962	2 329	486	1 044	47	- 1.3	241	29.0	60.0	100	0	0	49	47
		1963	2 352	534	1 110	46	+ 5.3	250	27.8	60.0	100	0	0	45	46
		1964	2 546	566	1 340	45	+ 16.0	254	26.7	60.0	57	29	14	105	45
		1965	1 788	479	1 080	41	- 26.5	245	24.3	60.0	52	27	21	75	45
Algeria 4/	AIR ALGERIE 5/	1960 5/	543 771	467 495	728 081	64	.	860	46.7	64.4	69	7	7	48 287	75
		1961 5/	582 776	503 937	804 438	63	+ 7.8	865	42.1	67.3	85	6	9	53 166	73
		1962 5/	454 733	419 727	610 570	69	- 16.9	921	46.3	67.5	87	5	8	43 183	79
		1963	332 122	332 931	576 619	57	- 21.0	997	38.6	67.8	86	9	5	34 494	66
		1964	253 770	254 799	477 213	53	- 23.5	1 016	35.4	66.3	90	7	3	25 565	54
		1965	245 875	226 330	411 720	57	- 7.2	962	40.3	70.3	89	9	2	21 492	51
Cameroon	AIR CAMEROUN 6/	*1960 6/	23 615	9 470	15 030	65	.	392	30.2	46.5	41	8	1	836	65
		*1961	53 415	19 705	15 540	65	+ 50.0	390	29.7	45.7	91	8	1	1 257	65
		*1962	69 630	27 100	41 705	65	+112.0	324	32.3	49.7	94	5	1	2 591	66
		*1963	85 540	27 765	42 680	65	+ 2.3	324	32.6	50.2	94	6	0	2 664	67
	AOC 7/	*1960	26 300	20 695	29 660	70	.	335	10.0	14.4	86	10	4	2 250	71
		*1961	28 845	21 135	31 150	78	+ 2.1	235	10.7	15.8	86	10	4	2 305	69
		1962 7/	.	.	.	.	.	.	.	.	.	.	.	.	.
	CAMEROON AIR TRANSPORT 8	*1963 8/	1 200	390	480	63	.	250	6.7	10.7	100	0	0	30	60
		*1964	7 300	1 970	3 120	60	+522.3	256	6.0	10.1	95	5	0	190	64
		*1965	7 425	1 955	3 265	60	+ 4.5	256	6.0	10.1	95	5	0	20	64
Congo (Brazzaville)	AIGA-CONGO 9	*1962	43 200	10 350	17 245	60	.	240	15.3	25.5	93	13	6	1 677	62
		*1963	48 300	11 500	19 160	60	+ 11.1	240	15.3	25.5	87	13	0	1 190	62
		*1964	52 800	12 660	21 075	60	+ 10.0	240	15.3	25.5	88	12	.	1 310	62
		*1965	55 440	13 280	22 130	60	+ 5.0	240	15.3	25.2	88	12	0	1 340	61
Congo (Democratic Republic of)	AIR CONGO 10	*1960	14 520	1 995	3 610	55	.	137	4.8	8.8	95	5	0	189	52
		*1961	6 900	1 035	1 910	55	- 47.9	233	5.9	10.0	100	0	0	96	55
	AIR CONGO 11/	*1961 11/	41 208	27 505	42 340	65	.	667	16.1	24.8	66	30	4	4 063	77
		1962	169 [illegible]	128 115	196 967	65	+366.8	661	17.1	26.2	59	40	1	24 731	82
		1963 11/	263 677	209 372	321 621	64	+117.1	1 021	35.6	52.6	76	21	3	33 744	69
		1964	225 972	266 170	413 434	62	- 4.8	1 270	34.2	55.2	73	24	3	33 145	61
		1965	247 854	281 997	437 805	64	+ 10.1	1 156	35.1	56.5	71	25	4	39 373	64
Ethiopia	EAL	1961	137 689	104 821	264 757	40	.	1 611	18.4	46.4	69	27	4	15 332	44
		1962	110 024	114 772	305 452	37	+ 9.5	1 043	18.0	48.3	67	29	4	15 647	40
		1963	122 [illegible]	123 [illegible]	[illegible]	41	- [illegible]	1 [illegible]	19.4	49.1	66	30	4	17 [illegible]	[illegible]
		1964	131 817	164 196	511 [illegible]	32	+ 32.4	1 246	24.6	79.2	71	25	4	21 [illegible]	32
		1965	159 490	213 112	617 452	35	+ 29.8	1 339	29.4	85.2	74	21	5	26 339	34
		1966	190 310	253 235	676 705	34	+ 9.4	1 323	31.4	91.0	70	25	5	30 406	38
Gabon	AIR GABON 12/	*1961 12/	2 000	500	795	71	.	500	5.6	7.9	60	10	0	91	70
		*1962	1 500	830	1 560	53	+ 66.0	553	6.9	13.0	94	6	0	81	53
		*1963	2 000	900	1 635	55	+ 8.4	450	6.9	12.6	94	6	0	85	55
		*1964	2 200	990	1 800	55	+ 10.0	450	7.1	12.9	95	5	0	96	55
		*1965	2 310	1 040	1 890	55	+ 5.1	450	6.9	12.6	95	5	0	95	55
	TRANS GABON 13/	*1960	33 410	4 940	12 350	40	.	148	9.1	22.6	82	17	1	521	40
		*1961	36 120	4 990	13 020	38	+ 1.0	138	9.8	25.5	81	18	1	539	42
		*1962	50 060	6 770	13 020	52	+ 35.7	135	8.7	16.7	90	10	0	675	54
		*1963	57 300	7 840	13 665	57	+ 15.8	137	9.1	15.9	89	12	0	809	61
		*1964	68 760	9 410	16 435	57	+ 20.0	137	9.1	16.0	88	12	0	965	61
		*1965	72 200	9 880	17 250	57	+ 5.0	137	9.1	16.0	86	13	1	1 015	61
Ghana	GHANA AIRWAYS	*1960	81 730	59 955	103 960	56	.	1 436	32.1	57.7	95	4	1	9 905	58
		1961	61 170	86 383	232 283	45	+ 44.1	1 412	24.5	57.4	76	19	5	9 905	35
		1962	71 789	78 033	234 958	38	- 9.7	1 097	18.6	49.0	74	22	4	9 191	33
		1963	78 367	84 278	244 319	34	+ 8.0	1 075	20.0	55.0	73	24	3	10 146	30
		1964	101 057	117 098	299 165	40	+ 38.9	1 159	27.5	67.9	79	18	3	13 329	35
		1965	119 511	149 667	352 795	42	+ 27.8	1 252	32.7	77.1	76	23	2	17 702	35
Guinea	AIR GUINEE 14/	1961	16 242	8 045	12 070	67	.	495	24.0	36.0	93	7	0	1 823	71
		1962	17 046	8 736	13 398	65	+ 8.6	513	22.2	34.1	89	11	0	795	66
		*1963	25 400	10 845	25 300	43	+ 49.0	427	13.7	32.0	86	12	0	985	40
		*1964	24 250	11 065	28 245	39	- 4.5	456	12.6	32.1	89	11	0	990	37
		*1965	20 600	9 080	23 715	38	- 15.1	441	12.7	33.2	87	13	0	835	26
Ivory Coast	AIR IVOIRE 15/	1960 15/	1 920	580	1 075	54	.	302	3.8	7.0	94	4	2	47	47
		1961 15/	6 938	1 330	2 690	50	+129.3	192	4.9	10.0	84	8	8	142	53
		1962	5 936	1 330	2 690	49	0.0	224	4.9	10.0	87	6	7	111	41
		1963	6 616	2 113	4 178	51	+ 58.9	159	7.0	13.9	88	8	4	216	66
		1964	6 503	1 937	5 507	35	- 9.8	293	7.3	20.9	83	14	3	219	53
		1965	10 206	3 035	9 401	32	+ 57.6	294	8.8	27.6	80	16	4	348	49
Liberia	LIBERIAN NATIONAL 16/	*1960	6 935	3 930	6 045	65	.	567	16.0	24.7	65	10	5	410	70
		*1961	8 195	4 235	6 615	64	+ 7.8	517	16.0	25.0	86	9	5	440	69
		*1962	8 605	4 445	7 150	62	+ 5.0	517	14.3	23.1	87	9	4	460	64
		*1963	12 910	6 520	11 565	59	+ 53.4	528	14.8	25.1	92	7	1	665	61
		*1964	29 055	3 290	6 090	54	- 51.8	113	12.6	23.4	88	11	1	330	54
		*1965	23 400	2 410	4 380	55	- 26.7	103	14.2	25.8	88	12	0	240	53

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PASSENGER TRAFFIC ON SCHEDULED SERVICES 1960-1965

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TOTAL OPERATIONS

APPENDIX 8A (Cont'd)

COUNTRY OR TERRITORY	AIRLINE	YEAR	Passengers Carried	Passenger-Kilometres Performed	Available Seat-Kilometres	Passenger Load Factor	Pass-Km Percentage Change Over Previous Year	Average: Kilometres Flown per Passenger	Average: Number of Passengers per aircraft	Average: Number of Seats Available per aircraft	Tonne-Kilometres Performed: Percentage Distribution: Passengers	Tonne-Kilometres Performed: Percentage Distribution: Freight	Tonne-Kilometres Performed: Percentage Distribution: Mail	Tonne-Kilometres Performed: Total	Weight Load Factor
			number	thousands		%	%	number			%	%	%	thousands	%
			Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13
Libya	MEA 17/	*1965 17/	24 144	20 803	47 996	43	.	861	34.2	78.8	90	8	2	2 020	48
	NAA/LIBLAVIA 17/	*1960	16 000	23 455	39 585	59		1 466	46.0	77.6	95	4	1	2 250	59
		*1961	25 625	27 065	46 410	58	+ 15.4	1 056	37.3	64.0	94	5	1	2 595	60
		*1962	19 200	14 475	26 320	55	- 46.5	754	33.7	61.2	88	11	1	1 485	57
		*1963	20 360	14 830	26 955	55	+ 2.5	728	33.3	60.6	86	13	1	1 550	57
		*1964	21 000	14 630	27 900	52	- 1.3	697	29.3	55.8	87	12	1	1 540	53
		*1965 17/	14 000	9 740	19 440	50	- 33.4	696	27.8	55.5	78	19	3	1 120	53
Malagasy Republic	AIR MADAGASCAR 18/	1960	36 489	10 090	23 818	42		277	7.7	18.1	55	41	4	1 643	62
		1961	38 315	10 595	25 010	42	+ 5.0	277	7.6	18.1	55	41	4	1 725	62
		1962 18/	103 050	36 301	71 135	51	+242.6	352	15.1	29.6	57	40	3	4 759	59
		1963 18/	117 705	89 109	157 913	56	+128.9	706	25.9	49.3	68	27	5	10 209	59
		1964	120 739	127 622	245 268	52	+ 53.6	1 057	33.9	65.1	70	24	6	15 782	63
		1965	125 631	145 097	268 074	54	+ 13.6	1 155	37.5	69.2	69	25	6	18 343	64
Mali	AIR MALI 19/	*1961 19/	7 615	1 165	2 339	50	.	153	12.9	25.9	94	6	0	175	51
		1962	19 570	29 240	100 090	29	+151.0	1 494	14.0	48.0	92	8	0	2 723	25
		1963	26 786	36 160	108 860	33	+ 23.7	1 350	16.9	50.8	62	38	0	5 575	46
		1964	36 409	40 455	120 716	34	+ 11.9	1 111	16.3	48.8	63	34	3	5 974	47
		1965	39 548	48 342	122 816	39	+ 19.5	1 222	15.4	39.1	72	27	1	6 894	41
Mauritania	AIR MAURITANIE 20/	*1963 20/	240	230	385	60	.	958	23.0	38.5	80	20	0	25	60
		*1964	5 000	1 870	3 110	60	+713.0	374	17.8	29.6	94	6	0	175	60
		*1965	50 000	12 390	22 470	55	+562.6	248	16.7	30.4	98	2	0	1 110	56
Morocco	ROYAL AIR MAROC	1960	142 473	157 548	268 214	59		1 106	36.8	60.9	72	22	4	18 216	61
		1961	141 096	155 811	273 656	57	- 1.1	1 104	35.7	62.7	81	16	3	17 579	64
		1962	127 406	172 629	286 764	60	+ 10.8	1 355	40.1	68.5	79	16	5	19 728	69
		1963	133 123	181 477	276 769	65	+ 5.1	1 363	43.9	67.5	82	15	3	20 014	66
		1964	142 322	194 210	322 294	60	+ 7.0	1 365	42.7	70.9	82	15	3	22 046	65
		1965	157 265	213 286	359 028	60	+ 9.8	1 356	44.5	74.7	85	13	2	24 385	66
Niger	AERO NIGER 21/	*1961	1 120	660	1 320	50	.	589	6.0	6.0	100	<	0	60	50
Nigeria 22/	NIGERIA AIRWAYS	1960 22/	82 429	136 837	189 601	72		1 660	34.3	47.6	77	15	8	15 964	71
		1961	84 675	140 542	240 396	58	- 2.7	1 660	31.9	54.5	77	16	7	15 892	58
		1962	90 471	147 381	306 314	48	+ 4.9	1 629	26.3	56.6	77	16	7	16 965	46
		1963	119 150	171 878	395 203	45	+ 16.6	1 443	23.6	65.0	76	18	6	23 210	44
		1964	134 710	193 901	372 010	51	+ 11.1	1 417	30.0	75.3	76	17	5	22 146	45
		1965	152 313	202 710	389 717	53	+ 6.2	1 331	35.7	66.2	77	16	5	20 066	49
Senegal	AIR SENEGAL 23/	*1963 23/	1 200	180	325	55	.	150	10.0	32.5	100	<	0	15	60
		*1964	12 000	1 800	3 250	55	+900.0	150	14.0	30.5	93	7	0	150	60
		*1965	32 220	5 610	10 010	56	+211.7	174	29.5	52.7	98	2	0	500	57
Sierra Leone 24/	SIERRA LEONE AIRWAYS 24/	*1960	3 600	3 380	6 805	50		939	19.9	40.0	95	5	0	325	50
		1961 24/	5 500	2 887	6 453	42	- 14.6	529	14.3	33.9	94	5	1	242	40
		1962	12 835	24 502	54 223	45	+748.7	1 909	32.0	72.5	93	6	1	2 205	46
		*1963	13 700	25 675	54 530	47	+ 4.8	1 874	33.6	71.3	93	6	1	2 435	46
		*1964	14 200	28 160	58 670	48	+ 9.7	1 983	35.0	72.9	95	5	0	2 800	48
		*1965	14 260	29 440	61 360	48	+ 4.5	2 065	36.8	76.7	95	5	0	2 925	47
Somalia	SOMALI AIRWAYS 25/	1964 25/	4 077	3 249	6 991	65	.	797	15.3	23.4	80	18	2	364	77
		*1965	11 770	6 450	10 710	57	+ 98.5	548	12.9	21.4	88	12	0	660	68
South Africa (Republic of)	AFRICAIR 26/	1960	6 587	6 324	10 535	60		960	24.0	40.1	100	.	.	467	57
		1961	4 501	4 492	6 890	65	- 29.0	998	26.1	40.1	100	.	.	317	60
		1962	.	.	.	.	.	.	.	.	.	.	.	.	.
	COMMERCIAL AIR SERVICE	1960	6 499	1 654	3 627	46		254	6.1	13.3	55	44	1	227	51
		1961	5 750	1 382	3 136	44	- 16.4	240	5.7	13.0	52	47	1	203	49
		1962	5 609	1 342	3 154	43	- 2.8	240	5.6	13.0	52	47	1	196	46
		1963	6 926	1 838	4 057	45	+ 36.5	265	4.9	9.9	55	44	1	248	49
		1964	11 036	3 444	7 117	48	+ 87.4	312	7.7	16.0	63	36	1	421	49
		1965	15 711	5 282	10 292	53	+ 53.4	336	9.1	17.2	67	32	1	618	52
	NAMAKWALAND	1961	451	229	363	62	.	507	2.3	3.7	100	.	.	21	43
		1962	483	238	384	45	+ 2.6	487	2.3	3.7	100	.	.	20	69
		1963	512	254	407	62	+ 8.0	496	2.6	4.2	100	.	.	66	61
		1964	589	290	448	65	+ 14.2	492	3.1	4.7	100	.	.	44	56
		1965	1 066	492	800	63	+ 69.7	462	2.9	4.7	100	.	.	50	66
	SAA	1960	366 438	488 961	829 456	59		553	34.2	58.0	75	17	8	56 994	62
		1961	402 950	641 312	1 161 373	55	+ 31.0	601	42.5	77.0	73	20	7	77 351	57
		1962	446 024	719 457	1 296 385	55	+ 12.2	609	45.4	81.8	71	22	7	90 359	57
		1963	513 644	849 440	1 490 296	57	+ 18.1	591	47.5	83.4	72	21	7	105 878	59
		1964	606 384	1 042 396	1 777 948	59	+ 22.7	564	50.1	95.5	73	22	5	126 425	59
		1965	693 267	1 144 383	2 006 701	57	+ 9.8	553	52.1	91.4	75	21	4	134 656	56
	SWIDWES LUGDIENS 27/	1960	3 160	987	1 702	58	.	312	1.8	3.0	85	8	7	117	69
		1961	5 795	3 818	4 832	77	+286.8	659	5.5	7.0	95	3	2	382	81
		1962	10 674	8 612	9 598	92	+125.6	807	10.1	11.3	98	1	1	868	93
		1963	10 800	8 695	9 410	92	+ 0.8	804	9.9	10.8	98	1	1	912	95
		1964	11 065	9 067	9 672	94	+ 4.4	819	10.8	11.5	98	1	1	883	95
		1965	10 328	9 207	9 525	97	+ 1.5	891	15.0	15.5	99	1	0	910	94
	WITWATERSRAND	1960	26 055	15 246	22 413	68	.	585	8.6	15.1	100	0	0	1 445	80
Sudan	SUDANAIR	1960	42 444	45 738	111 460	41		1 078	15.6	38.1	81	16	3	5 135	45
		1961	50 379	54 687	128 244	43	+ 19.6	1 086	16.3	38.1	80	18	2	5 923	45
		1962	61 176	80 574	198 757	41	+ 47.3	1 317	20.3	50.0	82	15	3	8 738	44
		1963	83 369	182 414	392 420	47	+126.4	2 188	40.0	85.9	84	14	2	15 909	48
		1964	94 064	133 697	368 527	36	- 26.7	1 421	26.3	72.6	85	13	2	14 593	40
		1965	86 109	110 903	304 679	36	- 17.0	1 288	24.4	67.0	83	14	3	12 251	39
Togo	AIR TOGO 28/	*1965	405	95	205	46	.	235	3.8	8.2	100	0	0	10	50
Tunisia	TUNIS AIR 29/	1960	95 648	72 653	102 050	71		760	37.4	52.6	88	9	3	7 029	70
		1961	88 516	70 909	109 708	65	- 2.4	801	39.0	60.4	85	13	2	7 298	62
		1962 29/	85 041	77 393	121 171	64	+ 9.1	910	41.1	64.3	85	12	3	8 663	67
		1963	101 398	92 869	140 474	66	+ 20.0	916	44.2	66.8	85	12	3	9 622	68
		1964	107 425	104 423	165 757	63	+ 12.4	972	44.8	71.1	86	12	2	10 775	64
		1965	128 887	110 335	164 133	67	+ 5.7	928	49.5	73.6	86	12	2	11 314	69
United Arab Republic	MISRAIR 30/	1965 30/	56 879	24 541	42 010	58	.	432	26.1	44.7	90	10	.	2 157	55

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PASSENGER TRAFFIC ON SCHEDULED SERVICES 1960-1965

for African airlines

TOTAL OPERATIONS

COUNTRY OR TERRITORY	AIRLINE	YEAR	Passengers Carried	Passenger-Kilometres Performed	Available Seat-Kilometres	Passenger Load Factor	Pass-Km Percentage Change Over Previous Year	Average: Kilometres Flown per Passenger	Average: Number of Passengers per aircraft	Average: Number of Seats Available per aircraft	Tonne-Kilometres Performed: Percentage Distribution: Passengers	Tonne-Kilometres Performed: Percentage Distribution: Freight	Tonne-Kilometres Performed: Percentage Distribution: Mail	Tonne-Kilometres Performed: Total	Weight Load Factor
			number	thousands		%	%	number			%	%	%	thousands	%
			Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13
United Arab Republic (cont'd)	UAA 31/	1960 31/	246 220	198 921	369 869	54		808	26.1	48.6	90	9	1	23 115	65
		1961 31/	267 275	282 230	578 779	49	+ 41.9	1 056	29.8	61.2	91	8	1	28 927	53
		1962	277 021	385 958	863 531	42	+ 29.7	1 321	29.1	68.7	87	12	1	39 197	46
		1963	294 137	384 047	911 269	42	+ 4.9	1 305	29.9	70.9	85	14	1	42 192	46
		1964	395 513	508 647	1 168 044	44	+ 32.4	1 287	32.8	75.4	89	10	1	53 448	46
		1965 32/	565 001	560 488	1 185 915	48	+ 12.0	1 560	38.7	80.6	90	9	1	59 060	47
Belgium - Belgian Congo 12/	SABENA 12	1960	111 398	190 759	380 883	64		1 620	28.7	44.7	69	24	7	24 300	77
		1961	37 329	22 946	33 410	69	+ 26.9	678	14.4	21.0	49	48	3	4 544	89
		1962	.	.	.	.	.	.	.	.	.	.	.	.	.
France - French Somaliland	AIR DJIBOUTI 33/	*1964	5 916	440	886	50	.	74	3.8	7.7	100	0	0	40	53
		*1965	11 815	1 705	3 545	48	+287.5	144	7.9	16.5	94	6	0	160	51
Portugal - Angola	DTA	1960	41 505	18 882	36 657	52		455	9.2	17.8	82	12	6	2 294	60
		1961	50 994	23 564	40 976	56	+ 22.1	453	10.4	18.5	80	14	6	2 743	66
		1962	61 265	27 351	44 357	62	+ 12.5	446	12.7	20.6	79	15	6	3 290	72
		1963	68 112	30 376	59 334	55	+ 19.1	478	13.3	24.2	78	16	6	3 706	59
		1964	82 215	39 340	69 517	57	+ 20.8	475	14.0	24.6	80	14	6	4 263	59
		1965	86 849	42 592	84 592	50	+ 8.1	479	14.3	28.3	80	13	7	4 613	59
" - Mozambique	DGTA	1960	74 511	37 289	46 880	58		785	10.1	17.4	81	14	5	3 196	65
		1961	76 905	28 321	50 452	55	+ 7.1	768	10.6	19.0	79	16	5	3 391	66
		1962	40 190	27 339	54 445	50	+ 3.5	673	11.1	22.3	78	17	5	3 308	61
		1963	44 994	29 525	64 361	46	+ 9.2	656	13.5	29.3	77	19	4	3 681	59
		1964	52 701	34 338	70 735	49	+ 16.3	672	14.5	29.3	78	18	4	4 707	63
		1965	60 039	39 610	77 867	51	+ 13.3	660	14.9	29.2	77	19	4	4 891	65
" - Portuguese Guinea	TAGP	1960	2 410	1 [illegible]	2 [illegible]	41		388	4.9	12.0	98	1	1	458	74
		1961	1 564	1 227	2 530	40	+ 10.0	523	5.0	12.3	97	0	3	553	44
		*1962	1 367	1 130	2 286	41	+ 10.0	523	5.0	12.4	96	0	4	527	43
		*1963	2 177	1 140	2 820	41	+ 0.9	525	6.6	11.5	96	0	4	630	48
		*1964	2 201	1 080	2 380	45	- 5.7	468	7.4	17.0	93	7	-	358	42
		*1965	2 244	1 050	2 300	46	- 1.9	468	7.5	16.4	92	8	-	345	41
" - Mar Tome	CTA	1960	1 741	285	591	48		164	4.8	10.0	94	6	-	34	44
		1961	1 698	280	628	47	- 12.7	159	5.0	10.6	91	9	0	33	44
		1962	1 432	214	374	57	- 14.4	149	4.8	6.6	94	6	0	31	43
		1963	1 540	256	478	54	+ 19.6	166	4.9	9.2	100	0	0	41	44
		1964	1 372	376	761	49	+ 46.9	154	5.8	11.7	94	6	0	51	43
		1965	2 722	337	423	77	- 11.5	143	5.5	7.1	92	8	0	61	46
United Kingdom - Bechuanaland	BECHUANALAND NATIONAL 34	*1965	470	140	285	50	.	326	4.0	8.1	100	0	0	11	5
" " - Southern Rhodesia	RHODESIA AIR SERVICES 35	*1963	3 [illegible]	2 650	5 360	55	.	882	27.6	42.9	91	7	2	29	55
		*1964	1 215	707	1 659	46	- 73.3	648	16.1	34.7	87	13	.	23	54
		1965	.	.	.	.	.	.	.	.	.	.	.	.	.
" " - Swaziland	SWAZI AIR 36	*1965	121	50	110	45	.	713	8.5	5.5	100	0	0	4	37
TOTAL -	AIR AFRICA: AIRLINES	1960	2 443 308	2 390 651	4 075 671	59		978	27.9	47.0	90	10	5	270 847	64
		1961	2 669 621	2 676 994	4 930 244	55	+ 11.9	995	28.6	52.2	78	17	5	309 394	59
		1962	3 027 657	3 272 640	6 156 951	53	+ 22.3	1 081	29.3	55.1	75	20	5	394 927	61
		1963	3 268 709	3 917 757	7 866 534	51	+ 19.7	1 199	32.7	64.0	75	20	5	466 603	54
		1964	3 621 387	4 446 514	8 624 316	52	+ 13.5	1 228	33.9	65.6	75	20	5	528 803	54
		1965	3 976 802	4 770 977	9 165 514	52	+ 7.3	1 200	35.4	67.9	76	20	4	564 264	53

SOURCES: Data for ICAO Contracting States are taken from the Digest of Statistics No. 170, Series T-No. 24 TRAFFIC 1960-1965 and the Addenda & Corrigenda No. 1.

NOTE: In APPENDIX 3A "TOTAL OPERATIONS" and APPENDIX 3B "INTERNATIONAL OPERATIONS"

* Estimated by ICAO. ( ) Includes non-scheduled data.

1) AIR AFRIQUE, a multi-national airline with headquarters in the Ivory Coast, is operated on partnership by eleven States signatories to the Yaoundé Treaty. Operations commenced August 1961; data for 1961 are for 5 months only.

2) Central African Airways Corporation (CAA) with headquarters in Southern Rhodesia (United Kingdom) is jointly owned and operated by Malawi (10%), Rhodesia (45%), and Zambia (45%).
Statistics include the traffic and capacity for the subsidiary companies of CAA.
Domestic operations include data for the services operated between and within Rhodesia, Zambia and Malawi.
Operations between the two States and one territory, which are 'international' according to ICAO's classification, amount to an estimated 60% of the total domestic figures reported.

3) East African Airways Corporation (EAAC) with headquarters in Kenya, performs operations on behalf of East Africa. Dasgpair Ltd. with headquarters in Kenya, operates services within East Africa in association with EAAC. Domestic operations include data for services operated between and within Kenya, the United Republic of Tanzania and Uganda; operations between the three States are 'international' according to ICAO's classification.

4) Algeria became an independent country 1 July 1962.

5) Air Algerie, a privately-owned airline of France up to 30 June 1962, became a government-controlled airline with the country's independence. Traffic between Algeria and France, classified as 'domestic' prior to 1 July 1962, is now classified as 'international' accounting for the noticeable increase in international operations in 1962 as compared with the 1962 data.

6) AIR CAMEROUN commenced scheduled operations April 1962; data for 1962 are for 9 months only.

7) AEROMARITIME, a subsidiary of UAT, was a French-owned airline with headquarters in the Cameroon which ceased operations in 1962 when the routes were taken over by other airlines.

8) CAMEROON AIR TRANSPORT was formed in March 1962 and scheduled operations commenced October 1963; data for 1963 for 3 months only.

9) Name changed from AIR CONGO September 1965.

10) AIR BRAZZAVILLE was a Belgian-owned airline which operated scheduled domestic services. As of 1962 the airline operated scheduled domestic services on behalf of AIR CONGO.

11) AIR CONGO took over the domestic routes operated by SABENA as of July 1961; international services commenced December 1961. From February 1963, international data includes the intercontinental to Europe services operated by SABENA on behalf of AIR CONGO.

12) AIR CONGO commenced operations April 1961; data for 1961 are for 9 months only.

13) TRANS MADI was a French-owned airline which continued to operate domestic and regional services after the country became independent in August 1960).

14) AIR GUINEE commenced operations January 1961.

15) AIR LIBERIA operations were suspended 24 August 1960 and recommenced February 1961.

16) Name changed from Liberian National Airways to Liberian National Airlines Inc. on 1 January 1965. International operations were suspended in 1965.

17) Kingdom of Libya Airlines commenced operations 2 October 1965; routes of RAA LIBYANA were taken over November 1965 when RAA ceased operations. 1965 data for RLA are for 3 months only and for RAA for 11 months.

18) AIR MADAGASCAR international operations commenced in 1962; intercontinental services to Europe commenced May 1963.

19) AIR MALI commenced operations August 1961; data for 1961 are for 5 months only. Intercontinental services to Europe were inaugurated in December 1961.

20) AIR MAURITANIA commenced operations October 1963; data for 1963 are for 3 months only.

21) AERO NIGER commenced operations May 1961, scheduled aero-taxi flights only.

22) Nigeria became an independent country October 1960. Data for 1960 are for the 12 months for West African Airways Corporation (Nigeria) Ltd.

23) AIR SENEGAL commenced scheduled operations November 1963; data for 1963 are for 2 months only.

24) Sierra Leone became independent April 1961. Intercontinental scheduled operations to Europe commenced 16 November 1961.

25) SOMALI AIRWAYS commenced operations 7 July 1964; data for 1964 are for 6 months only.

26) AFRICAIR ceased operations in 1962.

27) SUIDWES LUGDIENS as an airline of South West Africa.

28) AIR TOGO commenced international scheduled operations November 1965; data for 1965 are for 2 months only.

29) AIR TUNIS 1962 international data includes a small amount of domestic operations.

30) SWAZI AIR commenced scheduled operations 1 August 1965; regional and domestic routes taken over from United Arab Airlines (UAA) on that date. Data for 1965 are for 5 months only.

31) In 1960 up to September 1961, the United Arab Airlines was the scheduled airline of the United Arab Republic comprised of Egypt and Syria when the union was dissolved.

32) The Belgian-Congo became Congo (Léopoldville) August 1960. SABENA performed the scheduled domestic operations of that country up to 30 June 1961.

33) AIR DJIBOUTI commenced [illegible] scheduled operations April 1964; data for 1964 are for 9 months only.

34) BECHUANALAND NATIONAL commenced operations November 1965; data for 1965 are for 2 months only.

35) RHODESIAN AIR SERVICES commenced operations July 1963 and suspended services late 1964.

36) SWAZI AIR commenced operations November 1965; data for 1965 are for 2 months only.

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APPENDIX 8B

PASSENGER TRAFFIC ON SCHEDULED SERVICES 1960-1965

for African airlines

INTERNATIONAL OPERATIONS

COUNTRY OR TERRITORY	AIRLINE	YEAR	Passengers carried	Passenger-Kilometres Performed	Available Seat-Kilometres	Passenger Load Factor	Pass-Km Percentage Change Over Previous Year	Average: Kilometres Flown per Passenger	Average: Number of Passengers per aircraft	Average: Number of Seats Available per aircraft	Tonne-Kilometres Performed: Percentage Distribution: Passengers	Tonne-Kilometres Performed: Percentage Distribution: Freight	Tonne-Kilometres Performed: Percentage Distribution: Mail	Tonne-Kilometres Performed: Total	Weight Load Factor
			number	thousands		%	%	number			%	%	%	thousands	%
	AIRLINES OPERATED BY PARTICIPANTS		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13
Brazzaville Treaty States (Cameroon, Central African Republic, Chad, Congo (Brazzaville), Dahomey, Gabon Ivory Coast, Mauritania, Niger, Senegal, and Upper Volta)	AIR AFRIQUE 1/	*1961= 1/	107 075	63 206	139 162	45	.	613	19,8	43.7	44	53	3	12 981	57
		*1962	328 014	513 597	525 186	60	+396.2	1 318	33.7	56.4	60	34	6	47 229	64
		1963=	271 292	445 829	834 752	53	+ 42.2	1 643	38.6	72.4	60	34	6	67 251	59
		*1964=	291 121	559 245	1 003 588	56	+ 25.4	1 989	42.8	76.9	61	32	7	82 232	66
		1965	279 365	522 004	968 847	54	- 6.5	2 180	42.3	78.3	59	34	7	79 901	64
Central African (Malawi, Southern Rhodesia (United Kingdom), and Zambia, as of 1964) Includes traffic for AIR MALAWI, ZAMBIA AIRWAYS and AIR RHODESIA, subsidiary companies of CAA	CAA 2/	1960	60 706	85 566	122 035	70		1 410	33.7	48.1	89	8	3	8 124	71
		1961	52 358	82 498	105 264	59	- 27.0	1 002	29.2	49.1	87	10	3	6 126	61
		1962	49 458	61 868	107 609	58	- 1.0	1 023	28.9	50.3	87	9	4	6 006	59
		1963	62 615	64 857	105 100	62	+ 4.9	1 036	32.0	51.9	87	9	4	6 360	64
		1964	56 658	61 176	96 885	63	- 5.7	1 080	32.6	51.6	89	9	2	5 844	64
		1965	67 359	72 619	111 271	65	+ 18.7	1 078	33.9	51.9	90	8	2	6 875	66
East Africa (Kenya, the United Republic of Tanzania, and Uganda, as of 1964)	EAAC 3/	1960	44 395	154 941	238 796	65		3 490	55.4	54.5	80	14	6	17 020	64
		1961	52 536	197 869	314 752	63	+ 27.7	3 764	38.0	60.4	84	10	6	20 900	62
		1962	60 445	260 879	446 641	54	+ 21.7	3 995	35.3	65.5	83	11	6	25 732	53
		1963	71 372	350 391	503 526	56	+ 16.4	3 929	37.0	66.5	80	14	6	39 962	56
		1964	74 861	389 220	519 805	56	+ 3.1	3 874	37.7	67.8	76	18	6	33 584	57
		1965	83 639	282 807	567 855	50	- 2.3	3 390	32.4	65.1	78	16	6	31 958	53
Algeria 4/	AIR ALGERIE 5/	1960 5/	17 470	9 867	14 551	68		734	39.3	58.0	97	2	1	916	70
		1961 5/	12 406	7 848	12 129	65	- 20.4	633	38.3	59.5	97	2	1	728	67
		1962 5/	918	271	806	34	- 96.5	331	20.8	62.0	100	0	0	24	33
		1963	298 543	317 043	537 159	59	+1069.9	1 062	41.4	70.2	86	9	5	33 018	68
		1964	223 441	241 979	429 118	56	- 23.7	1 083	40.6	72.0	90	7	3	24 196	58
		1965	210 440	216 410	354 180	61	- 10.5	1 028	46.1	75.4	89	9	2	19 565	54
Cameroon	AIR CAMEROUN 6/	*1962	3 640	2 010	3 095	65	.	552	28.7	44.2	90	10	0	210	65
		*1963	3 460	3 015	4 640	65	+ 50.0	552	28.7	44.2	90	10	0	315	65
		*1964	24 000	7 920	12 185	65	+162.7	330	33.0	50.8	95	5	0	796	67
		*1965	24 720	9 160	12 550	65	+ 3.0	330	34.0	52.3	94	6	0	830	67
	AMA 7/	*1960	83 510	19 660	28 070	70		235	10.0	14.3	87	9	4	2 130	70
		*1961	85 130	20 050	29 480	68	+ 2.0	235	10.8	15.8	86	10	4	2 180	69
		1962	.	.	.	.	.	.	.	.	.	.	.	.	.
	CAMEROON AIR TRANSPORT 8/	*1963 8/	1 000	270	420	65	.	270	6.8	10.5	100	0	0	25	65
		*1964	6 500	1 750	2 720	60	+548.1	269	6.0	10.1	94	6	0	172	65
		*1965	6 825	1 835	3 065	60	+ 4.9	269	6.0	10.0	94	6	0	180	65
Congo (Democratic Republic of)	AIR CONGO 11/	*1961	1 760	2 090	3 195	65	.	1 188	34.8	63.2	95	5	0	200	65
		1962	46 216	29 055	67 791	43	+1290.2	629	24.8	57.5	81	17	2	3 631	50
		1963	90 573	147 449	267 818	55	+ 407.5	1 823	50.1	91.0	79	17	4	17 269	65
		1964	81 982	165 645	278 281	60	+ 12.3	2 021	58.0	97.4	76	19	5	19 672	60
		1965	75 763	170 761	285 926	60	+ 3.1	2 254	63.6	106.5	75	20	5	20 783	63
Ethiopia	EAL	1960	65 040	94 281	238 166	40		1 496	20.9	52.8	71	25	4	12 199	43
		1961	67 256	103 908	280 281	37	+ 10.1	1 548	19.9	53.9	69	27	4	13 762	41
		1962	68 753	112 672	283 251	40	+ 8.5	1 639	21.5	54.0	69	25	6	15 046	44
		1963	80 406	150 987	475 615	32	+ 34.0	1 878	27.8	67.6	73	21	6	19 150	31
		1964	121 713	198 619	578 449	34	+ 31.5	1 953	33.4	97.2	75	20	5	24 255	33
		1965	171 249	217 595	635 905	34	+ 9.6	1 957	36.5	106.6	70	24	6	28 287	37
Ghana	GHANA AIRWAYS	*1960	20 300	34 960	99 930	35		2 748	42.9	79.1	95	4	1	5 435	35
		1961	30 565	79 081	186 771	42	+ 43.9	2 604	26.9	63.4	75	20	5	9 252	34
		1962	36 677	69 593	189 499	37	- 12.0	1 897	20.2	55.0	73	24	3	8 454	32
		1963	43 492	75 558	227 976	33	+ 8.6	1 737	20.9	63.1	71	26	3	9 383	29
		1964	58 756	106 242	269 756	39	+ 40.6	1 809	29.8	75.6	78	19	3	12 389	34
		1965	87 961	176 559	330 889	41	+ 28.5	2 009	36.1	87.3	75	23	2	16 586	35
Guinea	AIR GUINEE 14/	1961	1 101	784	2 016	39	.	712	14.0	36.0	87	13	0	84	55
		1962	1 452	1 190	2 940	41	+ 51.8	820	14.7	36.3	90	10	0	109	41
		*1963	4 400	1 850	8 250	22	+203.0	416	7.0	31.8	83	17	0	175	18
		*1964	7 300	4 030	16 115	25	+ 65.9	552	8.1	32.2	86	14	0	370	22
		*1965	4 600	2 580	12 895	20	- 37.0	560	6.9	34.4	84	16	0	245	20
Liberia	LIBERIAN NATIONAL 16/	*1961	1 120	335	450	50	.	201	15.0	30.0	100	.	.	.	50
		*1962	1 275	235	470	50	- 4.4	200	4.7	9.4	100	0	0	20	50
		*1963	2 910	580	1 165	50	+ 146.8	199	9.7	19.4	100	0	0	50	50
		*1964	3 055	610	1 220	50	+ 5.2	200	9.4	18.8	100	0	0	67	50
		1965 16/	.	.	.	.	.	.	.	.	.	.	.	.	.
Libya	KLA 17/	*1965	20 619	18 449	43 215	43	.	895	34.2	80.2	90	8	2	1 [illegible]	45
	NAA/LIBYAVIA 17/	*1960	6 500	13 245	21 085	63		2 037	53.0	82.1	93	6	1	1 [illegible]	63
		*1961	13 040	18 490	30 820	60	+ 41.8	1 418	40.0	70.0	92	7	1	1 [illegible]	60
		*1962	16 000	12 315	22 390	55	- 33.4	770	42.5	78.2	90	9	1	1 [illegible]	55
		*1963	17 000	12 560	22 880	55	+ 2.0	739	42.6	77.4	87	12	1	1 [illegible]	55
		*1964	10 000	7 150	14 300	50	- 43.1	715	32.5	65.0	82	18	0	825	58
		*1965	6 500	4 640	9 270	50	- 35.0	714	30.0	59.8	69	26	5	640	55
Malagasy Republic	AIR MADAGASCAR 18/	1962	4 564	2 450	4 547	50	.	537	20.4	41.2	40	59	1	463	61
		1963	13 451	47 478	87 135	55	+1837.9	3 530	54.9	100.7	72	21	7	5 752	60
		1964	22 323	91 839	173 301	53	+ 93.4	4 114	65.6	123.8	73	20	7	11 293	65
		1965	25 052	109 771	197 842	55	+ 19.5	4 382	68.6	123.6	71	22	7	17 775	64
Mali	AIR MALI 19/	*1961	1 345	445	895	50	.	331	12.7	25.6	89	11	0	45	56
		1962	9 884	21 615	87 250	25	+4757.3	2 187	14.9	60.0	91	9	0	2 032	21
		1963	13 812	28 941	96 150	30	+ 33.9	2 096	18.4	61.3	57	43	0	4 846	45
		1964	18 146	33 145	106 288	31	+ 14.5	1 827	18.2	58.2	62	36	2	4 967	44
		1965	22 407	39 885	111 544	36	+ 20.3	1 780	20.5	57.2	68	31	1	5 956	38
Mauritania	AIR MAURITANIE 20/	*1965	12 000	4 030	8 060	50	.	336	19.2	38.4	100	0	0	360	50
Morocco	ROYAL AIR MAROC	1960	130 422	155 122	263 679	59		1 189	36.6	62.1	74	22	4	16 017	62
		1961	129 196	152 820	267 441	57	- 1.5	1 182	38.4	67.2	80	17	3	17 335	61
		1962	116 354	170 425	282 018	60	+ 11.5	1 440	41.2	68.1	80	17	3	19 532	63
		1963	122 465	179 068	275 082	65	+ 5.1	1 462	45.0	69.2	82	15	3	19 897	66
		1964	129 668	191 233	317 655	60	+ 6.8	1 475	43.8	72.7	82	15	3	21 781	65
		1965	143 963	210 260	353 015	60	+ 9.9	1 461	45.6	76.5	83	15	2	24 109	66
Nigeria 22/	NIGERIA AIRWAYS	1960 22/	37 458	115 553	154 413	75		3 085	45.7	61.1	76	16	8	13 506	71
		1961	38 059	119 796	205 028	58	+ 3.3	3 139	39.6	67.9	76	17	7	13 541	55
		1962	38 099	123 831	263 651	47	+ 3.7	3 250	35.8	76.2	75	17	8	14 339	44
		1963	51 303	142 995	324 283	44	+ 15.4	2 782	48.8	110.6	74	20	6	16 899	41
		1964	62 314	158 855	311 089	51	+ 11.1	2 549	47.5	93.1	76	19	5	18 577	44
		1965	67 587	164 363	312 620	53	+ 3.5	2 432	46.1	87.6	75	19	6	19 792	46

For notes see page 99

APPENDIX 8B (Cont'd)

PASSENGER TRAFFIC ON SCHEDULED SERVICES 1960-1965

for African airlines

INTERNATIONAL OPERATIONS

COUNTRY OR TERRITORY	AIRLINE	YEAR	Passengers Carried	Passenger-Kilometres Performed	Available Seat-Kilometres	Passenger Load Factor	Pass-Km Percentage Change Over Previous Year	Average: Kilometres Flown per Passenger	Average: Number of Passengers per aircraft	Average: Number of Seats Available per aircraft	Tonne-Kilometres Performed: Percentage Distribution: Passengers	Tonne-Kilometres Performed: Percentage Distribution: Freight	Tonne-Kilometres Performed: Percentage Distribution: Mail	Tonne-Kilometres Performed: Total	Weight Load Factor
			number	thousands		%	%	number			%	%	%	thousands	%
			Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13
Sierra Leone 24/	SIERRA LEONE AIRWAYS 24/	*1960	430	2 120	4 710	45		4 930	35.3	78.5	98	2	0	205	45
		*1961	500	1 885	4 710	40	- 11.9	3 770	31.4	78.5	94	6	0	170	40
		*1962	4 835	23 070	51 260	45	+1123.9	4 771	41.9	93.2	93	6	1	2 100	45
		*1963	4 900	24 100	51 270	47	+ 4.5	4 918	43.8	93.2	94	6	0	2 320	47
		*1964	5 000	26 500	55 210	48	+ 9.9	5 300	48.2	100.4	95	5	0	2 650	48
		*1965	5 250	27 820	57 970	48	+ 5.0	5 299	50.6	105.4	95	5	0	2 770	48
Somalia	SOMALIS AIRWAYS 25/	*1965	5 460	1 430	2 860	50	.	262	11.0	22.0	100	0	0	140	50
South Africa (Republic of)	SAA	1960	61 839	234 339	424 028	55		3 790	36.5	66.1	64	26	10	32 398	64
		1961	76 333	364 749	691 024	53	+ 55.7	4 778	58.5	110.7	65	27	8	50 583	59
		1962	87 142	416 425	807 315	52	+ 14.2	4 779	59.3	114.9	63	28	9	60 678	56
		1963	94 994	494 811	912 473	54	+ 18.8	5 209	61.3	113.0	64	27	9	70 989	59
		1964	97 722	609 884	1 087 693	56	+ 23.3	6 241	65.1	116.0	67	28	5	85 968	58
		1965	109 421	648 504	1 246 864	52	+ 6.3	5 927	63.1	121.3	68	28	4	89 516	54
	WITWATERSRAND	1960	26 055	15 246	22 413	68	.	585	27.2	39.7	100	0	0	1 445	80
Sudan	SUDANAIR	1960	16 407	29 912	80 375	37		1 823	20.7	55.6	86	11	3	3 260	39
		1961	19 223	36 748	94 167	39	+ 22.9	1 912	20.7	53.0	85	13	2	3 840	39
		1962	24 651	60 191	151 168	40	+ 63.8	2 441	29.1	73.2	86	11	3	6 333	45
		1963	38 621	157 510	337 350	47	+ 161.7	4 078	60.5	129.6	87	11	2	15 929	47
		1964	45 543	106 624	307 898	35	- 32.3	2 341	35.4	102.3	88	10	2	11 428	38
		1965	46 880	88 577	253 587	35	- 16.9	1 889	31.0	88.7	86	11	3	9 649	37
Togo	AIR TOGO 28/	*1965	260	70	155	45	.	269	3.5	7.8	100	0	0	5	45
Tunisia	TUNIS AIR 29/	1960	91 512	71 508	100 046	71		781	38.1	53.4	88	9	3	6 932	70
		1961	84 660	69 817	107 763	65	- 2.4	825	39.9	61.6	84	13	3	7 206	62
		1962 29/	85 041	77 393	121 171	64	+ 10.9	910	41.1	64.3	85	12	3	8 663	67
		1963	94 856	90 707	137 257	66	+ 17.2	956	45.2	68.3	85	12	3	9 430	68
		1964	98 293	101 593	160 634	63	+ 12.0	1 034	45.1	71.4	86	12	2	10 519	64
		1965	105 975	105 997	157 022	68	+ 4.3	1 000	50.0	74.0	86	12	2	10 944	63
United Arab Republic	MISRAIR 30/	1965	2 864	2 189	4 378	50	.	764	23.5	47.1	96	4	.	190	50
	UAA 31/	1960 31/	113 918	142 722	292 076	49		1 253	25.8	52.8	90	8	2	16 673	60
		1961 31/	148 995	228 466	497 817	46	+ 60.1	1 533	31.0	67.5	91	8	1	25 723	51
		1962	192 451	333 534	801 905	42	+ 46.0	1 733	30.5	73.2	87	12	1	36 212	45
		1963	189 420	341 387	838 666	41	+ 2.3	1 802	31.1	76.4	85	14	1	38 272	45
		1964	265 538	449 676	1 065 747	42	+ 31.7	1 693	33.6	79.7	89	10	1	48 087	45
		1965 30/	289 675	533 810	1 123 368	48	+ 18.7	1 843	39.6	83.3	90	9	1	56 227	47
France - French Somaliland	AIR DJIBOUTI 33/	*1964	1 020	205	455	45	.	201	3.4	7.6	100	0	0	20	50
		*1965	5 865	1 450	3 080	47	+ 15.8	247	9.4	19.9	95	7	0	140	50
Portugal - Angola	DTA	1960	1 374	824	1 260	65		600	13.3	20.3	84	13	3	94	74
		1961	1 198	719	1 310	55	- 12.7	600	11.8	21.5	78	20	2	87	66
		1962	2 560	1 252	2 992	42	+ 74.1	489	8.6	20.5	85	11	4	141	43
		1963	4 492	3 258	8 955	36	+ 160.2	725	10.6	29.2	86	12	2	343	37
		1964	6 086	4 419	9 455	47	+ 35.6	726	14.7	31.5	89	8	3	432	45
		1965	5 880	4 618	9 636	48	+ 4.5	785	16.3	33.9	90	7	3	444	50
" - Mozambique	DETA	1960	9 596	4 378	7 365	59		456	12.3	20.7	94	4	2	434	56
		1961	10 023	4 542	8 097	56	+ 3.7	453	11.8	21.0	92	5	3	469	53
		1962	11 123	5 044	8 916	57	+ 11.1	453	14.7	25.9	94	4	2	511	59
		1963	11 556	5 154	10 366	50	+ 2.2	446	18.4	37.0	93	4	3	527	53
		1964	13 662	6 096	11 596	53	+ 18.3	446	19.7	37.4	94	4	2	622	59
		1965	16 448	7 348	12 625	58	+ 20.5	447	21.7	37.2	94	4	2	750	67
" - Portuguese Guinea	TAGP	1960	1 783	876	2 148	41		491	6.1	14.9	98	1	1	449	34
		*1961	660	450	1 120	40	- 48.6	682	5.4	13.5	98	1	1	274	66
		*1962	725	495	1 230	40	+ 10.0	683	5.5	13.7	96	2	2	320	68
		*1963	730	500	1 240	40	+ 1.0	685	5.3	13.1	96	2	2	310	45
		*1964	700	265	660	40	- 47.0	379	6.6	16.5	98	2	-	255	41
		*1965	715	270	640	42	+ 1.9	378	6.8	16.0	96	4	-	265	45
" - São Tomé	STA	1960	101	44	113	39		436	4.9	12.6	100	-	-	4	33
		1961	44	26	32	80	- 40.1	591	8.7	10.7	100	-	-	2	61
		1962	.	.	.	.	.	.	.	.	.	.	.	.	.
		1963	74	32	74	43	.	432	4.0	9.3	100	-	-	3	38
		1964	67	27	62	44	- 15.6	403	3.9	8.9	100	-	-	2	38
		1965	.	.	.	.	.	.	.	.	.	.	.	.	.
United Kingdom - Bechuanaland	BECHUANALAND NATIONAL 34/	*1965	.	.	.	.	.	.	.	.	.	.	.	.	.
" " - Southern Rhodesia	RHODESIAN AIR SERVICES 35/	1964	426	556	1 222	45	.	1 305	18.5	40.7	86	14	.	49	55
		1965	.	.	.	.	.	.	.	.	.	.	.	.	.
" " - Swaziland	SWAZI AIR 36/	*1965	160	50	110	45	.	313	2.5	5.5	100	0	0	5	50
TOTAL -	ALL AFRICAN AIRLINES	1960	782 475	1 205 154	2 115 299	57		1 540	31.4	55.1	78	17	5	140 571	61
		1961	940 244	1 536 012	2 983 844	51	+ 27.5	1 634	33.3	64.8	75	20	5	185 293	54
		1962	1 123 076	2 079 410	4 232 799	49	+ 35.4	1 668	34.2	69.5	73	22	5	259 010	52
		1963	1 580 065	3 016 340	6 070 192	50	+ 45.1	1 909	39.7	79.9	74	21	5	370 660	53
		1964	1 695 698	3 424 383	6 831 645	50	+ 13.5	2 019	41.4	82.6	75	21	4	419 038	53
		1965	1 785 377	3 605 641	7 189 354	50	+ 5.3	2 020	42.6	84.9	75	21	4	438 682	52

For notes see page 99.

FINANCIAL DATA FOR 10 AFRICAN SCHEDULED INTERNATIONAL AIRLINES 1965

International and Domestic Scheduled Services

APPENDIX 9

Airline	Operating Revenues		Operating Costs	Scheduled Passenger Kilometres (Performed)	Available Scheduled Seat-Kilometres	Total Costs as Percentage of Revenue	Revenue per Available Seat-Kilometre	Cost per Available Seat-Kilometre	Revenue per Passenger-Kilometre	Cost per Passenger-Kilometre	Passenger Load Factor	Passenger Break-Even Load Factor
	Total All Services	Scheduled Passenger	Total All Services									
	U.S. DOLLARS (000's)			(000's)	(000's)	%	U.S. CENTS				%	%
						(3÷1)	(2÷5)	(6x7)	(2÷4)	(6x9)	(4÷5)	(8÷9)
	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12
Air Afrique	$ 41 554	$ 29 645	$ 41 483	536 592	994 133	100%	3.0¢	3.0¢	3.5¢	5.5¢	54%	56%
Air Congo a/	24 144	8 265	23 069	131 556	199 247	96	4.1	3.9	6.3	6.0	66	62
Air Madagascar	10 438	7 264	9 688	145 097	268 074	93	2.7	2.5	5.0	4.7	54	50
Central African (CAA)	9 702	7 028	9 415	158 443	256 394	97	2.7	2.6	4.4	4.3	62	59
East African (EAAC)	23 968	17 457	22 628	351 861	705 243	94	2.5	2.4	5.0	4.7	50	48
Ethiopian (EAL)	18 168	13 171	16 531	233 203	676 705	91	1.9	1.7	5.5	5.1	34	30
Royal Air Maroc	15 052	9 972	14 153	213 286	358 028	94	2.8	2.6	4.1	4.4	60	55
South African (SAA)	52 362	40 373	49 493	1 144 383	2 006 701	95	2.0	1.9	3.5	3.3	57	54
Tunis Air	6 687	4 773	5 482	110 335	164 133	82	2.9	2.4	4.3	3.5	67	56
United Arab (UAA)	31 501	22 850*	30 201	569 488	1 185 915	96	1.9	1.8	4.0	3.8	48	45
10 African Airlines Average	233 576	160 798	222 143	3 594 244	6 814 561	95	2.4	2.3	4.5	4.3	53	51
World Average	9 372 000	7 378 000	8 472 000	198 473 089	353 577 565	90	2.1	1.9	3.8	3.3	56	51

NOTES: 1. The 10 Airlines selected are those for which financial statistics for 1965 have been filed with ICAO.

2. The source for Columns 1, 2 and 3 is Digest of Statistics No. 123 Financial Data 1965. The source for Columns 4 and 5 is Digest of Statistics No. 120, Traffic 1960 - 1965.

3. The derivation of Columns 6 to 12 is indicated at the head of each column. In the case of Columns 8 and 10 giving costs per seat- and passenger-kilometre the method of applying the overall cost-revenue ratio to revenues per seat- and passenger-kilometre is intended only to give a rough indication of unit costs on scheduled passenger services. With the data available to ICAO there is no more accurate method.

* Estimated.

a/ Data exclude the intercontinental Europe-Africa services operated by SABENA (Belgium) on behalf of AIR CONGO.

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APPENDIX 10

Economy and Excursion Fares

Selected examples with base rates, May 1966

A. Intercontinental from Europe

Scheduled Service		Distance one way	Return Fare				
			Regular Economy		Lowest Excursion		
			Fare	Base Rate	Fare	Base Rate	Description
between	and	(km)	(US $)	(¢/km)	(US $)	(¢/km)	
Europe	Africa						
Paris	Algiers	1,354	146.20	5.40	122.90	4.53	Franc area only
	Monrovia	4,890	494.80	5.06	-	-	
	Abidjan	5,069	521.40	5.13	-	-	
	Brazzaville	6,023	638.40	5.30	-	-	
	Nairobi	6,496	670.40	5.15	-	-	
	Dar es Salaam	7,164	707.60	4.93	-	-	
	Mauritius	9,593	915.10	4.76	-	-	
London	Rabat	2,121	205.80	4.85	126.00	2.97	30-day
	Dakar	4,350	447.60	5.14	-	-	
	Lagos	5,038	521.40	5.18	-	-	
	Addis Ababa	5,930	675.70	5.68	-	-	
	Brazzaville	6,372	654.40	5.13	-	-	
	Dar es Salaam	7,494	712.90	4.76	-	-	
	Johannesburg	9,170	728.90	3.98	644.00	3.51	90-day local sale
Rome	Tripoli	1,017	109.70	5.40	84.00	4.13	30-day
	Casablanca	2,086	195.60	4.86	-	-	
	Kano	3,329	415.00	6.22	-	-	
	Khartoum	3,494	457.60	6.81	308.00	4.40	30-day
	Monrovia	5,321	494.80	4.65	-	-	
	Mogadiscio	5,722	606.50	5.30	-	-	
	Lusaka	6,852	681.00	4.97	-	-	
Europe	Other points						
Paris	Montreal	5,524	495.90	4.49	310.00	2.80	21-day
	New Delhi	7,716	718.20	4.65	-	-	
	Mexico City	9,194	761.90	4.14	585.00	3.18	21-day
London	New York	5,561	484.50	4.36	300.00	2.70	21-day
	Rio de Janeiro	9,271	779.00	4.21	-	-	
	Tokyo	14,666	1,287.50	4.39	-	-	
Rome	Kingston	8,872	818.90	4.62	585.40	3.31	21-day
	Lima	11,275	1,024.10	4.54	904.40	4.00	Off season economy
	Sydney	16,731	1,250.20	3.74	-	-	

Economy and Excursion Fares

Selected examples with base rates, May 1966

B. Intercontinental from New York

Scheduled Service		Distance one way	Return Fare				
			Regular Economy		Lowest Excursion		
			Fare	Base Rate	Fare	Base Rate	Description
between	and	(km)	(US $)	(¢/km)	(US $)	(¢/km)	
New York	North Africa						
	Cairo	9,025	883.50	4.89	535.00	2.96	21-day
	Tripoli	7,510	681.60	4.54	448.00	2.98	"
	Tunis	7,122	629.90	4.42	409.00	2.87	"
	Algiers	6,496	618.70	4.77	400.00	3.10	"
	East & South Africa						
	Khartoum	10,330	1,027.20	4.95	707.00	3.41	"
	Addis Ababa	11,238	1,130.50	5.03	784.00	3.49	"
	Entebbe	11,995	1,130.50	4.71	784.00	3.27	"
	Nairobi	12,177	1,130.50	4.64	784.00	3.22	"
	Dar es Salaam	12,845	1,130.50	4.40	784.00	3.05	"
	Johannesburg	13,296	1,130.50	4.25	784.00	2.94	"
	Tananarive	14,440	1,311.40	4.54	920.00	3.19	"
	West Africa						
	Dakar	6,134	741.00	6.04	492.00	4.01	"
	Abidjan	7,955	855.00	5.37	578.00	3.63	"
	Lagos	8,773	864.00	4.92	584.00	3.33	"
	Kano	9,569	864.00	4.51	584.00	3.05	"
	Douala	9,535	969.00	5.07	663.00	3.48	"
	Kinshasa	10,589	969.00	4.58	663.00	3.13	"
	Europe						
	London	5,561	484.00	4.35	300.00	2.70	"
	Barcelona	6,256	550.90	4.40	350.00	2.80	"
	Prague	6,560	611.80	4.66	395.00	3.01	"
	Zagreb	6,914	629.90	4.56	409.00	2.96	"
	Moscow	7,537	815.50	5.41	548.00	3.64	"
	Athens	7,928	776.40	4.90	519.00	3.27	"
	Other points						
	Tel Aviv	9,154	883.50	4.82	599.00	3.28	"
	Kuwait	10,380	1,031.70	4.97	710.00	3.42	"
	Karachi	12,200	1,111.90	4.55	834.00	3.42	28-day, Oct-Apr
	New Delhi	12,848	1,127.90	4.39	846.00	3.29	"
	Calcutta	14,158	1,180.30	4.17	886.00	3.13	"
	Sydney	23,297	1,718.40	3.68	1,619.40	3.48	21-day

APPENDIX 10 (Cont'd)

Economy and Excursion Fares

Selected examples with base rates, May 1966

C. Regional intra-African

Scheduled Service		Distance one way	Return Fare				
			Regular Economy		Lowest Excursion		
			Fare	Base Rate	Fare	Base Rate	Description
between	and	(km)	(US $)	(¢/km)	(US $)	(¢/km)	
Dakar	Abidjan	1,822	226.10	6.20	-	-	
	Accra	2,242	244.80	5.46	-	-	
	Lagos	2,639	276.70	5.25	-	-	
	Kinshasa	4,456	462.90	5.20	-	-	
	Nairobi	6,977	819.30	5.88	-	-	
Abidjan	Bamako	937	123.00	6.57	-	-	
	Conakry	1,172	155.50	6.63	-	-	
	Brazzaville	2,609	308.40	5.92	-	-	
	Khartoum	4,155	457.60	5.51	-	-	
Lagos	Tunis	3,439	457.60	6.64	-	-	
	Cairo	3,930	478.80	6.10	-	-	
	Addis Ababa	4,340	569.30	6.56	-	-	
	Nairobi	4,338	627.80	7.23	490.00	5.65	30-day
Nairobi	Dar es Salaam	668	108.40	8.11	68.60	5.13	30-day
	Mogadiscio	1,004	117.10	5.83	99.54	4.97	60-day
	Addis Ababa	1,165	175.00	7.50	115.50	4.95	30-day
	Kinshasa	2,522	403.00	8.00	-	-	
	Cairo	3,547	446.90	6.30	352.80	4.97	30-day
	Accra	4,741	659.70	6.96	-	-	
Addis Ababa	Dar es Salaam	1,833	290.00	7.91	190.80	5.20	30-day
	Cairo	2,475	367.10	7.41	-	-	
	Accra	4,742	595.90	6.28	-	-	
Cairo	Khartoum	1,621	180.20	5.56	-	-	
	Algiers	2,766	290.00	5.25	-	-	
	Dar es Salaam	4,214	548.00	6.50	-	-	
	Accra	4,293	505.40	5.88	-	-	
Tunis	Algiers	626	58.60	4.68	-	-	
	Casablanca	1,675	152.80	4.56	-	-	
	Cairo	2,288	231.50	5.06	-	-	
	Conakry	4,694	457.60	4.88	-	-	
	Monrovia	4,992	473.50	4.74	-	-	

APPENDIX 10 (Cont'd)

Economy and Excursion Fares

Selected examples with base rates, May 1966

D. Regional intra-European

Scheduled Service		Distance one way	Return Fare				
			Regular Economy		Lowest Excursion		
			Fare	Base Rate	Fare	Base Rate	Description
between	and	(km)	(US$)	(¢/km)	(US$)	(¢/km)	
Madrid	Geneva	1,011	111.60	5.52	-	-	
	Paris	1,045	119.60	5.72	100.70	4.82	30-day, Nov-Mar
	Rome	1,346	125.10	4.65	99.20	3.68	23-day, Nov-Mar
Frankfurt	Amsterdam	367	41.30	5.62	32.50	4.43	30-day
	London	644	90.50	7.02	-	-	
	Athens	2,020	242.50	6.00	191.50	4.74	30-day
Stockholm	Warsaw	1,201	166.10	6.92	-	-	
	Dublin	1,793	210.60	5.87	-	-	
	Lisbon	3,011	328.40	5.45	278.20	4.62	30-day
Copenhagen	Prague	625	114.00	9.12	-	-	
	Brussels	763	112.30	7.35	-	-	
	Milan	1,151	169.90	7.39	116.50	5.06	30-day

AVERAGE SEASONAL VARIATIONS IN THE AFRICAN REGION: 1962-1965

Average number of passengers embarked on and disembarked from international scheduled and non-scheduled air services during each month of a four-year period at 40 African airports *
(Source: ICAO Airport Traffic Digests)

State and Place Name		January	February	March	April	May	June	July	August	September	October	November	December	Total
NORTHERN SUB-REGION														
ALGERIA[1]	Algiers	[illegible]	22 [illegible]	[illegible]	24 [illegible]	21 [illegible]	28 [illegible]	41 302	45 344	45 [illegible]	31 701	32 [illegible]	29 869	366 627
MOROCCO[2]	Agadir	[illegible]	1 [illegible]	[illegible]	[illegible]	[illegible]	631	907	724	[illegible]	1 082	913	1 078	10 424
	Casablanca	21 [illegible]	17 [illegible]	17 [illegible]	21 [illegible]	17 [illegible]	15 785	23 [illegible]	21 [illegible]	21 [illegible]	16 095	14 176	18 354	219 924
	Marrakech	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	394	569	459	[illegible]	1 135	1 104	1 414	12 716
	Oujda	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	648	966	677	822	565	451	519	6 870
	Rabat[3]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Tanger	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5 312	[illegible]	4 256	[illegible]	3 364	2 604	3 322	49 955
TUNISIA	Tunis	2 [illegible]	[illegible]	2 [illegible]	2 [illegible]	2 [illegible]	5 552	9 316	10 347	[illegible]	8 695	4 414	4 259	32 919
UNITED ARAB REPUBLIC	Cairo	[illegible]	19 [illegible]	[illegible]	[illegible]	[illegible]	54 549	62 310	56 761	67 [illegible]	53 186	40 153	42 853	584 573
TOTAL 9 airports		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	138 481	168 213	164 942	174 [illegible]	130 540	100 119	118 576	1 554 042
Per cent of total		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.92%	10.83%	10.61%	11.20%	8.41%	6.44%	7.64%	100%
WESTERN SUB-REGION														
CAMEROUN[4]	Douala	[illegible]	[illegible]	[illegible]	6 634	6 645	10 238	11 543	9 282	11 507	9 791	9 113	9 306	113 090
	Garoua	[illegible]	[illegible]	[illegible]	770	516	558	788	563	530	584	640	625	8 019
	Maroua	[illegible]	[illegible]	[illegible]	371	324	575	459	368	324	320	362	604	5 526
	N'Gaoundere	[illegible]	[illegible]	[illegible]	755	321	444	420	324	277	292	262	312	4 046
	Tiko	[illegible]	[illegible]	[illegible]	953	608	705	1 065	1 072	1 190	1 092	1 116	1 230	12 046
	Yaounde	[illegible]	[illegible]	[illegible]	3 478	3 635	4 593	4 920	3 969	4 401	4 240	4 412	4 650	49 482
CHAD[5]	Fort Lamy	[illegible]	[illegible]	[illegible]	1 325	1 393	1 950	2 899	1 565	2 057	1 604	1 604	1 507	19 629
CONGO[6] (Dem. Rep. of)	Kisangani (ex-Stanleyville)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Kinshasa (ex-Leopoldville)	[illegible]	264	[illegible]	[illegible]	[illegible]	11 112	15 809	16 374	14 974	12 172	11 118	11 937	135 205
	Lubumbashi (ex-Elisabethville)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5 586	7 790	6 106	6 410	5 212	5 032	6 732	64 204
DAHOMEY[7]	Cotonou	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GHANA	Accra	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GUINEA[7]	Conakry	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
IVORY COAST	Abidjan	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MALI	Bamako	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1 650	2 624	1 669	2 292	2 505	1 857	1 921	24 986
NIGER[8]	Niamey	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2 344	2 595	[illegible]	[illegible]	2 274	1 767	1 896	24 521
SENEGAL[9]	Dakar	[illegible]	[illegible]	572	[illegible]	[illegible]	12 119	15 606	10 702	10 778	10 038	9 542	9 389	151 605
SIERRA LEONE	Freetown	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1 778	2 207	1 881	2 356	2 004	1 847	1 913	22 551
UPPER VOLTA[7]	Bobo Dioulasso	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	546	424	395	804	504	548	309	5 114
	Ouagadougou	[illegible]	[illegible]	[illegible]	1 104	1 240	1 752	1 676	1 119	1 [illegible]	1 [illegible]	1 [illegible]	1 164	15 435
TOTAL 20 airports		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	84 554	102 681	92 490	91 609	85 [illegible]	75 154	77 726	940 366
Per cent of total		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.94%	10.92%	9.84%	9.74%	9.46%	7.99%	8.27%	100%
EASTERN SUB-REGION														
KENYA	Nairobi	17 171	15 [illegible]	17 [illegible]	16 [illegible]	15 [illegible]	15 403	20 000	20 241	20 103	17 326	15 345	19 467	210 100
MALAGASY REPUBLIC	Majunga[11]	[illegible]	[illegible]	[illegible]	423	213	326	297	290	326	240	177	229	3 173
	Tamarave[11]	[illegible]	[illegible]	[illegible]	[illegible]	51	62	111	[illegible]	[illegible]	21	31	71	[illegible]
	Tananarive[10]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MALAWI[7]	Blantyre[2]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5 [illegible]	6 440	5 [illegible]	5 [illegible]	3 645	2 552	2 991	47 039
	Lilongwe[2]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4 [illegible]	5 [illegible]	5 290	5 [illegible]	4 [illegible]	5 [illegible]	5 [illegible]	61 [illegible]
TANZANIA[12]	Dar-es-Salaam	2 718	2 343	2 [illegible]	2 715	2 [illegible]	3 [illegible]	3 [illegible]	[illegible]	[illegible]	2 [illegible]	2 [illegible]	3 [illegible]	38 511
UGANDA[11]	Entebbe	2 [illegible]	2 [illegible]	2 [illegible]	2 [illegible]	2 [illegible]	2 [illegible]	3 [illegible]	3 [illegible]	3 [illegible]	2 [illegible]	2 [illegible]	3 [illegible]	35 177
TOTAL 8 airports		31 923	26 659	33 963	35 029	33 241	35 387	42 546	42 032	42 820	35 335	31 940	37 945	431 005
Per cent of total		7.41%	6.70%	7.88%	8.13%	7.71%	8.21%	9.87%	9.75%	9.93%	8.20%	7.41%	8.80%	100%
SOUTHERN SUB-REGION														
SOUTH AFRICA	Durban	1 264	1 000	1 102	1 400	1 497	1 510	1 423	1 455	1 300	1 290	1 013	1 326	15 490
	Johannesburg	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SOUTHERN[3] RHODESIA (U.K.)	Salisbury	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TOTAL 3 airports		35 175	27 527	30 858	30 441	36 271	35 362	43 621	42 599	42 188	39 311	34 659	40 660	436 871
Per cent of total		[illegible]	6.30%	7.06%	6.97%	8.31%	8.09%	9.99%	9.75%	9.66%	9.00%	7.94%	9.30%	100%
TOTAL 40 airports		224 930	203 070	248 037	281 548	254 955	288 154	357 034	334 069	350 710	302 166	241 572	275 030	3 362 084
Per cent of total		[illegible]	6.04%	7.41%	8.37%	7.56%	8.57%	10.62	9.94%	10.43%	8.99%	7.19%	8.18%	100%

* Selected airports for which monthly data covering at least a full year are available.

[1] Data available for 1965 only
[2] Includes also domestic services
[3] Excludes data on 1964
[4] Excludes data on 1962 and includes domestic services for 1963-1965
[5] Data available for 1963 only
[6] Data available for 1962 and 1963 only
[7] Excludes data on 1965
[8] Data available for 1964 only
[9] Data available for 1962 and 1964 only
[10] Excludes data on 1964 and includes domestic services for 1962 and 1963
[11] Data available for 1964 and 1965 only
[12] Excludes data on 1962

ICAO Economics and Statistics Branch (December 1966)

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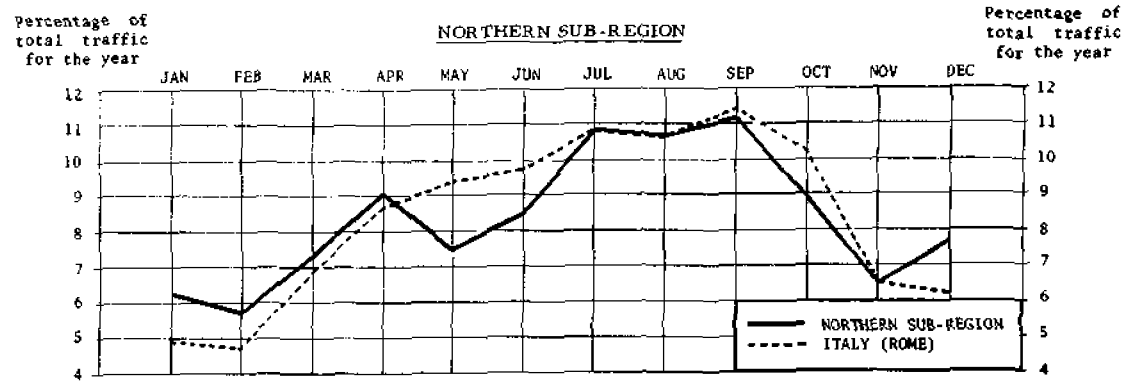
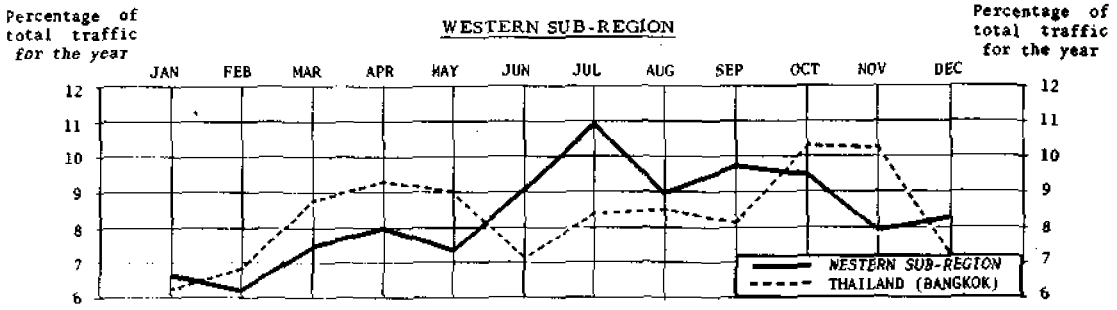
APPENDIX 12

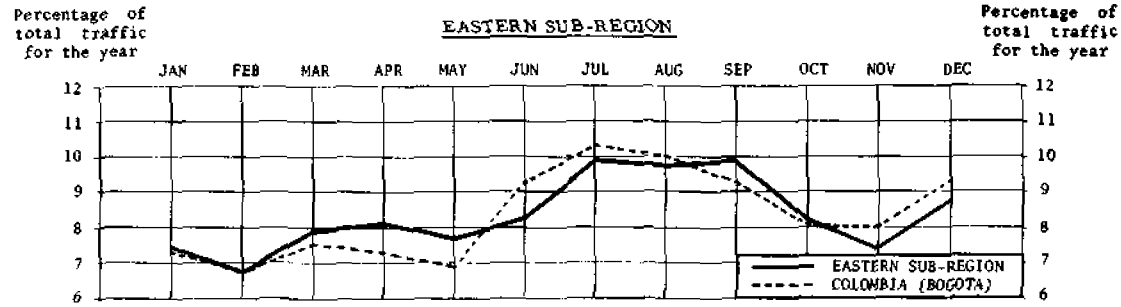
SEASONAL VARIATIONS IN SUB-REGIONS OF AFRICA

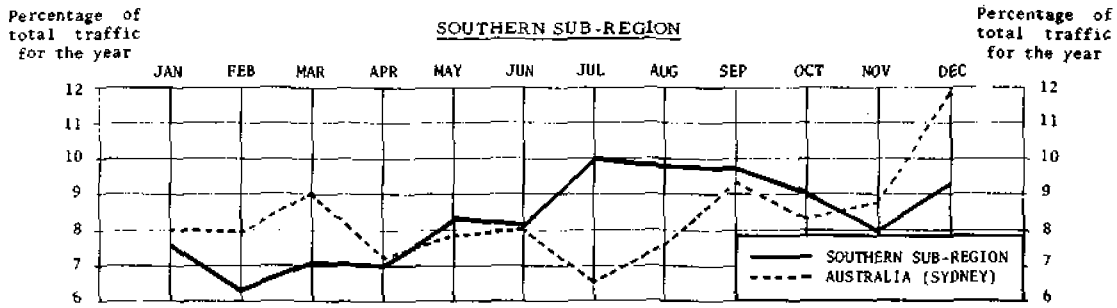
Average percentages of passengers monthly embarked on and disembarked from international scheduled and non-scheduled air services at 40 African airports* grouped in 4 sub-regions for the period 1962-1965, compared with corresponding percentages for 4 airports in other parts of the world *presenting some geographic similarities*

(Source: ICAO Airport Traffic Digests)









* Selected airports for which monthly data covering at least a full year are available (see listing under each sub-region at Appendix 11).

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APPENDIX 13

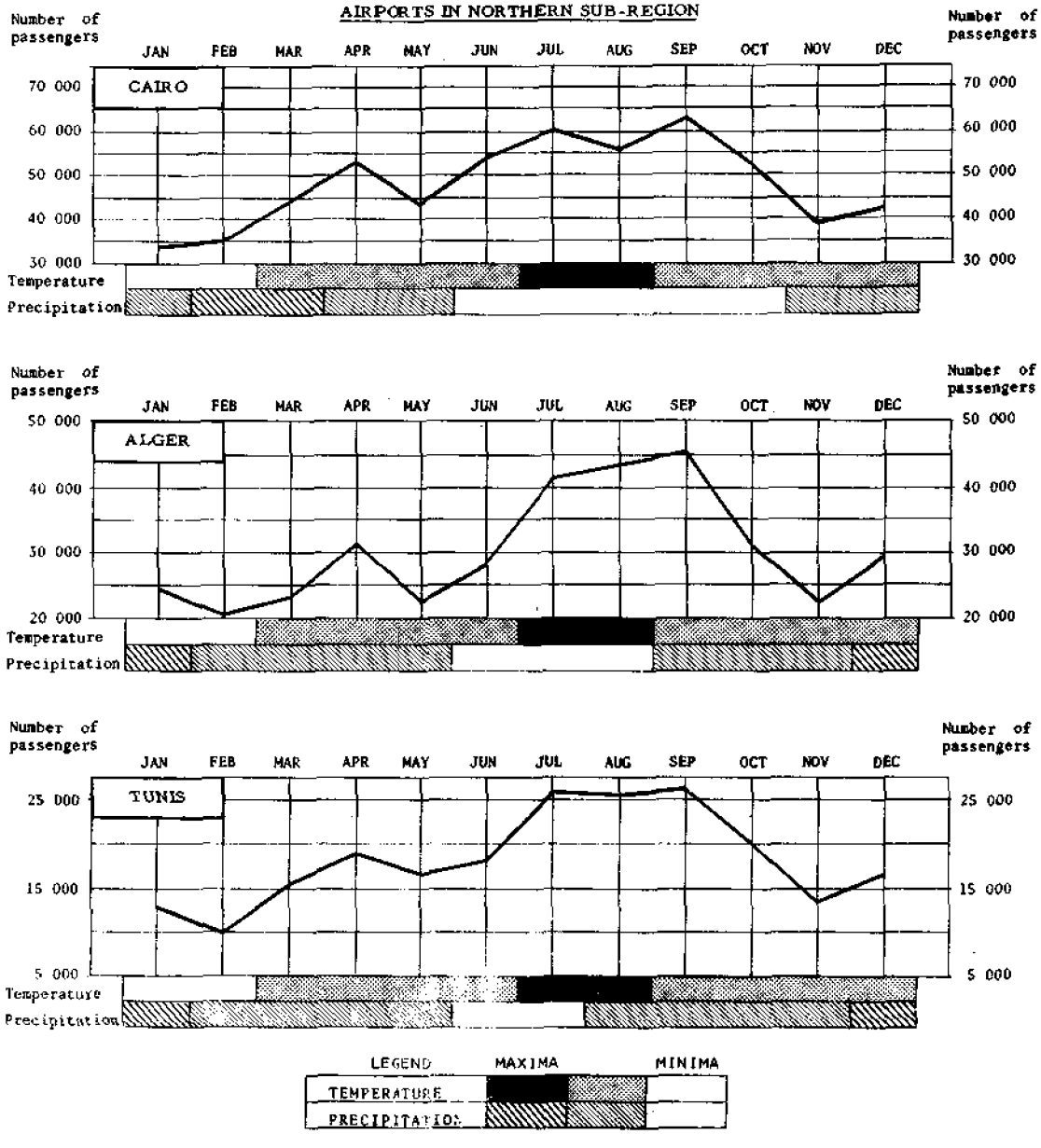
AVERAGE SEASONAL VARIATIONS AT INDIVIDUAL AFRICAN AIRPORTS

Average numbers of passengers embarked on and disembarked from international scheduled air services during each month of a four-year period (1962-1965), and months of occurrence of mean maxima and minima of temperature and precipitation, at selected airports*

(Sources: ICAO Airport Traffic Digests, and US Weather Bureau's "World Weather Records")

Diagram 1

AIRPORTS IN NORTHERN SUB-REGION

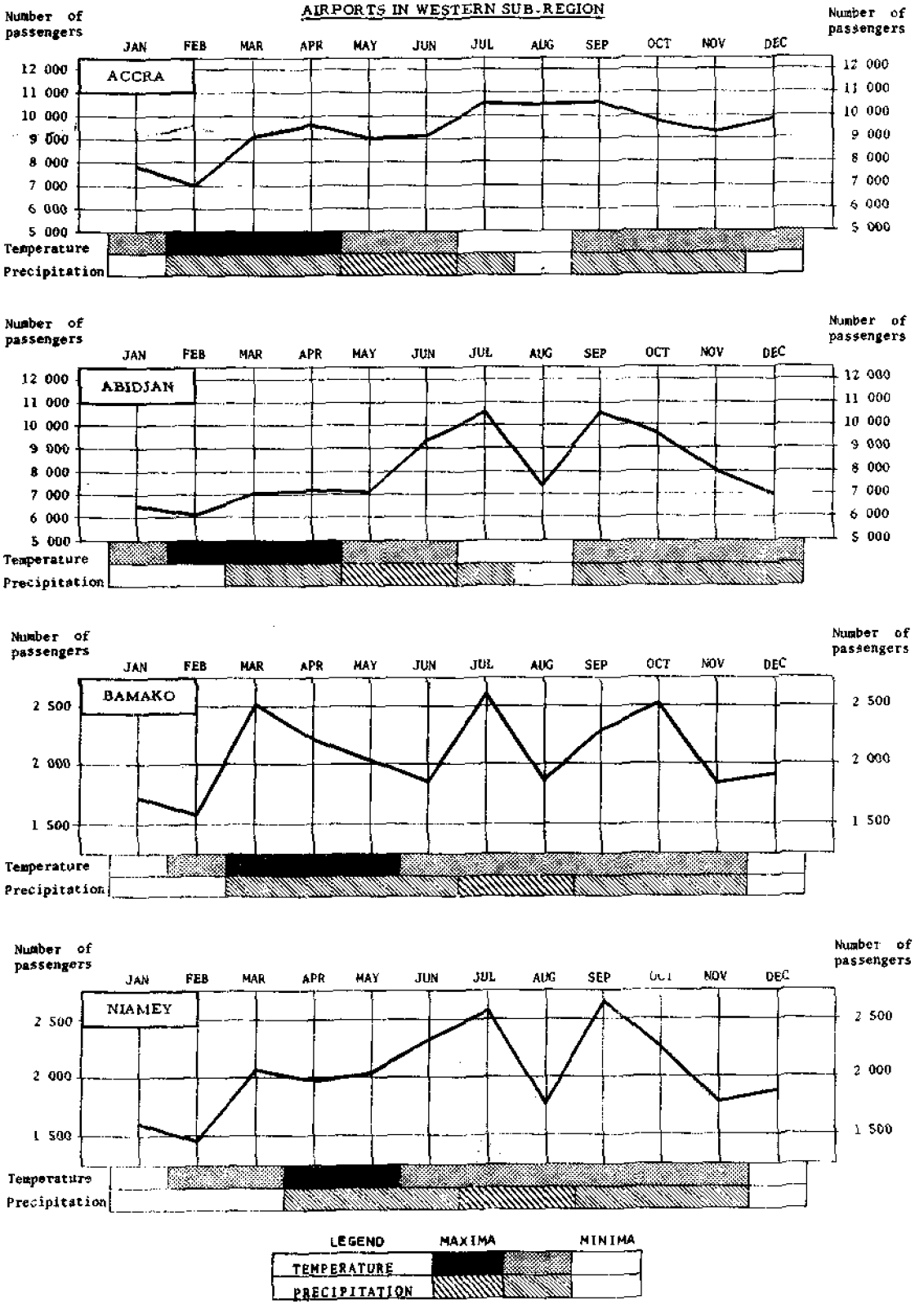


* See list at Appendix 11. Certain airports included in that appendix have been omitted in the diagrams because climatological data were not readily available or passenger traffic data on domestic services could not be separated from those on international services.

AVERAGE SEASONAL VARIATIONS AT INDIVIDUAL AFRICAN AIRPORTS

Diagram 2

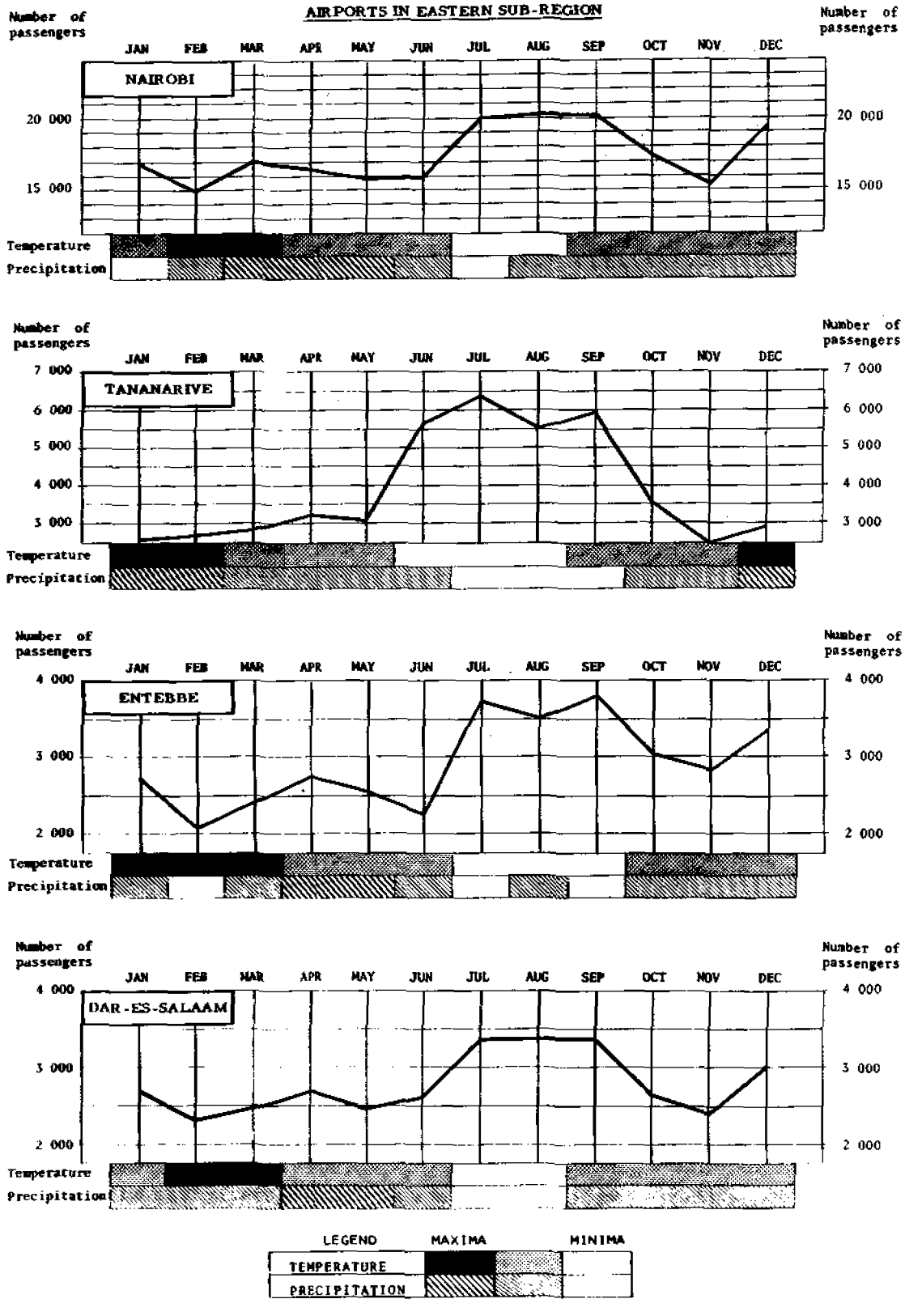
AIRPORTS IN WESTERN SUB-REGION



AVERAGE SEASONAL VARIATIONS AT INDIVIDUAL AFRICAN AIRPORTS

Diagram 3

AIRPORTS IN EASTERN SUB-REGION

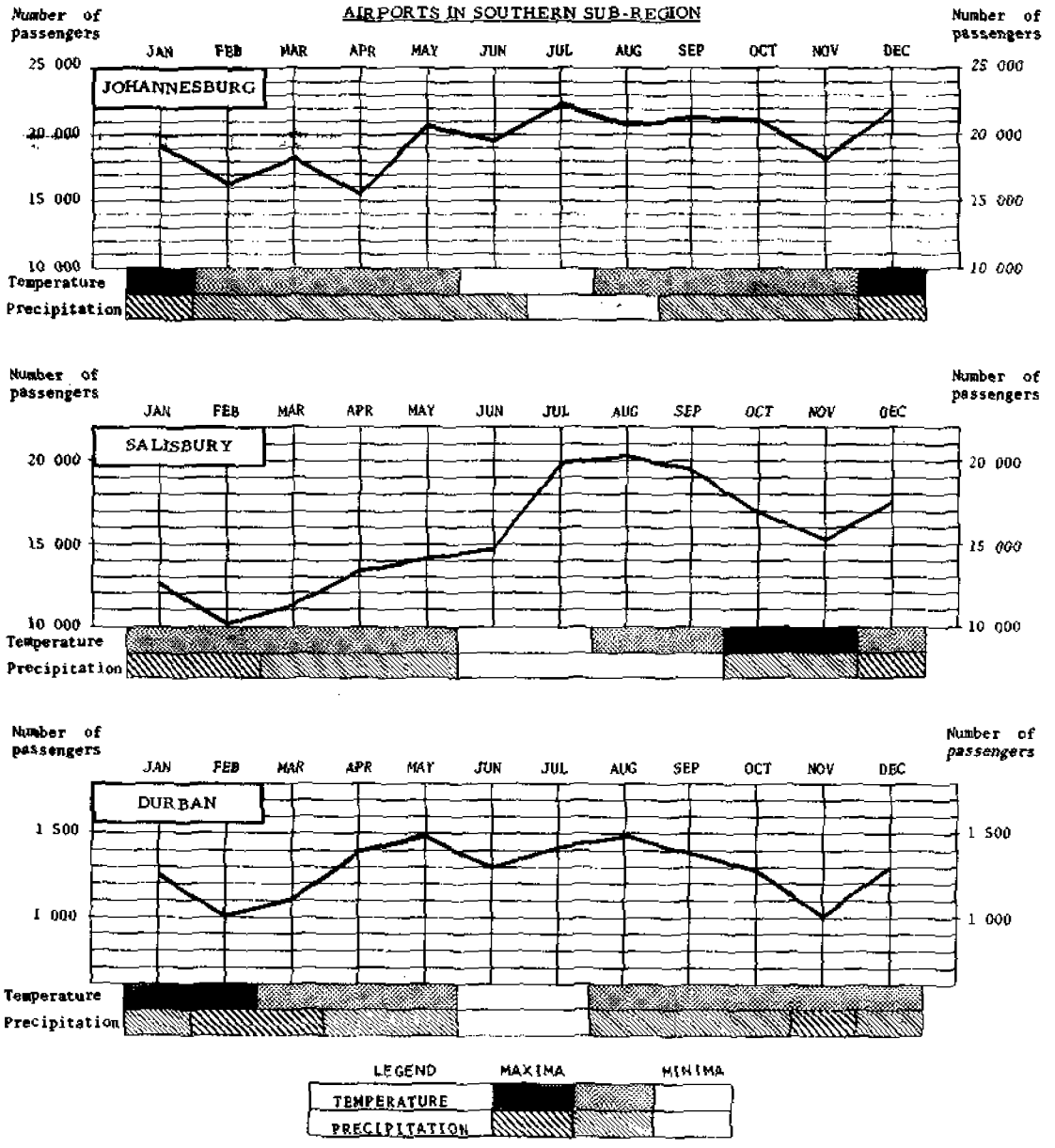


APPENDIX 13 (Cont'd)

AVERAGE SEASONAL VARIATIONS AT INDIVIDUAL AFRICAN AIRPORTS

Diagram 4

AIRPORTS IN SOUTHERN SUB-REGION



APPENDIX 14

TRAFFIC FLOW DATA

1960 and 1965

Scheduled Services - International Operations to and within Africa

by African and non-African carriers

GENERAL NOTE

Sources

These estimates have been prepared on the basis of data contained in the ICAO Digests of Statistics - Traffic Flow, for March 1960 and March 1965. When the data concerning an airline were not available for these months but for September of the same or the preceding year, or in exceptional cases for March of the preceding year, the relevant Digests have been used. When no data was available in any of these Digests, the ABC World Airways Guides for March 1960 and March 1965 have been utilized.

Nature of the data

This chart covers only certain components of the traffic flow on international flight stages of scheduled services to and within Africa, i. e. the number of airlines operating on each stage, the flight frequency, the passenger seats available, the revenue passengers carried and the passenger load factor. Data on domestic flight stages in Africa have also been included when such stages form an integral part of an international service (e. g. Addis Ababa - Asmara as part of an Addis Ababa - Asmara - Cairo service).

A stage of service consists only of non-stop flights. Therefore a "direct" flight from Cairo to Tunis via Tripoli is not shown as Cairo - Tunis but as Cairo - Tripoli and Tripoli - Tunis. Non-stop flights between each African city and points outside Africa have been grouped together as one stage of service by region (e. g. Dakar - Europe; Dakar - South America; and Dakar - North America).

Data shown for every pair of cities include operations in both directions. Therefore the same figures appear twice, first under the city listed first in the alphabetical order and second under the other city of the pair (e. g. first against ABIDJAN - Accra and later against ACCRA - Abidjan).

The traffic carried on every stage of service includes passengers embarked and disembarked at each terminal as well as passengers who continued their air journey in the same aircraft with which they arrived. Therefore the total traffic shown for any given city in this chart where transit passengers are counted twice may not be readily comparable to the figure contained for the same city in the ICAO Airport Traffic Digests where transit passengers are counted once.

(Continued on next page)

APPENDIX 14 (Cont'd)

Methods of estimation

The flight frequency on each stage of service has been obtained by converting into weekly figures the total number of scheduled flights performed by all airlines in each direction during a sample month. Additional flights operated during peak periods have not been included. Therefore the data concerning flight frequencies represent the minimum number of round-trips operated each week throughout the year between the two cities under consideration.

The data available on the capacity offered and the traffic carried by all airlines in each direction of a flight stage during a sample month have been added together and projected into yearly totals after adjustment to take account of the seasonal variations. When the ABC World Airways Guide had to be used, several judgement factors were applied to estimate the yearly capacity and traffic corresponding to the flight frequency and type of aircraft indicated in the Guide. Therefore the data shown under "passenger seats available" and "revenue passengers carried", although they have not been rounded off, always represent approximate figures for a full year.

Comparability of the data

In view of the sources used and the methods of estimation available, the overall accuracy of the figures cannot be claimed and a margin of error of plus or minus 15 per cent must be accepted. This applies particularly to the year 1960 because a substantial number of operations which were reported on as international in 1965 by newly independent States had been considered as domestic in 1960 by the States responsible for the territories in which these operations were performed. Therefore these operations had been omitted from the 1960 Traffic Flow Digests and a greater degree of estimation was required for that year to include them in this chart and allow comparison with 1965.

Subject to these reservations, the figures contained in this chart are generally realistic and should be valuable for purposes of comparison. The reader is requested to consult the footnotes on page for explanations of apparent discrepancies or significant changes in particular stages of service.

- - - - - - - - - -

TRAFFIC FLOW DATA

1960 and 1965

Scheduled Services - International Operations to and within Africa

by African and non-African carriers

STAGES OF SERVICE (non-stop flights between the following points)		NUMBER OF AIRLINES operating between these points		FLIGHT FREQUENCY (round-trips per week)		PASSENGER SEATS AVAILABLE (yearly total for both directions)		REVENUE PASSENGERS CARRIED (yearly total for both directions)		LOAD FACTOR %	
		1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
ABERCORN (Zambia)	Mbeya [1]	1	-	1	-	2,064	-	884	-	43	-
	Ndola [2]	1	-	1	-	2,256	-	1,001	-	44	-
					Total	4,320		1,885			
ABIDJAN (Ivory Coast)	Accra	5	7	5	10	22 392	66 144	10 798	34 099	48	52
	Bamako	2	1	3	1	24 128	2 400	18 096	1 391	75	58
	Bobo Dioulasso	1	1	1	1	8 008	6 048	4 804	4 316	60	71
	Bouake [2]	1	-	2	-	7.840	-	4 704	-	60	-
	Conakry	2	2	2	3	11 960	29 544	7 774	12 337	65	42
	Cotonou	2	2	2	2	12 128	18 240	7 519	10 829	62	59
	Dakar	2	1	3	1	18 200	13 608	12 740	7 696	70	57
	Douala	1	1	1	1/4	3 920	720	2 352	13	60	2
	Kumasi	-	1	-	1	-	2 688	-	1 742	-	65
	Lome	2	1	3	1/2	24 128	2 880	13 279	2 652	55	92
	Monrovia	3	8	3	10	12 896	83 148	10 319	36 719	80	44
	Niamey	1	2	1	2	5 720	27 840	3 718	10 634	65	38
	EUROPE [3]	1	-	1/2	-	4 004	-	3 003	-	75	-
					Total	155 324	253 260	99 097	122 428		
ACCRA (Ghana)	Abidjan	5	7	5	10	22 392	66 144	10 798	34 099	48	52
	Conakry	-	1	-	1	-	9 048	-	3 890	-	43
	Cotonou	-	1	-	1	-	7 200	-	5 418	-	75
	Douala	-	1	-	1	-	9 072	-	1 755	-	19
	Freetown	2	1	2	1	11 648	5 376	4 045	2 223	35	41
	Kano	1	1	2	1/2	10 800	2 808	6 877	195	64	7
	Kinshasa [3]	1	-	1	-	6 132	-	5 616	-	92	-
	Kumasi	-	2	-	3	-	8 448	-	5 525	-	65
	Lagos	3	11	13	27	33 988	204 552	25 065	92 475	74	45
	Lome	1	2	2	3	8 240	11 184	5 356	9 568	65	86
	Monrovia	1	3	3	4	13 752	32 760	9 464	20 735	69	63
	Ouagadougou	-	1	-	1/2	-	3 744	-	598	-	16
	Tripoli	1	1	1	1/2	9 360	5 328	5 148	1 079	55	20
	EUROPE	1	3	1	6	9 360	65 004	5 148	27 547	55	42
					Total	125 672	430 668	77 517	205 107		
ADDIS ABABA (Ethiopia)	Asmara	1	1	5	7	33 552	75 816	17 810	36 491	53	48
	Cairo	-	1	-	1	-	10 080	-	6 773	-	67
	Dire Dawa	1	2	8	8	25 248	39 732	11 973	18 824	47	47
	Khartoum	1	5	2	7	8 784	70 896	3 133	15 731	36	22
	Nairobi	1	4	2	7	12 636	63 756	6 279	36 248	50	57
					Total	80 220	260,280	39,195	114,067		
AIOUN (Mauritania)	Nioro	1	1	1	1	4 120	3 000	1 442	754	35	25
	Nouakchott [2]	1	-	1	-	4 120	-	1 442	-	35	-
					Total	8 240	3 000	2 884	754		

See GENERAL NOTE on page 117 and footnotes on page 136.

APPENDIX 14 (Cont'd)

TRAFFIC FLOW DATA

STAGES OF SERVICE		NUMBER OF AIRLINES		WEEKLY FREQUENCY		SEATS AVAILABLE		PASSENGERS CARRIED		LOAD FACTOR	
		1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
ALBERTVILLE (Democratic Republic of Congo)	Bujumbura	1	1	1	1	2 912	2 912	1 310	1 310	45	45
	Lubumbashi [2]	1	-	1	-	2 912	-	1 456	-	50	-
					Total	5 824	2 912	2 766	1 310		
ALEXANDRIA [4] (U.A.R.)	Cairo	1	1	3	2	8 424	6 912	3 731	2 067	44	30
	EUROPE	2	1	6	2	24 264	6 912	8 372	4 095	35	59
	MIDDLE EAST/ASIA [1]	1	-	1	-	2 912	-	1 164	-	40	-
					Total	35 600	13 824	13 267	6 162		
ALGER (Algeria)	Annaba	2	1	8	1	43 224	5 720	28 327	2 288	66	40
	Bamako	-	1	-	1	-	9 048	-	3 166	-	35
	Casablanca	-	1	-	1	-	7 392	-	5 746	-	78
	Oran	2	1	5	1	34 212	8 064	27 833	2 379	81	30
	Rabat	-	1	-	1	-	9 048	-	2 939	-	32
	Tripoli	-	1	-	3	-	26 208	-	8 086	-	31
	Tunis	1	4	1	7	6 564	54 240	2 938	17 790	45	33
	EUROPE	4	4	83	57	606 896	421 368	460 720	330 851	76	79
					Total	690 896	541 088	519 818	373 245		
ANNABA [4] ex-Bône (Algeria)	Alger	2	1	8	1	43 224	5 720	28 327	2 288	66	40
	Skikda [2]	2	-	11	-	69 264	-	55 409	-	80	-
	Tunis	2	1	8	1	43 056	5 720	15 951	2 002	37	35
	EUROPE	2	2	12	5	88 192	37 500	64 656	29 393	73	78
					Total	243 736	48 940	164 343	33 683		
ASMARA (Ethiopia)	Addis Ababa	1	1	5	7	33 552	75 816	17 910	36 491	53	48
	Assab	1	1	3	3	9 108	7 728	3 146	2 899	35	38
	Cairo	1	1	3	7	18 684	75 816	9 659	31 512	52	42
	Kassala	-	1	-	1	-	4 160	-	1 372	-	33
	Khartoum	4	4	10	4	29 428	21 284	8 926	7 573	30	36
	Port Sudan	1	1	1	1	7 164	4 576	1 313	1 830	18	40
	Wadi Halfa [1]	1	-	1/4	-	1 560	-	1 313	-	84	-
	MIDDLE EAST/ASIA	5	3	11	5	27 884	17 884	12 799	9 085	46	51
					Total	127 380	207 264	54 966	90 762		
ASSAB (Ethiopia)	Asmara	1	1	3	3	9 108	7 728	3 146	2 899	35	38
	Dire Dawa	1	1	2	1	4 860	2 688	1 222	832	25	31
	Djibouti	1	1	3	2	6 648	5 712	1 001	793	15	14
	MIDDLE EAST/ASIA	1	1	3	2	11 628	4 704	1 664	1 651	14	35
					Total	32 244	20 832	7 033	6 175		
BAMAKO (Mali)	Abidjan	2	1	3	1	24 128	2 400	18 096	1 391	75	58
	Alger	-	1	-	1	-	9 048	-	3 166	-	35
	Bobo Dioulasso	1	1	2	1	7 640	5 760	4 202	3 042	55	53
	Casablanca	-	1	-	1	-	9 072	-	5 226	-	58
	Conakry	-	2	-	2	-	11 448	-	4 716	-	41
	Dakar	1	3	3	3	12 360	22 872	8 654	10 033	70	44
	Kankan	1	1	1	1	4 120	2 704	1 648	1 094	40	40
	Monrovia	-	1	-	1	-	9 072	-	4 407	-	49
	Mopti	1	1	1	2	3 920	4 608	2 744	4 381	70	95
	Nioro	1	1	1	1	4 120	3 000	1 648	2 850	40	95
	Ouagadougou	-	2	-	2	-	9 792	-	4 355	-	44
	Rabat	-	1	-	1/2	-	3 744	-	429	-	11
	EUROPE	2	2	3	3	24 128	17 568	16 890	10 985	70	63
					Total	80 416	111 088	53 880	56 075		

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TRAFFIC FLOW DATA

STAGES OF SERVICE		NUMBER OF AIRLINES		WEEKLY FREQUENCY		SEATS AVAILABLE		PASSENGERS CARRIED		LOAD FACTOR	
		1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
BANGUI[4]	Berberati	1	1	2	1	7 250	3 264	2 537	1 976	35	61
(Central African	Bouar	1	1	2	1	8 240	7 464	3 708	3 211	45	43
Republic)	Brazzaville	2	2	6	4	36 944	20 064	16 624	8 060	45	40
	Douala	1	1	1	1/4	4 120	816	1 236	130	30	16
	Fort Archambault	2	1	2	2	6 900	6 888	2 760	2 262	40	33
	Fort Lamy	2	2	4	5	28 704	24 108	15 950	11 804	55	49
	N'Gaoundere[1]	1	-	1	-	4 120	-	2 266	-	55	-
	Yaounde	-	1	-	1	-	6 300	-	1 456	-	23
					Total	96 278	69 904	44,981	28 899		
BATA	Santa Isabel	1	1	5	7	11 040	14 904	6 253	8 697	57	58
(Rio Muni)	EUROPE	1	1	1	2	7 392	13 128	5 720	7 397	77	56
					Total	18 432	28 032	11 973	16 094		
BATHURST	Conakry	1	1	1	1	2 912	6 000	1 630	3 640	56	61
(Gambia)	Dakar	2	2	2	2	5 504	9 456	1 511	3 861	27	41
	Freetown	3	2	3	2	13 856	8 832	3 936	4 953	28	56
	EUROPE	2	1	2	1	11 648	5 376	5 064	2 444	43	45
					Total	33 920	29 664	12 141	14 898		
BATOURI	Berberati	-	1	-	1/2	-	1 632	-	364	-	22
(Cameroun)	Bouar	1	1	1	1/2	3 570	1 632	1 071	182	30	11
	Yaounde	1	1	1	1	3 570	3 264	892	845	25	26
					Total	7 140	6 528	1 963	1 391		
BEIRA	Blantyre	-	3	-	3	-	8 072	-	2 200	-	27
(Mozambique)	Lourenço Marques[2]	1	-	1	-	2 592	-	1 001	-	39	-
	Mozambique[2]	1	-	1	-	2 436	-	1 170	-	48	-
	Salisbury	2	2	3	5	6 648	15 936	3 289	9 620	49	60
					Total	11 676	24 008	5 460	11 820		
BENGHAZI	Cairo	1	1	3	4	12 024	35 280	8 528	21 827	71	62
(Libya)	Entebbe	-	1	-	1	-	6 720	-	4 303	-	64
	Khartoum	2	1	2	1	11 512	10 740	5 561	4 030	48	38
	Nairobi	-	1	-	4	-	26 688	-	9 295	-	35
	Tripoli	3	5	9	19	40 356	148 536	25 623	74 808	63	50
	Wadi Halfa[1]	3	-	4	-	22 080	-	18 614	-	84	-
	EUROPE	4	2	6	8	33 592	57 432	23 417	27 781	70	48
					Total	119 564	285 396	81 743	142 044		
BERBERA	Burao	-	1	-	1	-	2 376	-	1 014	-	43
(Somalia)	MIDDLE EAST/ASIA	1	1	2	2	4 920	4 920	2 952	3 653	60	74
					Total	4 920	7 296	2 952	4 667		
BERBERATI	Bangui	1	1	2	1	7 250	3 264	2 537	1 976	35	61
(Central African	Batouri	-	1	-	1/2	-	1 632	-	364	-	22
Republic)	Bouar	1	1	2	2	7 250	6 528	2 175	2 288	30	35
	Douala	-	1	-	1/2	-	1 632	-	169	-	10
					Total	14 500	13 056	4 712	4 797		
BISSAU	Dakar[1]	1	-	2	-	2 912	-	1 748	-	60	-
(Portuguese	Sal	-	1	-	1	-	4 860	-	2 418	-	50
Guinea)	EUROPE	-	1	-	1	-	4 860	-	2 613	-	54
					Total	2 912	9 720	1 748	5 031		

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APPENDIX 14 (Cont'd)

TRAFFIC FLOW DATA

STAGES OF SERVICE		NUMBER OF AIRLINES		WEEKLY FREQUENCY		SEATS AVAILABLE		PASSENGERS CARRIED		LOAD FACTOR	
		1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
BLANTYRE (Malawi)	Beira	-	3	-	3	-	8 072	-	2 200	-	27
	Dar-es-Salaam	1	3	2	5	8 844	24 256	6 227	16 317	70	67
	Lilongwe	-	2	-	2	-	4 368	-	2 184	-	50
	Salisbury	1	4	2	12	9 072	54 400	4 992	28 809	55	53
					Total	17 916	91 096	11 219	49 510		
BOBO DIOULASSO (Upper Volta)	Abidjan	1	1	1	1	8 008	6 048	4 804	4 316	60	71
	Bamako	1	1	2	1	7 640	5 760	4 202	3 042	55	53
	Bouake [1]	1	-	1	-	3 920	-	1 960	-	50	-
	Mopti [1]	1	-	1	-	3 920	-	1 960	-	50	-
	Ouagadougou	2	2	3	2	15 848	11 808	8 716	8 515	55	72
					Total	39 336	23 624	21 642	15 873		
BOUAKE [5] (Ivory Coast)	Abidjan	1	-	2	-	7 840	-	4 704	-	60	-
	Bobo Dioulasso	1	-	1	-	3 920	-	1 960	-	50	-
	Ouagadougou	1	-	1	-	3 920	-	1 960	-	50	-
					Total	15 680	-	8 624	-		
BOUAR (Central African Republic)	Bangui	1	1	2	2	8 240	7 464	3 708	3 211	45	43
	Batouri	1	1	1	1/2	3 570	1 632	1 071	182	30	11
	Berberati	1	1	2	2	7 250	6 528	2 175	2 288	30	35
	Douala	1	1	2	1	7 350	3 672	3 670	1 755	50	48
	Fort Lamy	-	1	-	1/4	-	528	-	507	-	96
	Yaounde	1	1	1	1	4 680	2 040	1 872	962	40	47
					Total	31 090	18 600	12 496	8 905		
BRAZZAVILLE [4] (Republic of the Congo)	Bangui	2	2	6	4	36 944	20 064	16 624	8 060	45	40
	Douala	2	3	2	3	14 352	31 992	6 458	6 604	45	21
	Fort Lamy [3]	1	-	1/4	-	1 428	-	1 170	-	82	-
	Johannesburg	1	1	2	1	10 800	12 528	7 150	6 877	66	55
	Kano	1	1	2	1	12 096	12 528	7 553	7 384	62	59
	Libreville	2	1	3	2	14 352	15 696	6 458	5 382	45	34
	Livingstone [1]	1	-	1	-	6 480	-	3 315	-	51	-
	Luanda	1	1	2	1	8 112	4 320	3 245	1 053	40	24
	Pointe Noire	1	1	2	2	5 824	9 468	1 747	1 547	30	16
	Port Gentil	1	1	1	1	8 112	5 760	2 433	1 391	30	24
	Salisbury	1	1	1	1	5 316	12 480	3 081	4 147	58	33
	Tripoli [3]	1	-	1/2	-	3 312	-	1 482	-	45	-
	EUROPE	2	1	2	1	15 168	12 480	8 342	5 863	55	47
					Total	142 296	137 316	69 058	48 308		
BUJUMBURA ex-Usumbura (Burundi)	Albertville	1	1	1	1	2 912	2 912	1 310	1 310	45	45
	Bukavu	1	1	11	14	32 032	40 768	14 414	16 306	45	40
	Cairo	-	1	-	1	-	7 560	-	5 304	-	70
	Entebbe	1	1	1	2	3 240	12 480	2 860	5 616	88	45
	Goma	1	1	1	1/4	5 720	660	1 716	156	30	24
	Kigali	1	1	1	2	2 912	5 824	1 310	2 620	45	45
	Kinshasa	-	1	-	1/2	-	2 460	-	494	-	20
	Kisangani [1]	1	-	2	-	13 824	-	9 802	-	71	-
	Lubumbashi	1	2	2	2	13 754	11 788	8 008	5 686	58	48
					Total	74 394	84 452	39 420	37 492		
BUKAVU (Democratic Republic of Congo)	Bujumbura	1	1	11	14	32 032	40 768	14 414	16 306	45	40
	Kigali	1	1	1	1	2 912	2 912	1 164	1 164	40	40
					Total	34 944	43 680	15 578	17 470		

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TRAFFIC FLOW DATA

STAGES OF SERVICE		NUMBER OF AIRLINES		WEEKLY FREQUENCY		SEATS AVAILABLE		PASSENGERS CARRIED		LOAD FACTOR	
		1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
BUKOBA (Tanzania)	Entebbe	1	1	4	5	3 328	4 160	2 163	2 704	65	65
	Mwanza	1	1	3	5	2 496	4 160	1 746	2 080	70	50
					Total	5 824	8 320	3 909	4 784		
BULAWAYO (Rhodesia)	Johannesburg	2	2	7	6	33 288	33 852	20 202	25 909	61	77
	Livingstone	-	2	-	4	-	18 928	-	9 464	-	50
					Total	33 288	52 780	20 202	35 373		
BURAO[6] (Somalia)	Berbera	-	1	-	1	-	2 376	-	1 014	-	43
	MIDDLE EAST/ASIA	-	1	-	1	-	2 040	-	949	-	47
					Total	-	4 416	-	1 963		
CABINDA (Angola)	*Pointe Noire*	1	1	1	1	2 912	4 160	1 892	2 704	65	65
	San Antonio Do Zaire[2]	1	-	1	-	2 912	-	1 892	-	65	-
					Total	5 824	4 160	3 784	2 704		
CAIRO (U. A. R.)	Addis Ababa	-	1	-	1	-	10 080	-	6 773	-	67
	Alexandria	1	1	3	2	8 424	6 912	3 731	2 067	44	30
	Asmara	1	1	3	7	18 684	75 816	9 659	31 512	52	42
	Benghazi	1	1	3	4	12 024	35 280	8 528	21 827	71	62
	Bujumbura	-	1	-	1	-	7 560	-	5 304	-	70
	Djibouti[1]	1	-	1	-	8 008	-	3 924	-	49	-
	Entebbe	-	1	-	1	-	11 560	-	8 239	-	71
	Kano	-	2	-	3	-	25 632	-	13 533	-	53
	Khartoum	5	5	9	9	47 200	76 752	11 998	27 031	25	35
	Kisangani[1]	1	-	2	-	14 304	-	10 400	-	73	-
	Nairobi	1	3	1	3	10 708	35 304	8 470	24 076	79	68
	Port Sudan	2	1	2	1	10 076	4 160	2 235	1 872	22	45
	Tripoli	-	1	-	1	-	13 440	-	4 563	-	34
	Wadi Halfa[1]	1	-	1/4	-	1 560	-	897	-	58	-
	EUROPE	26	21	60	93	380 316	884 852	232 145	410 476	61	46
	MIDDLE EAST/ASIA	19	21	84	106	422 940	872 544	266 752	453 302	63	52
					Total	934 244	2 059 892	558 739	1 010 575		
CASABLANCA (Morocco)	Alger	-	1	-	1	-	7 392	-	5 746	-	78
	Bamako	-	1	-	1	-	9 072	-	5 226	-	58
	Dakar	2	2	2	2	12 520	11 880	4 382	5 161	35	43
	Marrakech	-	1	-	1/4	-	1 032	-	637	-	62
	Meknes[2]	2	-	4	-	22 248	-	7 475	-	34	-
	Oran	1	1	2	1	12 696	8 064	9 139	2 977	72	37
	Oujda[2]	1	-	1	-	4 608	-	1 287	-	28	-
	Rabat	2	2	15	11	89 784	92 736	34 372	39 502	38	43
	Saint Louis	-	1	-	1/4	-	720	-	598	-	83
	Tanger	2	2	7	4	40 128	34 128	24 765	25 818	62	76
	EUROPE	5	5	22	31	109 540	226 800	64 173	154 297	59	68
					Total	291 524	391 824	145 593	239 962		
COLOMB BECHAR (Algeria)	Oran	1	1	1	1	6,032	8,256	1,296	1,924	21	23
CONAKRY (Guinea)	Abidjan	2	2	2	3	11 960	29 544	7 774	12 337	65	42
	Accra	-	1	-	1	-	9 048	-	3 890	-	43
	Bamako	-	2	-	2	-	11 448	-	4 716	-	41
	Bathurst	1	1	1	1	2 912	6 000	1 630	3 640	56	61
	Dakar	2	4	10	7	54 208	54 120	29 814	32 837	55	61

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APPENDIX 14 (Cont'd)

TRAFFIC FLOW DATA

STAGES OF SERVICE		NUMBER OF AIRLINES		WEEKLY FREQUENCY		SEATS AVAILABLE		PASSENGERS CARRIED		LOAD FACTOR	
		1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
CONAKRY (Cont'd)	Freetown	3	3	5	5	13 840	19 124	7 058	11 910	51	62
	Kankan	1	1	1	1	4 120	2 704	1 648	1 094	40	40
	Monrovia	-	3	-	4	-	50 472	-	10 811	-	21
	Rabat	-	1	-	1	-	14 904	-	2 626	-	18
	EUROPE	-	3	-	3	-	40 512	-	15 899	-	39
					Total	87 040	237 876	47 924	99 760		
CONSTANTINE [6] (Algeria)	Ouargla	-	1	-	1	-	10 320	-	1 651	-	16
	EUROPE	-	2	-	6	-	43 632	-	32 006	-	73
					Total	-	53 952	-	33 657		
COTONOU (Dahomey)	Abidjan	2	2	2	2	12 128	18 240	7 519	10 829	62	59
	Accra	-	1	-	1	-	7 200	-	5 418	-	75
	Douala	-	1	-	1/2	-	2 880	-	1 001	-	35
	Lagos	2	2	3	5	14 352	21 216	9 620	15 132	67	71
	Lome	3	2	5	4	31 768	17 616	17 472	13 065	55	74
	Niamey	3	2	3	1	20 040	15 360	12 024	6 123	60	40
					Total	78 288	82 512	46 635	51 568		
DAKAR (Senegal)	Abidjan	2	1	3	1	18 200	13 608	12 740	7 696	70	57
	Bamako	1	3	3	3	12 360	22 872	8 652	10 033	70	44
	Bathurst	2	2	2	2	5 504	9 456	1 511	3 861	27	41
	Bissau [1]	1	-	2	-	2 912	-	1 748	-	60	-
	Casablanca	2	2	2	2	14 120	11 880	4 953	5 161	35	43
	Conakry	2	4	10	7	54 208	54 120	29 814	32 837	55	61
	Freetown	-	1	-	1/2	-	2 880	-	1 404	-	49
	Monrovia	2	2	3	3	18 912	38 904	13 958	23 764	74	61
	Nouakchott	-	1	-	1	-	6 360	-	4 628	-	73
	Rabat	-	1	-	3	-	27 144	-	6 786	-	25
	Sal [1]	1	-	1	-	1 456	-	874	-	60	-
	Saint Louis	2	1	9	4	20 496	24 072	8 198	9 360	40	39
	EUROPE	8	7	25	17	146 504	203 844	112 964	132 262	77	65
	SOUTH AMERICA	6	6	12	12	64 020	136 008	47 801	92 755	75	68
	NORTH AMERICA	1	2	1	2	6 780	27 132	3 406	14 118	50	52
					Total	365 472	578 280	246 619	344 665		
DAR-ES-SALAAM (Tanzania)	Blantyre	1	3	2	5	8 844	24 256	6 227	16 317	70	67
	Mbeya [2]	1	-	1/2	-	1 152	-	611	-	53	-
	Mombasa	1	1	1/2	2	1 248	8 640	767	6 643	61	77
	Mtwara [2]	1	-	1	-	2 592	-	1 625	-	63	-
	Nairobi	1	5	3	8	12 492	64 564	7 449	33 591	60	52
	Ndola	-	1	-	1	-	3 252	-	1 794	-	55
	Sao Hills [2]	1	-	1/2	-	1 008	-	468	-	46	-
	Tananarive	-	1	-	1	-	17 280	-	13 130	-	76
	Tanga	-	1	-	1	-	2 400	-	1 417	-	59
	Zanzibar	1	1	1/2	1	1 800	2 400	1 560	1 170	87	49
					Total	29 136	122 792	18 707	74 062		
DIRE DAWA (Ethiopia)	Addis Ababa	1	2	8	8	25 248	39 732	11 973	18 824	47	47
	Assab	1	1	2	1	4 860	2 688	1 222	832	25	31
	Djibouti	1	1	13	7	28 680	37 044	4 680	9 789	16	26
					Total	58 788	79 464	17 875	29 445		
DJERBA [5] (Tunisia)	Sfax	1	-	2	-	6 048	-	4 810	-	80	-
	Tripoli	1	-	2	-	5 940	-	1 300	-	22	-
					Total	11 988	-	6 110	-		

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TRAFFIC FLOW DATA

STAGES OF SERVICE		NUMBER OF AIRLINES		WEEKLY FREQUENCY		SEATS AVAILABLE		PASSENGERS CARRIED		LOAD FACTOR	
		1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
DJIBOUTI	Assab	1	1	3	2	6 648	5 712	1 001	793	15	14
(*French*	Cairo [1]	1	-	1	-	8 008	-	3 924	-	49	-
Somaliland)	Dire Dawa	1	1	13	7	28 680	37 044	4 680	9 789	16	26
	Nairobi	-	1	-	1	-	14 304	-	9 854	-	69
	Tananarive	1	2	2	2	16 016	27 216	7 208	18 506	45	68
	EUROPE	1	2	1	2	8 008	32 888	4 084	21 048	51	64
	MIDDLE EAST/ASIA	2	4	17	12	15 168	23 520	7 631	18 493	50	79
					Total	82 528	140 684	28 528	78 483		
DOUALA [4]	Abidjan	1	1	1	1/4	3 920	720	2 352	13	60	2
(Cameroun)	Accra	-	1	-	1	-	9 072	-	1 755	-	19
	Bangui	1	1	1	1/4	4 120	816	1 236	130	30	16
	Berberati	-	1	-	1/2	-	1 632	-	169	-	10
	Bouar	1	1	2	1	7 350	3 672	3 670	1 755	50	48
	Brazzaville	2	3	2	3	14 352	31 992	6 458	6 604	45	21
	Cotonou	-	1	-	1/2	-	2 880	-	1 001	-	35
	Fort Lamy	2	2	4	4	23 772	31 276	8 020	6 214	34	20
	Garoua	-	1	-	1/2	-	1 620	-	325	-	20
	Kano [1]	1	-	1	-	8 112	-	3 650	-	45	-
	Kinshasa	-	1	-	1	-	3 264	-	1 456	-	45
	Lagos	2	3	3	5	10 552	32 424	6 331	15 392	60	47
	Libreville	2	1	8	7	29 624	38 388	18 367	23 530	62	61
	N'Gaoundere	-	1	-	1	-	2 172	-	104	-	5
	Pointe Noire [3]	1	-	1	-	8 112	-	2 433	-	30	-
	Port Gentil	1	1	2	1/4	9 960	816	4 482	169	45	21
	Santa Isabel	1	1	2	4	4 968	7 812	1 768	4 199	36	54
	Yaounde	2	1	12	7	48 612	28 812	26 736	23 105	55	80
	EUROPE	2	1	5	2	34 944	27 216	28 652	20 553	82	76
					Total	208 398	224 584	114 155	106 474		
DURBAN	Lourenço Marques	3	2	6	2	16 272	10 176	8 385	4 901	52	48
(*South Africa*)	*Salisbury*	1	1	1	2	4 752	11 556	3 380	10 517	71	91
					Total	29 024	21 732	11 765	15 418		
DZAOUDZI (Comores Islands)	Majunga	1	1	1	1	2 912	4 656	1 757	2 184	60	47
EL AIOUN	Sidi Ifni	1	1	3	3	6 504	13 104	2 821	8 281	43	63
(Spanish Sahara)	EUROPE	1	1	6	3	11 904	14 988	7 475	10 777	63	72
					Total	18 408	28 092	10 296	19 058		
ENTEBBE	Benghazi	-	1	-	1	-	6 720	-	4 303	-	64
(Uganda)	Bujumbura	1	1	1	2	3 240	12 480	2 860	5 616	88	45
	Bukoba	1	1	4	5	3 328	4 160	2 163	2 704	65	65
	Cairo	-	1	-	1	-	11 560	-	8 239	-	71
	Juba	1	1	1	1	2 912	4 160	1 018	1 456	35	35
	Khartoum	6	1	12	1	73 480	13 200	47 027	11 998	64	91
	Nairobi	5	4	9	7	54 752	54 348	33 538	39 358	61	72
	Ndola	3	1	3	1	16 268	13 496	12 803	12 281	79	91
	Salisbury [3]	1	-	1	-	6 048	-	2 444	-	40	-
	Tripoli	-	1	-	1/4	-	1 332	-	845	-	63
	EUROPE	-	2	-	3	-	36 552	-	28 729	-	79
					Total	160 028	158 008	101 853	115 529		
FORT ARCHAMBAULT (Chad)	Bangui	2	1	2	2	6 900	6 888	2 760	2 262	40	33
	Fort Lamy	-	1	-	2	-	6 888	-	3 406	-	49
					Total	6 900	13 776	2 760	5 668		

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APPENDIX 14 (Cont'd)

TRAFFIC FLOW DATA

STAGES OF SERVICE		NUMBER OF AIRLINES		WEEKLY FREQUENCY		SEATS AVAILABLE		PASSENGERS CARRIED		LOAD FACTOR	
		1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
FORT HILL (Malawi)	Mbeya	1	1	2	2	1 456	1 456	655	728	45	50
FORT JAMESON (Zambia)	Lilongwe	1	2	1	2	2 912	5 824	1 747	2 912	60	50
	Lusaka	1	2	1	2	2 912	5 824	1 747	2 912	60	50
					Total	5 824	11 648	3 494	5 824		
FORT LAMY [4] (Chad)	Bangui	2	2	4	5	28 704	24 108	15 850	11 804	55	49
	Bouar	-	1	-	1/4	-	528	-	507	-	96
	Brazzaville [3]	1	-	1/4	-	1 428	-	1 170	-	82	-
	Douala	2	2	4	4	23 772	31 176	8 020	6 214	34	20
	Fort Archambault	-	1	-	2	-	6 888	-	3 406	-	49
	Garoua	2	1	2	2	5 700	6 888	1 710	923	30	13
	Maradi	-	1	-	1/4	-	720	-	39	-	5
	Maroua	2	2	3	6	11 420	28 200	4 568	7 534	40	27
	N'Gaoundere	-	1	-	1	-	2 856	-	91	-	3
	Pointe Noire	-	1	-	1/2	-	2 160	-	221	-	10
	Tripoli	1	2	1/2	1	3 120	3 492	1 747	1 911	56	55
	Zinder	-	1	-	1	-	5 040	-	403	-	8
	EUROPE	2	2	7	3	50 724	35 748	35 507	23 946	70	67
					Total	124 868	147 804	68 572	56 999		
FREETOWN (Sierra Leone)	Accra	2	1	2	1	11 648	5 376	4 045	2 223	35	41
	Bathurst	3	2	3	2	13 856	8 832	3 936	4 953	28	56
	Conakry	3	3	5	5	13 840	19 124	7 058	11 910	51	62
	Dakar	-	1	-	1/2	-	2 880	-	1 404	-	49
	Monrovia	3	3	3	5	10 888	21 328	7 072	13 474	65	63
	EUROPE	-	1	-	1	-	11 440	-	5 490	-	48
					Total	50 232	68 980	22 111	39 454		
GAO (Mali)	Niamey	1	1	1	1	3 920	2 208	2 940	2 196	75	99
	Tombouctou	-	1	-	1	-	2 208	-	2 040	-	92
					Total	3 920	4 416	2 940	4 236		
GAROUA (Cameroun)	Douala	-	1	-	1/2	-	1 620	-	325	-	20
	Fort Lamy	2	1	2	2	5 700	6 888	1 710	923	30	13
	Maroua	2	1	3	2	11 420	7 368	3 997	2 366	35	32
	N'Gaoundere	2	1	7	4	25 360	14 508	13 948	9 425	55	65
	Yagoua	1	1	1	1	4 120	3 672	2 060	3 145	50	86
	Yaounde	-	1	-	1/2	-	1 800	-	702	-	39
					Total	46 600	35 856	21 715	16 886		
GOMA (Democratic Republic of Congo)	Bujumbura	1	1	1	1/4	5 720	660	1 716	156	30	24
	Kigali	-	1	-	1	-	2 912	-	1 310	-	45
	Kindu	-	1	-	1/4	-	660	-	156	-	24
	Kinshasa	-	1	-	1/4	-	660	-	260	-	39
	Lubumbashi	-	1	-	1/4	-	900	-	650	-	72
					Total	5 720	5 792	1 716	2 532		
HARGEISA (Somalia)	Mogadiscio [2]	1	-	2	-	3 972	-	1 963	-	49	-
	Nairobi [1]	1	-	1	-	1 728	-	806	-	47	-
	MIDDLE EAST/ASIA	2	1	3	5	6 792	8 880	3 484	3 224	51	36
					Total	12 492	8 880	6 253	3 224		
JOHANNESBURG (South Africa)	Brazzaville	1	1	2	1	10 800	12 528	7 150	6 877	66	55
	Bulawayo	2	2	7	6	33 288	33 852	20 202	25 909	61	77
	Kano [3]	1	-	1/2	-	2 472	-	1 547	-	63	-

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TRAFFIC FLOW DATA

STAGES OF SERVICE		NUMBER OF AIRLINES		WEEKLY FREQUENCY		SEATS AVAILABLE		PASSENGERS CARRIED		LOAD FACTOR	
		1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
JOHANNESBURG (Cont'd)											
	Khartoum [3]	1	-	1	-	6 264	-	2 548	-	41	-
	Kinshasa	3	4	3	5	22 788	69 792	11 583	21 853	51	31
	Lagos	-	1	-	2	-	23 760	-	16 952	-	71
	Livingstone	3	1	2	1	12 660	5 256	6 461	4 043	51	77
	Lourenço Marques	2	2	4	29	9 264	27 216	6 799	17 173	73	63
	Luanda	-	1	-	4	-	56 640	-	26 221	-	46
	Lubumbashi [1]	1	-	1	-	6 048	-	2 301	-	38	-
	Mauritius	2	2	1	2	6 504	11 976	5 421	11 414	83	95
	Nairobi	1	3	1	4	6 804	42 120	5 655	22 334	83	53
	Salisbury	6	5	21	24	116 160	200 592	70 200	120 138	60	60
	EUROPE	-	1	-	1/4	-	1 668	-	325	-	19
					Total	233 052	485 400	139 867	273 239		
JUBA (Sudan)	Entebbe	1	1	1	1	2 912	4 160	1 018	1 456	35	35
	Khartoum	1	1	1	1	2 912	4 160	1 018	1 456	35	35
					Total	5 824	8 320	2 036	2 912		
KANKAN (Guinea)	Bamako	1	1	1	1	4 120	2 704	1 648	1 094	40	40
	Conakry	1	1	1	1	4 120	2 704	1 648	1 094	40	40
					Total	8 240	5 408	3 296	2 188		
KANO [4] (Nigeria)	Accra	1	1	2	1/2	10 800	2 808	6 877	195	64	7
	Brazzaville	1	1	2	1	12 096	12 528	7 553	7 384	62	59
	Cairo	-	2	-	3	-	25 632	-	13 533	-	53
	Douala [1]	1	-	1	-	8 112	-	3 650	-	45	-
	Johannesburg [3]	1	-	1/2	-	2 472	-	1 547	-	63	-
	Khartoum	1	1	1	1/2	5 832	2 808	4 784	390	82	14
	Kinshasa	2	1	5	1	29 856	17 520	16 835	8 697	56	50
	Kisangani [1]	1	-	1/4	-	768	-	754	-	98	-
	Lagos	3	4	8	10	46 872	97 872	34 554	45 110	74	46
	Luanda [1]	1	-	1	-	5 184	-	3 302	-	64	-
	Salisbury [1]	1	-	1/2	-	2 448	-	884	-	36	-
	Tripoli [1]	2	-	2	-	13 488	-	10 634	-	79	-
	EUROPE	6	4	16	9	99 720	101 928	72 244	54 951	72	54
					Total	237 648	261 096	163 618	130 260		
KARIBA [6] (Southern Rhodesia - U.K.)	Livingstone	-	1	-	1	-	5 824	-	2 912	-	50
	Salisbury	-	1	-	1	-	5 824	-	2 912	-	50
					Total	-	11 648	-	5 824		
KASSALA [6] (Sudan)	Asmara	-	1	-	1	-	4 160	-	1 372	-	33
	Khartoum	-	1	-	1	-	4 160	-	1 372	-	33
					Total	-	8 320	-	2 744		
KHARTOUM [4] (Sudan)	Addis Ababa	1	5	2	7	8 784	70 896	3 133	15 731	36	22
	Asmara	4	4	10	4	29 428	21 284	8 926	7 573	30	36
	Benghazi	2	1	2	1	11 512	10 740	5 561	4 030	48	38
	Cairo	5	5	9	9	47 200	76 752	11 998	27 031	25	35
	Entebbe	6	1	12	1	73 480	13 200	47 027	11 998	64	91
	Johannesburg [3]	1	-	1	-	6 264	-	2 548	-	41	-
	Juba	1	1	1	1	2 912	4 160	1 018	1 456	35	35
	Kano	1	1	1	1/2	5 832	2 808	4 784	390	82	14
	Kassala	-	1	-	1	-	4 160	-	1 372	-	33
	Kisangani [1]	1	-	1	-	8 448	-	8 086	-	96	-
	Lagos	-	2	-	3	-	34 320	-	9 397	-	27
	Nairobi	5	2	13	3	78 708	34 116	56 602	18 031	72	53
	Port Sudan	2	2	4	4	11 648	17 056	4 658	6 822	40	40

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TRAFFIC FLOW DATA

STAGES OF SERVICE		NUMBER OF AIRLINES		WEEKLY FREQUENCY		SEATS AVAILABLE		PASSENGERS CARRIED		LOAD FACTOR	
		1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
KHARTOUM (Cont'd)	Tripoli	-	1	-	1/2	-	4 344	-	2 041	-	47
	Wadi Halfa [1]	3	-	4	-	22 080	-	18 614	-	84	-
	EUROPE	7	5	24	9	144 816	85 968	104 078	42 143	72	50
	MIDDLE EAST/ASIA	3	3	3	4	18 084	33 076	11 180	14 844	62	45
					Total	469 196	412 880	288 213	162 859		
KIGALI (Rwanda)	Bujumbura	1	1	1	2	2 912	5 824	1 310	2 620	45	45
	Bukavu	1	1	1	1	2 912	2 912	1 164	1 164	40	40
	Goma	-	1	-	1	-	2 912	-	1 310	-	45
					Total	5 824	11 648	2 474	5 094		
KINDU [6] (Democratic Republic of Congo)	Goma	-	1	-	1/4	-	660	-	156	-	24
	Kinshasa	-	1	-	1/4	-	660	-	117	-	17
					Total	-	1 320	-	273		
KINSHASA ex-Leopoldville (Democratic Republic of Congo)	Accra [3]	1	-	1	-	6 132	-	5 616	-	92	-
	Bujumbura	-	1	-	1/2	-	2 460	-	494	-	20
	Douala	-	1	-	1	-	3 264	-	1 456	-	45
	Goma	-	1	-	1/4	-	660	-	260	-	39
	Johannesburg	3	4	3	5	22 788	69 792	11 583	21 853	51	31
	Kano	2	1	5	1	29 856	17 520	16 835	8 697	56	50
	Kindu	-	1	-	1/4	-	660	-	117	-	18
	Kisangani [2]	1	-	1/4	-	768	-	91	-	12	-
	Lagos	-	2	-	2	-	19 536	-	13 590	-	70
	Libenge [2]	1	-	1/2	-	3 072	-	936	-	30	-
	Luanda	1	1	3	1	16 800	6 240	10 218	2 808	61	45
	Lubumbashi	1	1	1/4	3	3 072	40 752	949	26 338	31	65
	Salisbury [1]	1	-	1	-	4 728	-	2 938	-	62	-
	EUROPE	1	4	3	9	28 236	125 384	22 711	58 730	80	47
					Total	115 452	286 268	71 877	134 343		
KISANGANI [5] ex-Stanleyville (Democratic Republic of Congo)	Bujumbura	1	-	2	-	13 824	-	9 802	-	71	-
	Cairo	1	-	2	-	14 304	-	10 400	-	73	-
	Kano	1	-	1/4	-	768	-	754	-	98	-
	Khartoum	1	-	1	-	8 448	-	8 086	-	96	-
	Kinshasa	1	-	1/4	-	768	-	91	-	12	-
	Libenge	1	-	1/2	-	3 840	-	2 821	-	73	-
	Tripoli	1	-	1/4	-	768	-	13	-	2	-
					Total	42 720	-	31 967	-		
KUMASI [6] (Ghana)	Abidjan	-	1	-	1	-	2 688	-	1 742	-	65
	Accra	-	2	-	3	-	8 448	-	5 525	-	65
	Ouagadougou	-	1	-	1	-	2 400	-	1 742	-	73
	Tamale	-	1	-	1	-	3 360	-	2 587	-	77
					Total	-	16 896	-	11 596		
LAGOS (Nigeria)	Accra	3	11	13	27	33 988	204 554	25 065	92 475	74	45
	Cotonou	2	2	3	5	14 352	21 216	9 620	15 132	67	71
	Douala	2	3	3	5	10 552	32 424	6 331	15 392	60	47
	Johannesburg	-	1	-	2	-	23 760	-	16 952	-	71
	Kano	3	4	8	10	46 872	97 872	34 554	45 110	74	46
	Khartoum	-	2	-	3	-	34 320	-	9 397	-	27
	Kinshasa	-	2	-	2	-	19 536	-	13 590	-	70
	Libreville	-	1	-	1	-	12 480	-	2 587	-	21
	Monrovia	-	1	-	1	-	12 480	-	494	-	4
	Port Gentil [1]	1	-	1	-	8 112	-	4 867	-	60	-

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TRAFFIC FLOW DATA

STAGES OF SERVICE		NUMBER OF AIRLINES		WEEKLY FREQUENCY		SEATS AVAILABLE		PASSENGERS CARRIED		LOAD FACTOR	
		1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
LAGOS (Cont'd)	Tunis	-	1	-	1	-	15 600	-	4 160	-	27
	EUROPE	1	7	1	9	8 112	108 744	6 002	54 652	74	50
					Total	121 988	582 984	86 439	269 941		
LIBENGE [5] (Democratic Republic of Congo)	Kinshasa	1	-	1/2	-	3 072	-	936	-	30	-
	Kisangani	1	-	1/2	-	3 840	-	2 821	-	73	-
	Tripoli	1	-	1	-	6 144	-	4 173	-	68	-
	EUROPE	1	-	1/4	-	636	-	429	-	67	-
					Total	13 692	-	8 359	-		
LIBREVILLE (Gabon)	Brazzaville	2	1	3	2	14 352	15 696	6 458	5 382	45	34
	Douala	2	1	8	7	29 624	38 388	18 367	23 530	62	61
	Lagos	-	1	-	1	-	12 480	-	2 587	-	21
	N'Gaoundere	-	1	-	1	-	3 384	-	104	-	3
	Port Gentil	2	1	7	5	27 632	23 196	11 052	10 972	40	47
	Yaounde	-	1	-	1	-	5 760	-	1 248	-	22
					Total	71 608	98 904	35 877	43 823		
LILONGWE (Malawi)	Blantyre	-	2	-	2	-	4 368	-	2 184	-	50
	Fort Jameson	1	2	1	2	2 912	5 824	1 747	2 912	60	50
					Total	2 912	10 192	1 747	5 096		
LIVINGSTONE (Zambia)	Brazzaville [1]	1	-	1	-	6 480	-	3 315	-	51	-
	Bulawayo	-	2	-	4	-	18 928	-	9 464	-	50
	Johannesburg	3	1	2	1	12 660	5 256	6 461	4 043	51	77
	Kariba	-	1	-	1	-	5 824	-	2 912	-	50
	Ndola	1	1	1	1	5 508	5 184	3 783	3 770	69	73
	Salisbury	1	1	1	1	2 112	5 824	455	2 912	22	50
	Wankie M. C.	-	2	-	3	-	7 280	-	3 640	-	50
	Windhoek [1]	1	-	1	-	2 112	-	585	-	28	-
					Total	28 872	48 296	13 599	26 741		
LOME [4] (Togo)	Abidjan	2	1	3	1/2	24 128	2 880	13 270	2 652	55	92
	Accra	1	2	2	3	8 240	11 184	5 356	9 568	65	86
	Cotonou	3	2	5	4	31 768	17 616	17 472	13 065	55	74
	Niamey	-	1	-	1/2	-	2 160	-	1 924	-	89
					Total	64 136	33 840	36 098	27 209		
LOURENÇO MARQUES (Mozambique)	Beira [2]	1	-	1	-	2 592	-	1 001	-	39	-
	Durban	3	2	6	2	16 272	10 176	8 385	4 901	52	48
	Johannesburg	2	2	4	29	9 264	27 216	6 799	17 173	73	63
	Luanda [1]	1	-	3	-	18 144	-	7 332	-	40	-
	Salisbury	1	2	1	3	6 168	21 516	4 901	11 297	79	53
					Total	52 440	58 908	28 418	33 371		
LUANDA (Angola)	Brazzaville	1	1	2	1	8 112	4 320	3 245	1 053	40	24
	Johannesburg	-	1	-	4	-	56 640	-	26 221	-	46
	Kano [1]	1	-	1	-	5 184	-	3 302	-	64	-
	Kinshasa	1	1	3	1	16 800	6 240	10 218	2 808	61	45
	Lourenço Marques [1]	1	-	3	-	18 144	-	7 332	-	40	-
	Salisbury	-	2	-	4	-	52 716	-	27 300	-	52
	San Antonio Do Zaire [2]	1	-	1	-	2 912	-	1 892	-	65	-
	EUROPE	-	2	-	9	-	129 852	-	70 005	-	54
					Total	51 152	249 768	25 989	127 387		

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APPENDIX 14 (Cont'd)

TRAFFIC FLOW DATA

STAGES OF SERVICE		NUMBER OF AIRLINES		WEEKLY FREQUENCY		SEATS AVAILABLE		PASSENGERS CARRIED		LOAD FACTOR	
		1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
LUBUMBASHI	Albertville [2]	1	-	1	-	2 912	-	1 456	-	50	-
ex-Elisabethville	Bujumbura	1	2	2	2	13 754	11 788	8 008	5 686	58	48
(Democratic	Goma	-	1	-	1/4	-	900	-	650	-	72
Republic of	Johannesburg [1]	1	-	1	-	6 048	-	2 301	-	38	-
Congo)	Kinshasa	1	1	1/4	3	3 072	40 752	949	26 338	31	65
	Ndola	2	3	2	3	6 312	13 072	2 496	4 363	40	33
	Tripoli [1]	1	-	1/4	-	1 104	-	364	-	33	-
	EUROPE	1	1	1	1/2	6 048	6 864	4 498	3 107	74	45
					Total	39 250	73 376	20 072	40 144		
LUSAKA	Fort Jameson	1	2	1	2	2 912	5 824	1 747	2 912	60	50
(Zambia)	Nairobi	-	1	-	1	-	13 320	-	5 798	-	44
	Ndola	3	4	7	11	34 856	64 032	22 611	35 041	65	55
	Salisbury	3	4	7	16	35 240	90 240	25 512	20 990	72	23
					Total	73 008	173 416	49 870	64 741		
MAJUNGA	Dzaoudzi	1	1	1	1	2 912	4 656	1 757	2 184	60	47
(Malagasy	Nairobi	-	1	-	1	-	14 304	-	11 661	-	82
Republic)	Tananarive	1	2	1	2	2 912	18 960	1 757	11 934	60	63
					Total	5 824	37 920	3 514	25 779		
MARADI [6]	Fort Lamy	-	1	-	1/4	-	720	-	39	-	5
(Niger)	Tahoua	-	1	-	1	-	4 320	-	1 157	-	27
	Zinder	-	1	-	1	-	3 600	-	962	-	27
					Total	-	8 640	-	2 158		
MAROUA	Fort Lamy	2	2	3	6	11 420	28 200	4 568	7 534	40	27
(Cameroun)	Garoua	2	1	3	2	11 420	7 368	3 997	2 366	35	32
	Yagoua	2	1	2	1	8 240	3 672	3 708	2 106	45	57
					Total	31 080	39 240	12 273	12 006		
MARRAKECH [8]	Casablanca	-	1	-	1/4	-	1 032	-	637	-	62
(Morocco)	EUROPE	-	1	-	1/2	-	1 032	-	637	-	62
					Total	-	2 064	-	1 274		
MAURITIUS	Johannesburg	2	2	1	2	6 504	11 976	5 421	11 414	83	95
(Mauritius	Nairobi	-	1	-	1	-	13 320	-	8 060	-	61
Island)	Reunion	1	1	2	3	13 404	27 456	7 657	11 260	57	41
	Salisbury	-	2	-	2	-	8 548	-	4 256	-	50
	COCOS ISLANDS	2	2	1	2	6 504	10 704	4 095	10 114	63	94
					Total	26 412	72 004	17 173	45 104		
MBEYA	Abercorn [1]	1	-	1	-	2 064	-	884	-	43	-
(Tanzania)	Dar-es-Salaam [2]	1	-	1/2	-	1 152	-	611	-	53	-
	Fort Hill	1	1	2	2	1 456	1 456	655	728	45	50
	Sao Hill [2]	1	-	1/2	-	672	-	468	-	70	-
					Total	5 344	1 456	2 618	728		
MEKNES [5]	Casablanca	2	-	4	-	22 248	-	7 475	-	34	-
(Morocco)	Oran	1	-	1	-	7 632	-	4 329	-	57	-
	EUROPE	2	-	2	-	14 616	-	8 684	-	59	-
					Total	44 496	-	20 488	-		

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TRAFFIC FLOW DATA

STAGES OF SERVICE		NUMBER OF AIRLINES		WEEKLY FREQUENCY		SEATS AVAILABLE		PASSENGERS CARRIED		LOAD FACTOR	
		1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
MOGADISCIO (Somalia)	Hargeisa [2]	1	-	2	-	3 972	-	1 963	-	49	-
	Mombasa [1]	1	-	1	-	2 340	-	585	-	25	-
	Nairobi	2	2	2	3	8 292	16 620	2 652	10 335	32	62
	MIDDLE EAST/ASIA	1	4	1	4	6 300	26 352	3 549	23 715	56	90
					Total	20 904	42 972	8 749	34 050		
MOMBASA (Kenya)	Dar-es-Salaam	1	1	1/2	2	1 248	8 640	767	6 643	61	77
	Mogadiscio [1]	1	-	1	-	2 340	-	585	-	25	-
	Nairobi	1	1	1	3	2 952	13 332	1 742	9 867	59	74
	Tanga	1	1	1/2	1	1 800	4 800	1 274	2 353	71	49
					Total	8 340	26 772	4 368	18 863		
MONROVIA (Liberia)	Abidjan	3	8	3	10	12 896	83 148	10 319	36 719	80	44
	Accra	1	3	3	4	13 752	32 760	9 464	20 735	69	63
	Bamako	-	1	-	1	-	9 072	-	4 407	-	49
	Conakry	-	3	-	4	-	50 472	-	10 811	-	21
	Dakar	2	2	3	3	18 912	38 904	13 958	23 764	74	61
	Freetown	3	3	3	5	10 888	21 328	7 072	13 474	65	63
	Lagos	-	1	-	1	-	12 480	-	494	-	4
	EUROPE	-	2	-	2	-	26 508	-	14 833	-	56
	SOUTH AMERICA	-	1	-	1	-	10 908	-	6 188	-	57
					Total	56 448	285 580	40 813	131 425		
MOPTI (Mali)	Bamako	1	1	1	2	3 920	4 608	2 744	4 381	70	95
	Bobo Dioulasso [1]	1	-	1	-	3 920	-	1 960	-	50	-
	Ouagadougou	-	1	-	1	-	2 400	-	2 280	-	95
	Tombouctou	-	1	-	1	-	2 208	-	2 105	-	95
						7 840	9 216	4 704	8 766		
MOZAMBIQUE [5] (Mozambique)	Beira	1	-	1	-	2 436	-	1 170	-	48	-
	Mtwara	1	-	1	-	2 592	-	1 521	-	59	-
					Total	5 028	-	2 691	-		
MTWARA [5] (Tanzania)	Dar-es-Salaam	1	-	1	-	2 592	-	1 625	-	63	-
	Mozambique	1	-	1	-	2 592	-	1 521	-	59	-
					Total	5 184	-	3 146	-		
MWANZA (Tanzania)	Bukoba	1	1	3	5	2 496	4 160	1 746	2 080	70	50
NAIROBI (Kenya)	Addis Ababa	1	4	2	7	12 636	63 756	6 279	36 248	50	57
	Benghazi	-	1	-	4	-	26 688	-	9 295	-	35
	Cairo	1	3	1	3	10 708	35 304	8 470	24 076	79	68
	Dar-es-Salaam	1	5	3	8	12 492	64 564	7 449	33 591	60	52
	Djibouti	-	1	-	1	-	14 304	-	9 854	-	69
	Entebbe	5	4	9	7	54 752	54 348	33 538	39 358	61	72
	Hargeisa [1]	1	-	1	-	1 728	-	806	-	47	-
	Johannesburg	1	3	1	4	6 804	42 120	5 655	22 334	83	53
	Khartoum	5	2	13	3	78 708	34 116	56 602	18 031	72	53
	Lusaka	-	1	-	1	-	13 320	-	5 798	-	44
	Majunga	-	1	-	1	-	14 304	-	11 661	-	82
	Mauritius	-	1	-	1	-	13 320	-	8 060	-	61
	Mogadiscio	2	2	2	3	8 292	16 620	2 652	10 335	32	62
	Mombasa	1	1	1	3	2 952	13 332	1 742	9 867	59	74

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TRAFFIC FLOW DATA

STAGES OF SERVICE		NUMBER OF AIRLINES		WEEKLY FREQUENCY		SEATS AVAILABLE		PASSENGERS CARRIED		LOAD FACTOR	
		1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
NAIROBI (Cont'd)	Ndola	2	2	2	3	13 608	18 880	7 410	15 043	54	80
	Salisbury	3	2	9	9	58 928	97 920	45 964	84 760	78	87
	Tananarive [3]	1	-	3	-	24 188	-	17 657	-	73	-
	Tripoli	-	1	-	1/2	-	5 328	-	2 613	-	49
	EUROPE	-	3	-	10	-	104 808	-	82 355	-	79
	MIDDLE EAST/ASIA	2	3	3	5	19 848	55 968	13 078	26 780	66	48
					Total	305 644	689 000	207 302	453 552		
NDOLA (Zambia)	Abercorn [1]	1	-	1	-	2 256	-	1 001	-	44	-
	Dar-es-Salaam	-	1	-	1	-	3 252	-	1 794	-	55
	Entebbe	3	1	3	1	16 268	13 496	12 803	12 281	79	91
	Livingstone	1	1	1	1	5 508	5 184	3 783	3 770	69	73
	Lubumbashi	2	3	2	3	6 312	13 072	2 496	4 363	40	33
	Lusaka	3	4	7	11	34 856	64 032	22 611	35 041	65	55
	Nairobi	2	2	3	3	13 608	18 880	7 410	15 043	54	80
	Salisbury	3	3	3	2	10 704	9 460	4 186	5 262	39	56
					Total	89 512	127 376	54 290	77 554		
N'GAOUNDERE (Cameroun)	Bangui [1]	1	-	1	-	4 120	-	2 266	-	55	-
	Douala	-	1	-	1	-	2 172	-	104	-	5
	Fort Lamy	-	1	-	1	-	2 856	-	91	-	3
	Garoua	2	1	7	4	25 360	14 508	13 948	9 425	55	65
	Libreville	-	1	-	1	-	3 384	-	104	-	3
	Yaounde	2	1	7	4	25 360	13 968	13 948	10 341	55	74
					Total	54 840	36 888	30 162	20 065		
NIAMEY (Niger)	Abidjan	1	2	1	2	5 720	27 840	3 718	10 634	65	38
	Cotonou	3	2	3	1	20 040	15 360	12 024	6 123	60	40
	Gao	1	1	1	1	3 920	2 208	2 940	2 196	75	99
	Lome	-	1	-	1/2	-	2 160	-	1 924	-	89
	Ouagadougou	2	1	4	1	19 768	5 760	7 907	2 782	40	48
	Tahoua	-	1	-	1	-	4 320	-	1 365	-	32
	Zinder	-	1	-	1/2	-	2 880	-	1 040	-	36
	EUROPE	2	2	4	3	29 848	43 200	22 386	21 671	75	50
					Total	79 296	103 728	48 975	47 735		
NIORO (Mali)	Aioun	1	1	1	1	4 120	3 000	1 442	754	35	25
	Bamako	1	1	1	1	4 120	3 000	1 648	2 850	40	95
					Total	8 240	6 000	3 090	3 604		
NOUAKCHOTT (Mauritania)	Aioun [2]	1	-	1	-	4 120	-	1 442	-	35	-
	Dakar	-	1	-	1	-	6 360	-	4 628	-	73
	Port Etienne	2	3	2	3	5 576	17 144	4 461	7 160	80	42
	Saint Louis	2	1	7	4	17 584	23 352	8 792	11 284	50	48
					Total	27 280	46 856	14 695	23 072		
ORAN [4] (Algeria)	Alger	2	1	5	1	34 212	8 064	27 833	2 379	81	30
	Casablanca	1	1	2	1	12 696	8 064	9 139	2 977	72	37
	Colomb Bechar	1	1	1	1	6 032	8 256	1 296	1 924	21	23
	Meknes [1]	1	-	1	-	7 632	-	4 329	-	57	-
	Oujda [1]	1	-	2	-	6 048	-	3 731	-	62	-
	Rabat [1]	2	-	4	-	21 264	-	13 039	-	61	-
	EUROPE	3	3	40	14	276 976	97 788	193 931	70 018	70	72
	MIDDLE EAST/ASIA	-	1	-	1	-	10 152	-	5 076	-	50
					Total	364 860	132 324	253 298	82 374		

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TRAFFIC FLOW DATA

STAGES OF SERVICE		NUMBER OF AIRLINES		WEEKLY FREQUENCY		SEATS AVAILABLE		PASSENGERS CARRIED		LOAD FACTOR	
		1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
OUAGADOUGOU (Upper Volta)	Accra	-	1	-	1/2	-	3 744	-	598	-	16
	Bamako	-	2	-	2	-	9 792	-	4 355	-	44
	Bobo Dioulasso	2	2	3	2	15 848	11 808	8 716	8 515	55	72
	Bouake [1]	*1*	-	*1*	-	3 920	-	1 960	-	50	-
	Kumasi	-	1	-	1	-	2 400	-	1 742	-	73
	Mopti	-	1	-	1	-	2 400	-	2 280	-	95
	Niamey	2	1	4	1	19 768	5 760	7 907	2 782	40	48
	Tamale	-	1	-	1	-	3 360	-	312	-	9
					Total	39 536	39 264	18 583	20 584		
OUARGLA [6] (Algeria)	Constantine	-	1	-	1	-	10 320	-	1 651	-	16
OUJDA (Morocco)	*Casablanca* [2]	*1*	-	*1*	-	4 608	-	1 287	-	28	-
	Oran [1]	1	-	2	-	6 048	-	3 731	-	62	-
	EUROPE	1	1	1	1	6 144	7 992	2 691	6 292	44	79
					Total	16 800	7 992	7 709	6 292		
POINTE NOIRE [4] (Republic of the Congo)	Brazzaville	1	1	2	2	5 824	9 468	1 747	1 547	30	16
	Cabinda	1	1	1	1	2 912	4 160	1 892	2 704	65	65
	Douala [3]	1	-	1	-	8 112	-	2 433	-	30	-
	Fort Lamy	-	1	-	1/2	-	2 160	-	221	-	10
	Port Gentil	2	1	3	2	12 064	7 308	6 030	3 328	50	46
					Total	28 912	23 096	12 102	7 800		
PORT ETIENNE (Mauritania)	Nouakchott	2	3	2	3	5 576	17 144	4 461	7 160	80	42
	EUROPE	-	3	-	3	-	17 144	-	8 307	-	48
					Total	5 576	34 288	4 461	15 467		
PORT GENTIL [4] (Gabon)	Brazzaville	1	1	1	1	8 112	5 760	2 433	1 391	30	24
	Douala	1	1	2	1/4	9 960	816	4 482	169	45	21
	Lagos [1]	1	-	1	-	8 112	-	4 867	-	60	-
	Libreville	*2*	*1*	*7*	*5*	27 632	23 196	11 052	10 972	40	47
	Pointe Noire	2	1	3	2	12 064	7 308	6 030	3 328	50	46
					Total	65 880	37 080	65 880	15 860		
PORT SUDAN (Sudan)	Asmara	1	1	1	1	7 164	4 576	1 313	1 830	18	40
	Cairo	*2*	*1*	*2*	*1*	*10 076*	*4 160*	*2 235*	*1 872*	*22*	*45*
	Khartoum	*2*	*2*	*4*	*4*	11 648	17 056	4 558	6 822	40	40
	MIDDLE EAST/ASIA	2	2	3	4	8 736	17 472	4 542	9 084	52	52
					Total	37 624	43 264	12 748	19 608		
RABAT (Morocco)	Alger	-	1	-	1	-	9 048	-	2 939	-	32
	Bamako	-	1	-	1/2	-	3 744	-	429	-	11
	Casablanca	2	2	15	11	89 784	92 736	34 372	39 502	38	43
	Conakry	-	1	-	1	-	14 904	-	2 626	-	18
	Dakar	-	1	-	3	-	27 144	-	6 786	-	25
	Oran [1]	*2*	-	*4*	-	*21 264*	-	*13 039*	-	*61*	-
	EUROPE	2	4	12	16	68 520	136 848	46 839	85 564	68	63
					Total	179 568	284 424	94 250	137 846		
REUNION (Reunion Island)	Mauritius	1	1	2	3	13 404	27 456	7 657	11 260	57	41
	Tamatave	-	1	-	1	-	5 620	-	3 080	-	55
	Tananarive	1	2	2	4	13 608	29 496	10 829	13 736	80	47
					Total	27 012	62 572	18 486	28 076		

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TRAFFIC FLOW DATA

STAGES OF SERVICE		NUMBER OF AIRLINES		WEEKLY FREQUENCY		SEATS AVAILABLE		PASSENGERS CARRIED		LOAD FACTOR	
		1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
SAINT LOUIS (Senegal)	Casablanca	-	1	-	1/4	-	720	-	598	-	83
	Dakar	2	1	9	4	20 496	24 072	8 198	9 360	40	39
	Nouakchott	2	1	7	4	17 584	23 352	8 792	11 284	50	48
					Total	38 080	48 144	16 990	21 242		
SALISBURY (Southern Rhodesia - U.K.)	Beira	2	2	3	5	6 648	15 936	3 289	9 620	49	60
	Blantyre	1	4	2	12	9 072	54 400	4 992	28 809	55	53
	Brazzaville	1	1	1	1	5 316	12 480	3 081	4 147	58	33
	Durban	1	1	1	2	4 752	11 556	3 380	10 517	71	91
	Entebbe [3]	1	-	1	-	6 048	-	2 444	-	40	-
	Johannesburg	6	5	21	24	116 160	200 592	70 200	120 138	60	60
	Kano [1]	1	-	1/2	-	2 448	-	884	-	36	-
	Kariba	-	1	-	1	-	5 824	-	2 912	-	50
	Kinshasa [1]	1	-	1	-	4 728	-	2 938	-	62	-
	Livingstone	1	1	1	1	2 112	5 824	455	2 912	22	50
	Lourenço Marques	1	2	1	3	6 168	21 516	4 901	11 297	79	53
	Luanda	-	2	-	4	-	52 716	-	27 300	-	52
	Lusaka	3	4	7	16	35 240	90 240	25 512	20 990	72	23
	Mauritius	-	2	-	2	-	8 548	-	4 256	-	50
	Nairobi	3	2	9	9	58 928	97 920	45 964	84 760	78	87
	Ndola	3	3	3	2	10 704	9 460	4 186	5 262	39	56
	Windhoek [1]	1	-	1/4	-	504	-	52	-	10	-
	EUROPE	-	1	-	1/4	-	1 668	-	377	-	23
					Total	268 828	588 680	172 278	333 297		
SAL [4] (Cap Verde Islands)	Bissau	-	1	-	1	-	4 860	-	2 418	-	50
	Dakar [1]	1	-	1	-	1 456	-	874	-	60	-
	EUROPE	3	2	6	2	34 488	16 860	21 060	14 352	61	85
	SOUTH AMERICA	3	2	6	2	34 488	11 976	21 047	11 624	61	97
					Total	70 432	33 696	42 981	28 394		
SANTA ISABEL (Rio Muni)	Bata	1	1	5	7	11 040	14 904	6 253	8 697	57	58
	Douala	1	1	2	4	4 968	7 812	1 768	4 199	36	54
					Total	16 008	22 716	8 021	12 896		
SAO HILLS [5] (Tanzania)	Dar-es-Salaam	1	-	1/2	-	1 008	-	468	-	46	-
	Mbeya	1	-	1/2	-	672	-	468	-	70	-
					Total	1 680	-	936	-		
SAN ANTONIO DO ZAIRE [5] (Angola)	Cabinda	1	-	1	-	2 912	-	1 892	-	65	-
	Luanda	1	-	1	-	2 912	-	1 892	-	65	-
					Total	5 824	-	3 784	-		
SEBHA [5] (Libya)	Tripoli	1	-	1	-	1 968	-	1 118	-	57	-
SFAX [5] (Tunisia)	Djerba	1	-	2	-	6 048	-	4 810	-	80	-
	Tunis	1	-	2	-	5 832	-	5 044	-	86	-
					Total	11 880	-	9 854	-		
SIDI IFNI (Ifni)	El Aioun	1	1	3	3	6 504	13 104	2 821	8 281	43	63
	EUROPE	1	1	3	7	5 256	16 224	3 471	12 298	66	76
					Total	11 760	29 328	6 292	20 579		

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TRAFFIC FLOW DATA

STAGES OF SERVICE		NUMBER OF AIRLINES		WEEKLY FREQUENCY		SEATS AVAILABLE		PASSENGERS CARRIED		LOAD FACTOR	
		1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
SKIKDA ex-Philippeville (Algeria)	Annaba [2]	2	-	11	-	69 264	-	55 409	-	80	-
	EUROPE	2	1	13	1	96 772	6 144	70 330	5 720	73	93
					Total	166 036	6 144	125 739	5 720		
TAHOUA [6] (Niger)	Maradi	-	1	-	1	-	4 320	-	1 157	-	27
	Niamey	-	1	-	1	-	4 320	-	1 365	-	32
					Total	-	8 640	-	2 522		
TAMALE [6] (Ghana)	Kumasi	-	1	-	1	-	3 360	-	2 587	-	77
	Ouagadougou	-	1	-	1	-	3 360	-	312	-	9
					Total	-	6 720	-	2 899		
TAMATAVE [6] (Malagasy Republic)	Tananarive	-	1	-	1	-	5 620	-	3 743	-	66
	Reunion	-	1	-	1	-	5 620	-	3 080	-	55
					Total	-	11 240	-	6 823		
TANANARIVE (Malagasy Republic)	Dar-es-Salaam	-	1	-	1	-	17 280	-	13 130	-	76
	Djibouti	1	2	2	2	16 016	27 216	7 208	18 506	45	68
	Majunga	1	2	1	2	2 912	18 960	1 757	11 934	60	63
	Nairobi [3]	1	-	3	-	24 188	-	17 657	-	73	-
	Reunion	1	2	2	4	13 608	29 496	10 829	13 736	80	47
	Tamatave	-	1	-	1	-	5 620	-	3 743	-	66
					Total	56 724	98 572	37 451	61 049		
TANGA (Tanzania)	Dar-es-Salaam	-	1	-	1	-	2 400	-	1 417	-	59
	Mombasa	1	1	1/2	1	1 800	4 800	1 274	2 353	71	49
	Zanzibar	1	1	1/2	1	1 800	2 400	1 222	858	68	36
					Total	3 600	9 600	2 496	4 628		
TANGER (Morocco)	Casablanca	2	2	7	4	40 128	34 128	24 765	25 818	62	76
	EUROPE	5	5	31	35	113 832	144 608	60 528	91 933	53	64
					Total	153 960	178 736	85 293	117 751		
TETUAN (Morocco)	EUROPE	1	1	4	1	5 712	4 576	1 872	1 600	33	35
TOMBOUCTOU [6] (Mali)	Gao	-	1	-	1	-	2 208	-	2 040	-	92
	Mopti	-	1	-	1	-	2 208	-	2 105	-	95
					Total	-	4 416	-	4 145		
TRIPOLI (Libya)	Accra	1	1	1	1/2	9 360	5 328	5 148	1 079	55	20
	Alger	-	1	-	3	-	26 208	-	8 086	-	31
	Benghazi	3	5	9	19	40 356	148 536	25 623	74 308	63	50
	Brazzaville [3]	1	-	1/2	-	3 312	-	1 482	-	45	-
	Cairo	-	1	-	1	-	13 440	-	4 563	-	34
	Djerba [1]	1	-	2	-	5 940	-	1 300	-	22	-
	Entebbe	-	1	-	1/4	-	1 332	-	845	-	63
	Fort Lamy	1	2	1/2	1	3 120	3 492	1 747	1 911	56	55
	Kano [1]	2	-	2	-	13 488	-	10 634	-	79	-
	Khartoum	-	1	-	1/2	-	4 344	-	2 041	-	47
	Kisangani [1]	1	-	1/4	-	768	-	13	-	2	-
	Libenge [1]	1	-	1	-	6 144	-	4 173	-	68	-
	Lubumbashi [1]	1	-	1/4	-	1 104	-	364	-	33	-
	Nairobi	-	1	-	1/2	-	5 328	-	2 613	-	49
	Sebha [2]	1	-	1	-	1 968	-	1 118	-	57	-
	Tunis	1	4	2	5	11 832	44 760	4 446	32 792	38	73

(Continued on next page)

See GENERAL NOTE on page 117 and footnotes on page 136.

TRAFFIC FLOW DATA

STAGES OF SERVICE		NUMBER OF AIRLINES		WEEKLY FREQUENCY		SEATS AVAILABLE		PASSENGERS CARRIED		LOAD FACTOR	
		1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
TRIPOLI (Cont'd)	EUROPE	7	8	26	29	149 794	198 608	80 391	122 605	54	62
	MIDDLE EAST/ASIA[3]	1	-	1	-	4 440	-	1 430	-	32	-
					Total	251 626	451 376	137 869	251 343		
TUNIS (Tunisia)	Alger	1	4	1	7	6 564	54 240	2 938	17 790	45	33
	Annaba	2	1	8	1	43 056	5 720	15 951	2 002	37	35
	Lagos	-	1	-	1	-	15 600	-	4 160	-	27
	Sfax [1]	1	-	2	-	5 832	-	5 044	-	86	-
	Tripoli	1	4	2	5	11 832	44 760	4 446	32 792	38	73
	EUROPE	6	8	25	32	145 872	283 508	99 723	179 288	68	63
					Total	213 156	403 828	128 102	236 032		
VILLA CISNEROS (Spanish Sahara)	EUROPE	1	1	2	7	4 032	9 084	2 847	6 578	71	72
WADI HALFA [5] (Sudan)	Asmara	1	-	1/4	-	1 560	-	1 313	-	84	-
	Benghazi	3	-	4	-	22 080	-	18 614	-	84	-
	Cairo	1	-	1/4	-	1 560	-	897	-	58	-
	Khartoum	3	-	4	-	22 080	-	18 614	-	84	-
					Total	47 280	-	39 438	-		
WANKIE-M. C. [6] (Southern Rhodesia - U.K.)	Livingstone	-	2	-	3	-	7 280	-	3 640	-	50
WINDHOEK [5] (South West Africa)	Livingstone	1	-	1	-	2 112	-	585	-	28	-
	Salisbury	1	-	1/4	-	504	-	52	-	10	-
					Total	2 616	-	637	-		
YAGOUA (Cameroun)	Garoua	1	1	1	1	4 120	3 672	2 060	3 145	50	86
	Maroua	2	1	2	1	8 240	3 672	3 708	2 106	45	57
					Total	12 360	7 344	5 768	5 251		
YAOUNDE (Cameroun)	Bangui	-	1	-	1	-	6 300	-	1 456	-	23
	Batouri	1	1	1	1	3 570	3 264	892	845	25	26
	Bouar	1	1	1	1	3 180	2 040	1 272	962	40	47
	Douala	2	1	12	7	48 612	28 812	26 736	23 105	55	80
	Garoua	-	1	-	1/2	-	1 800	-	702	-	39
	Libreville	-	1	-	1	-	5 760	-	1 248	-	22
	N'Gaoundere	2	1	7	4	25 360	13 968	13 948	10 341	55	74
					Total	80 722	61 944	42 848	38 659		
ZANZIBAR (Tanzania)	Dar-es-Salaam	1	1	1/2	1	1 800	2 400	1 560	1 170	87	49
	Tanga	1	1	1/2	1	1 800	2 400	1 222	858	68	36
					Total	3 600	4 800	2 782	2 028		
ZINDER [6] (Niger)	Fort Lamy	-	1	-	1	-	5 040	-	403	-	8
	Maradi	-	1	-	1	-	3 600	-	962	-	27
	Niamey	-	1	-	1/2	-	2 880	-	1 040	-	36
					Total	-	11 520	-	2 405		

See GENERAL NOTE ON page 117.

[1] Stage no longer flown by scheduled services in 1965.

[2] Domestic stage of an international service in 1960 flown only by domestic services in 1965.

[3] Non-stop service in 1960 operated with stops en route in 1965.

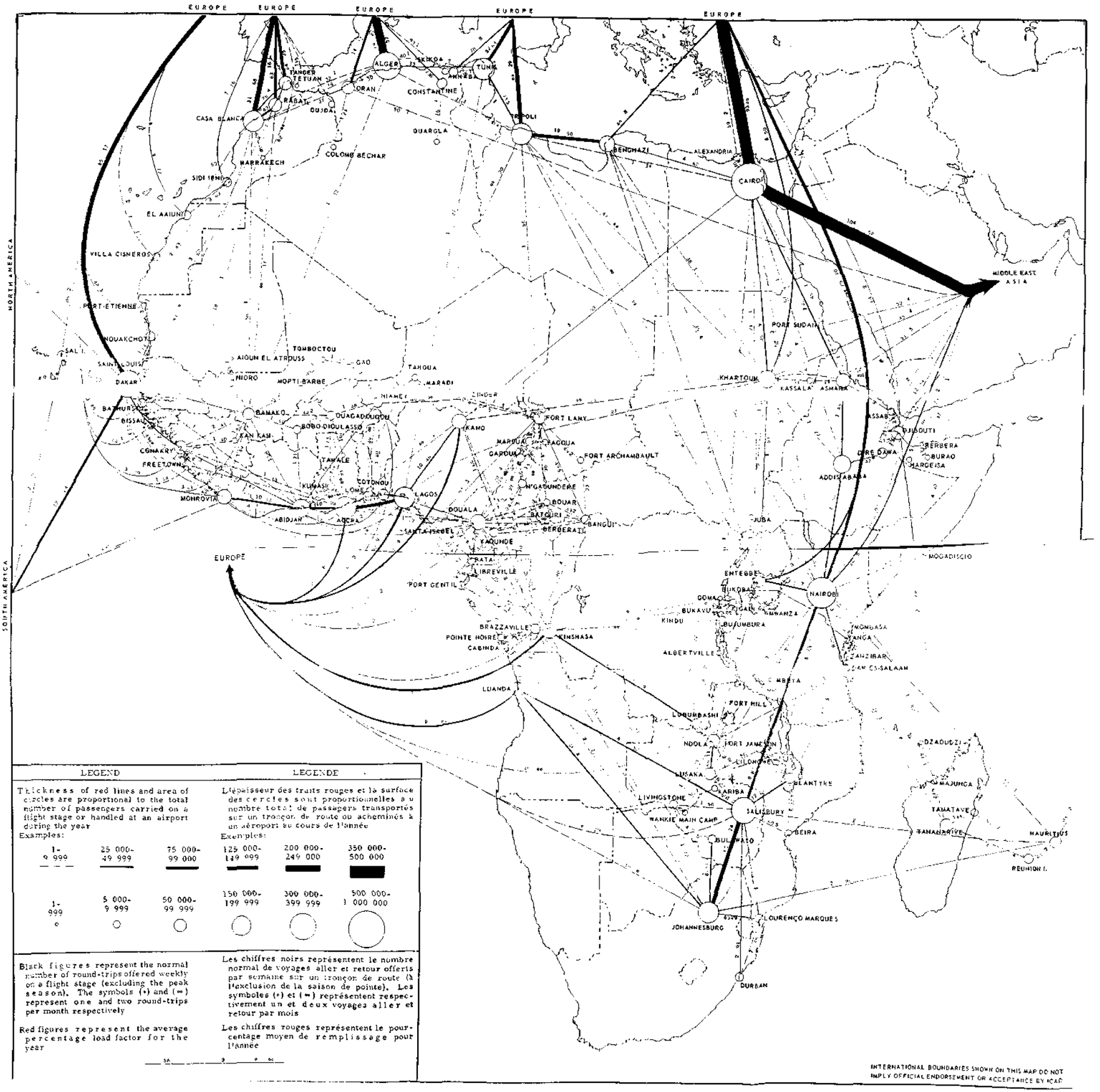
[4] Decrease in international traffic through this point mainly due to a number of long-haul services no longer using it as a stop en route in 1965.

[5] Point no longer served by international scheduled services in 1965.

[6] Point not yet served by international scheduled services in 1960.

VOYAGES DE PASSAGERS SUR LES SERVICES AERIENS REGULIERS INTERNATIONAUX DANS LA REGION AFRIQUE 1965

MAP 1



LEGEND			LEGENDE		
Thickness of red lines and area of circles are proportional to the total number of passengers carried on a flight stage or handled at an airport during the year Examples:			L'épaisseur des traits rouges et la surface des cercles sont proportionnelles au nombre total de passagers transportés sur un tronçon de route ou acheminés à un aéroport au cours de l'année Exemples:		
1- 9 999	25 000- 49 999	75 000- 99 000	125 000- 149 999	200 000- 249 000	350 000- 500 000
1- 999	5 000- 9 999	50 000- 99 999	150 000- 199 999	300 000- 399 999	500 000- 1 000 000
Black figures represent the normal number of round-trips offered weekly on a flight stage (excluding the peak season). The symbols (•) and (=) represent one and two round-trips per month respectively			Les chiffres noirs représentent le nombre normal de voyages aller et retour offerts par semaine sur un tronçon de route (à l'exclusion de la saison de pointe). Les symboles (•) et (=) représentent respectivement un et deux voyages aller et retour par mois		
Red figures represent the average percentage load factor for the year			Les chiffres rouges représentent le pourcentage moyen de remplissage pour l'année		

INTERNATIONAL BOUNDARIES SHOWN ON THIS MAP DO NOT IMPLY OFFICIAL ENDORSEMENT OR ACCEPTANCE BY ICAO

ICAO TECHNICAL PUBLICATIONS

The following summary gives the status, and also describes in general terms the contents of the various series of technical publications issued by the International Civil Aviation Organization. It does not include specialized publications that do not fall specifically within one of the series, such as the ICAO Aeronautical Chart Catalogue *or the* Meteorological Tables for International Air Navigation.

INTERNATIONAL STANDARDS AND RECOMMENDED PRACTICES are adopted by the Council in accordance with Articles 54, 37 and 90 of the Convention on International Civil Aviation and are designated, for convenience, as Annexes to the Convention. The uniform application by Contracting States of the specifications comprised in the International Standards is recognized as necessary for the safety or regularity of international air navigation while the uniform application of the specifications in the Recommended Practices is regarded as desirable in the interest of safety, regularity or efficiency of international air navigation. Knowledge of any differences between the national regulations or practices of a State and those established by an International Standard is essential to the safety or regularity of international air navigation. In the event of non-compliance with an International Standard, a State has, in fact, an obligation, under Article 38 of the Convention, to notify the Council of any differences. Knowledge of differences from Recommended Practices may also be important for the safety of air navigation and, although the Convention does not impose any obligation with regard thereto, the Council has invited Contracting States to notify such differences in addition to those relating to International Standards.

PROCEDURES FOR AIR NAVIGATION SERVICES (PANS) are approved by the Council for worldwide application. They comprise, for the most part, operating procedures regarded as not yet having attained a sufficient degree of maturity for adoption as International Standards and Recommended Practices, as well as material of a more permanent character which is considered too detailed for incorporation in an Annex, or is susceptible to frequent amendment, for which the processes of the Convention would be too cumbersome. As in the case of Recommended Practices, the Council has invited Contracting States to notify any differences between their national practices and the PANS when the knowledge of such differences is important for the safety of air navigation.

REGIONAL SUPPLEMENTARY PROCEDURES (SUPPS) have a status similar to that of PANS in that they are approved by the Council, but only for application in the respective regions. They are prepared in consolidated form, since certain of the procedures apply to overlapping regions or are common to two or more regions.

The following publications are prepared by authority of the Secretary General in accordance with the principles and policies approved by the Council.

ICAO FIELD MANUALS derive their status from the International Standards, Recommended Practices and PANS from which they are compiled. They are prepared primarily for the use of personnel engaged in operations in the field, as a service to those Contracting States who do not find it practicable, for various reasons, to prepare them for their own use.

TECHNICAL MANUALS provide guidance and information in amplification of the International Standards, Recommended Practices and PANS, the implementation of which they are designed to facilitate.

AIR NAVIGATION PLANS detail requirements for facilities and services for international air navigation in the respective ICAO Air Navigation Regions. They are prepared on the authority of the Secretary General on the basis of recommendations of regional air navigation meetings and of the Council action thereon. The plans are amended periodically to reflect changes in requirements and in the status of implementation of the recommended facilities and services.

ICAO CIRCULARS make available specialized information of interest to Contracting States. This includes studies on technical subjects as well as texts of Provisional Acceptable Means of Compliance.

EXTRACT FROM THE CATALOGUE

ICAO SALABLE PUBLICATIONS

Inclusive Tour Services in International Air Transport.
(Doc 8244-AT/717). August 1962. 41 pp. ... $0.75

Aerial Work - A General Study of the Use Of Civil Aviation for Aerial Work.
(Doc 8337-C/944). June 1963. 138 pp. $2.25

Air Transport in Africa.
(Doc 8419-AT/718). July 1964. 71 pp. $1.50

Report of the African Air Transport Conference (Addis Ababa, November 1964).
(Doc 8462-AT/719). December 1964. 26 pp. . $0.50

A Review of the Economic Situation of Air Transport.
(Circular 73-AT/10). June 1965. 82 pp. ... $1.50

Air Freight in Latin American Region.
(Doc 8487-AT/720). June 1965. ..... $1.50

North Atlantic Traffic Forecasts
(Circular 76-AT/11). April 1966. 33 pp. ... $0.75

Air Transport Operating Costs
(Circular 77-AT/12). May 1966. 63 pp. $1.25

N.B.—*Cash remittance should accompany each order.*
Catalogue sent free on request.

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