

ICAO

CIRCULAR

CIRCULAR 28-AT/4



JUNE 1952

Existing Forms of
COMMERCIAL AND TECHNICAL CO-OPERATION
BETWEEN EUROPEAN AIRLINES
in Regional Air Services

*Study by the Institut français du transport aérien,
published by authority of the Secretary General of ICAO*

**INTERNATIONAL
CIVIL AVIATION
ORGANIZATION
MONTREAL • CANADA**

This publication is issued in English, French and Spanish.

Published in Montreal, Canada, by the
International Civil Aviation Organization.
Correspondence concerning publications
should be addressed to the Secretary General
of ICAO, International Aviation Building,
1080 University Street, Montreal, Canada.

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FOREWORD

Among the objectives of this Organization, as set forth in the Convention under which it was formed, is to foster the planning and development of international air transport so as to ensure the safe and orderly growth of international civil aviation throughout the world and to prevent economic waste caused by unreasonable competition. In furtherance of these objectives, the Council is entrusted with the permissive function of conducting research into all aspects of air transport that are of international importance, of communicating the results of its research to the Contracting States, and of facilitating the exchange of information between Contracting States on air transport matters.

One of the subjects of outstanding interest in this field is the degree of collaboration that exists between international airlines, which collaboration, as the Convention recognizes, may extend as far as the formation of joint organizations to operate air services on any routes or in any regions. The Assembly, at its Fourth Session, concluded that this ultimate objective did not at that time present any concrete problems requiring intensive study, but noted that co-operative arrangements in a number of different forms had already been developed by certain airlines and governments with satisfactory results and promise of still further satisfactory results in the future.

The Assembly also recognized that the general collection and analysis of data concerning this aspect of the operation of international air services would continue in any event. It appeared to the Secretariat that the Continent of Europe offered an advantageous field for study of various co-operative arrangements between international airlines and, in particular, of pooling systems. Little information having been received on these subjects from Contracting States direct, and the ICAO statistical reporting forms not being calculated to furnish material on the subject, the Organization authorized the Institut français du transport aérien to undertake on its behalf a study of these various co-operative arrangements, including particularly pooling arrangements. The study was made, and the report thereon is reproduced in this Circular.

Although the research that went into this paper was carried on with periodic consultations between the Secretariat of ICAO and IFTA, and although the scope of the paper was mutually agreed on, the conclusions set forth herein should not be construed as representing an official view held by ICAO.

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INTRODUCTION

This study deals with the efforts undertaken and the results achieved in the field of co-operation by various agencies responsible for the organization and operation of air transport in the European-Mediterranean Region. As its title suggests, the study covers a fairly extensive field of investigation. The following two comments are presented as justification for undertaking the work.

In the first place, the terms of reference contained in ICAO's letter entrusting us with the task of carrying out this enquiry, authorized us to interpret the expression "pool" in a wider sense than is usually given to the word in commercial circles. Since the problem was not solely that of pooling certain traffic, but also that of co-operating in "the provision of ground facilities and services" (according to the actual wording of our reference document), we have dealt with the subject of pooling as including various categories of agreements covering all means of operating air traffic, which agreements are frequently combined, as indicated by current practice.

Secondly, we found that the results of our investigation did not enable us to supply ICAO with certain information on commercial pooling arrangements requested by that Organization, such as detailed statistics of operation, the ratio of transit traffic to direct exchange traffic and the physical difficulties arising from competition between any particular companies. Our efforts to obtain documentation on these points were hampered by secrecy and by the inadequacy of the statistical methods used - at least for general publication purposes.

The fact that we were unable to collect numerical data concerning the results of pooling agreements naturally reduces the accuracy of the conclusions which may be drawn from this study. These conclusions are nevertheless of some practical value since, in the absence of figures, we have provided accurate information regarding the factors, peculiar to the European network, which currently limit the effectiveness within that region of pooling agreements or of any arrangements of this type. The survey also provides accurate information regarding those factors which must govern the conclusion of agreements if the latter are to be fully effective in remedying the current ills. These governing factors appear to be of such importance that it is in their light that the structure and method of functioning of present agreements should be studied. It therefore appeared useful to begin this report with a survey of the special characteristics of air transport in Europe which affect co-operation between airlines in that area. On reading this survey, it will be readily understood why the effectiveness of pooling arrangements is, of necessity, very limited.

The effectiveness is naturally greatest where co-operation does not hamper in any way the commercial freedom of action of the airlines. In this particular field we were even able in some cases to obtain numerical data which are given later in the chapter dealing with technical co-operation agreements.

As regards the other types of co-operation considered, their very existence, whether in the form of concrete achievements, or as plans for the future, or even as outline projects, appears to be sufficient justification for their inclusion in this study. In fact, all these different formulae represent efforts (at both the national and international levels, and without any overall co-ordination) inspired by the desire to remedy the deficiencies of the pooling agreements. Both in the matter of organizing the activities of a group of national operators -- which is the purpose of the "Association des Transports aériens de l'Union française" (ATAF) -- and in the case of regional mergers, based on the unquestionable significance of certain well-defined bonds -- as in the case of the Scandinavian consortium -- some problem or aspect of the problem is always encountered, for which no solution has yet been found. It can therefore be said that the various forms of co-operation which are dealt with in the last chapter are related to the pooling agreements, and, when seen in the light of our study, will be found to be complementary to them.

As for international co-operation by participation in the capital of the airlines, the only information we have been able to obtain is too fragmentary to be of any practical use. We did not therefore see fit to cover this aspect of the problem in our study.

Finally, it should be pointed out that the study deals essentially with the operation of scheduled air transport in Europe, which, if not the only form of air transport, is at least the one with which current co-operative systems are most directly concerned. Except for a few instances (for example, in certain general statistical tables or for special national systems such as the ATAF or the British associate contracts), no reference has been made to the activities of the many European so-called "charter" companies, in spite of the real importance they have achieved.

The study has been arranged as follows. After endeavouring, in Chapter I, to define the special features of air transport operation in Europe, the study proceeds with an analysis of the different types of co-operative agreements. Chapters II, III and IV deal respectively with Commercial Agency Agreements, Ground Service Agreements and, finally, various special Technical Agreements. Chapter V considers the actual Commercial Pooling Agreements, the characteristic feature of which is a formula for revenue-sharing between participants, on the basis of a more or less strict control

of the service provided. It was thought appropriate to conclude the study with an outline of several systems of co-operation which we believe might well serve as a basis for future organizations. These systems (some of which are already being applied, others as yet only planned) go beyond the limited scope of the pooling arrangements, and the fact that they are an attempt to remedy certain of their deficiencies is, in itself, an indication of the desire to place European co-operation on a wider and sounder basis.

INSTITUT FRANCAIS
DU TRANSPORT AERIEN

CHAPTER I

THE EUROPEAN-MEDITERRANEAN REGION AND AIR TRANSPORT

To understand the problem of co-operation between airlines in Europe and the special difficulties which such co-operation may encounter in that area, it is essential, first of all, to explain exactly how and why Europe is entirely different from all the other regions of the world, and then to analyze the special features of air transport in the European-Mediterranean Region.

A. - EUROPE

Nowhere in the world does there exist, in such a small area, such a multiplicity of sovereign nations. These nations are jealous of their sovereignty for very ancient reasons, and the fact that the technical and political developments of the last fifty years threaten their sovereignties tends only to accentuate nationalistic sentiments and the defensive reactions associated therewith.

This complex political situation is accompanied by an even more exceptional economic and human diversity. In fact, and this is perhaps the basic feature of Europe, each one of these sovereign nations has its own tongue, and even if one of these nations has had to grant equal status to two languages and another to four, this was done much more to recognize and to protect a de facto division than to promote mutual intercourse and understanding. The diversity of climates, products, traditions, customs, and living standards is such that a journey of a few hours, or even the crossing of a range of mountains or a river is enough to bring a traveller from one world into another. On either side of a frontier everything will be found to be different, except - only too frequently - the mutual distrust and misunderstanding, mental scars left by ten centuries of wars.

The last of these wars impoverished Western Europe very seriously and left behind an accumulation of destruction of all kinds which is still far from being repaired. Europeans are, therefore, living in far worse conditions than they were twelve or fifteen years ago, and even if they recognize that economic unification of Europe is necessary, they fear that they may not dispose of an adequate margin to enable them to bear the initial cost of such re-organization. They know very well that any effort - even a successful one -

towards increased output may cause unemployment in one place, lower salaries elsewhere, or may involve selling produce at a loss somewhere else; and each one, feeling his own weakness, will fear all the more the possibility of his being included among the victims. Hence the resistance which is felt, particularly in union circles, both industrial and agricultural. The strength of this resistance can be shown by a recent example: British miners are opposed to the importation of Italian miners at a time when a rapid increase in coal production appears to be vital for the British economy.

This diversity within Europe cannot be eliminated on short term. At the same time, however, it is quite apparent that Europe itself, and the Mediterranean basin which is complementary to it, still constitute a distinct economic entity in the modern world. Its high density of population, its advanced and ancient civilization, even its own internal dissensions (which have always been indicative of the instinctive search for a common law (even one based on the acceptance of force)) contributed to the establishment in Europe of the oldest and the most dense network of ground communications. But as, over the centuries, the European-Mediterranean unit has become less and less self-supporting, another network of commerce and communication with the rest of the world has developed - initially with European possessions abroad - thus further complicating the picture of activities and rivalries.

The 1939-1945 war, even more clearly than that of 1914-1918, was, to Europe, a civil war. Six years after the end of hostilities which left the United States and the USSR the only two "great powers" of the modern world, Europe, divided and partitioned as we have described it, feels the urgent necessity for unified action and even accepts it in limited fields, but Europe has not yet found the way to political unity. The reason is that a struggle is going on between a tradition of sovereignty and self-sufficiency on the one hand, and, on the other, an obvious necessity for joint organization and increased production for collective survival.

The straining of Europe between its political structure and its means of joint salvation can also be noted in the restricted field of commercial aviation.

B. - AIR TRANSPORT IN THE EUROPEAN-MEDITERRANEAN REGION

From the moment when - with the advent of the aeroplane - transport vehicles were able to cross land frontiers without losing their nationality, commercial aviation became in Europe a new means of national expression, a new symbol of the nationalist spirit of rivalry and a new instrument to serve the national instinct for self-preservation.

It is startling to note in this connection that international aviation was established in Europe, with a relatively dense network of passenger services, ten years earlier than in the United States, where the economic need for such services was nevertheless much greater. The reason was that the first European commercial airlines, by playing on the national instincts of their governments and of domestic public opinion, experienced no trouble in obtaining the subsidies which were then, in those early stages of aviation, an absolute necessity for any fairly ambitious development of air transport, but for exceptional geographic or economic circumstances.

On this basis, co-operation was self-contradictory. At the outset, competition was therefore the rule at the domestic level, between operators of the same nationality. A greater volume of operations and services over a greater number of routes "of national interest" ensured a greater share in the subsidies granted by a government to its own airline industry. It was by a process of elimination or merging, however, that those European countries that had originally followed the system of subsidizing several operators gradually abandoned it in favour of the single company, nationalized or otherwise. This situation was, on the whole, consolidated after 1945. One might have expected, therefore, that the European States, which actually controlled their principal airlines, could bring them to practise some reasonable degree of co-operation, particularly within the European-Mediterranean network.

This did not happen, however, because almost all these national airlines had been formed or re-organized for purposes which extended far beyond Europe. With the long-haul aircraft of the period 1945-50, any country capable of bearing the initial outlay, which is not enormous, and which political circumstances have frequently reduced or facilitated (surplus aircraft, American loans), can assert itself on the major world air routes essential to its interests. The "national interest" therefore justifies participation - often very ambitious participation - in international air transport, and this participation justifies the granting of a subsidy. Fear that the parliament or the government will reduce the subsidy therefore explains why the airlines have concentrated mainly on long-haul operations, both because the latter are the main justification for operating and because increased revenue (particularly revenue in hard currency) can more reasonably be anticipated in this field than elsewhere.

The different concepts which governed the establishment of air services in Europe and in the United States respectively, can be shown in the following table:

TABLE I

I

Distribution of regional services and long-haul services operated by European airlines

(Daily available seat - km (in millions) - Summer 1950)

Airlines	Regional services* (European-Mediterranean)	Long-haul services	Ratio (%)
Air France	0.8	2.6	31
BOAC - BEAC	1.7	4.7	36
KLM	0.8	2.7	33
SAS and Braathens	1.5	1.5	100
Total of European airlines	9	13.7	65

II

Distribution of domestic services and long-haul services in the United States

(Daily available seat - km (in millions) - Summer 1950)

Domestic services (16 "trunk-line" companies)	Long-haul services (American flag carriers)	Ratio (%)
58	19	305

* Excluding British and French internal services and traffic between France and North Africa.






Thus, in the case of the airlines which operate regional services within Europe as well as long-haul services, the volume of the former traffic is approximately one-third of that of the latter. In the case of the European airlines combined, the volume of regional traffic is approximately two-thirds of the long-haul traffic, whereas in the United States the domestic traffic is three times as great as the long-haul traffic.

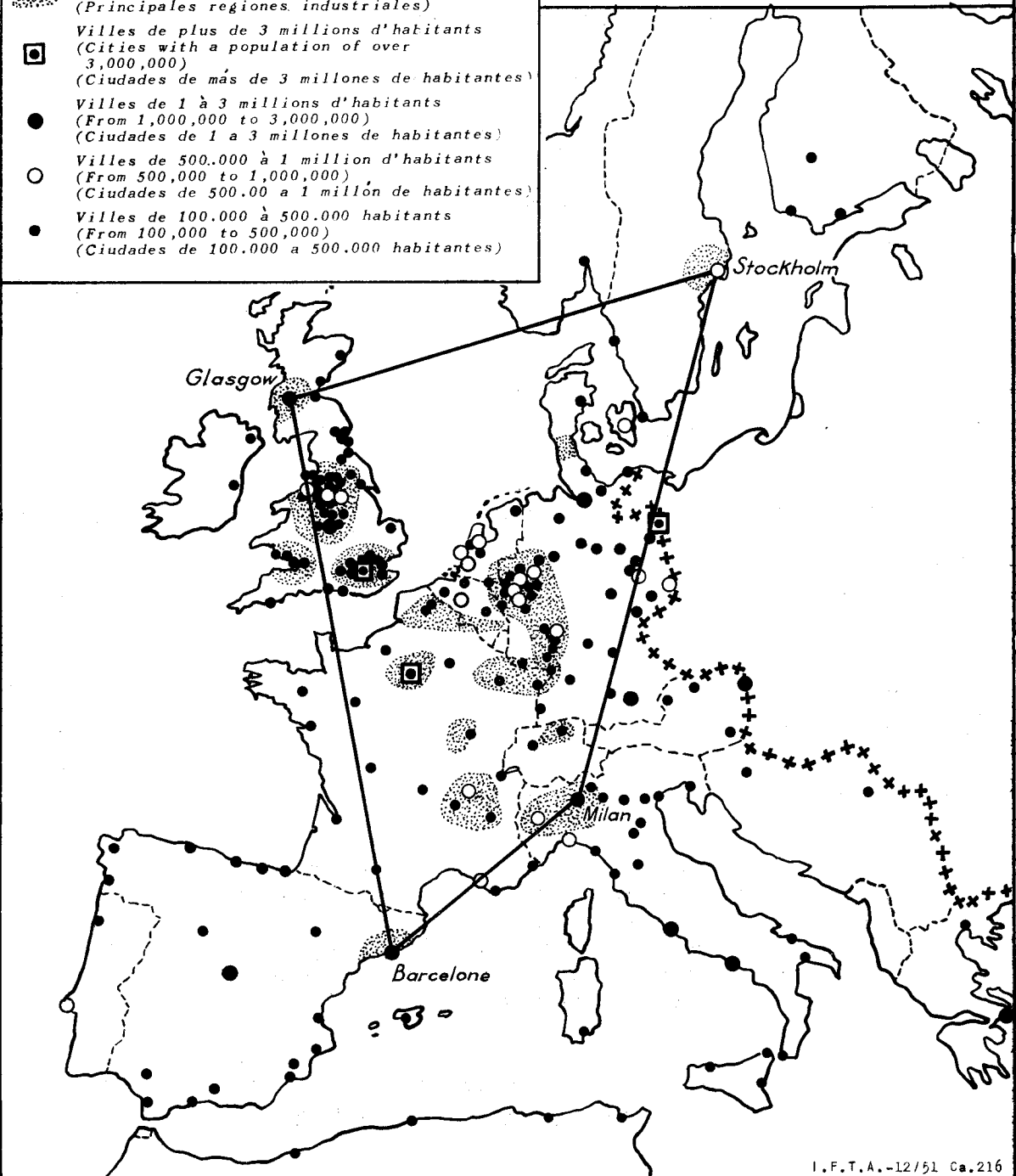
A first conclusion may therefore be drawn from the foregoing: air transport operations in the European-Mediterranean Region represent only

REPARTITION DE LA POPULATION EN EUROPE OCCIDENTALE
ET PRINCIPALES REGIONS INDUSTRIELLES (1951)

DISTRIBUTION OF POPULATION AND MAIN INDUSTRIAL AREAS
IN WESTERN EUROPE (1951)

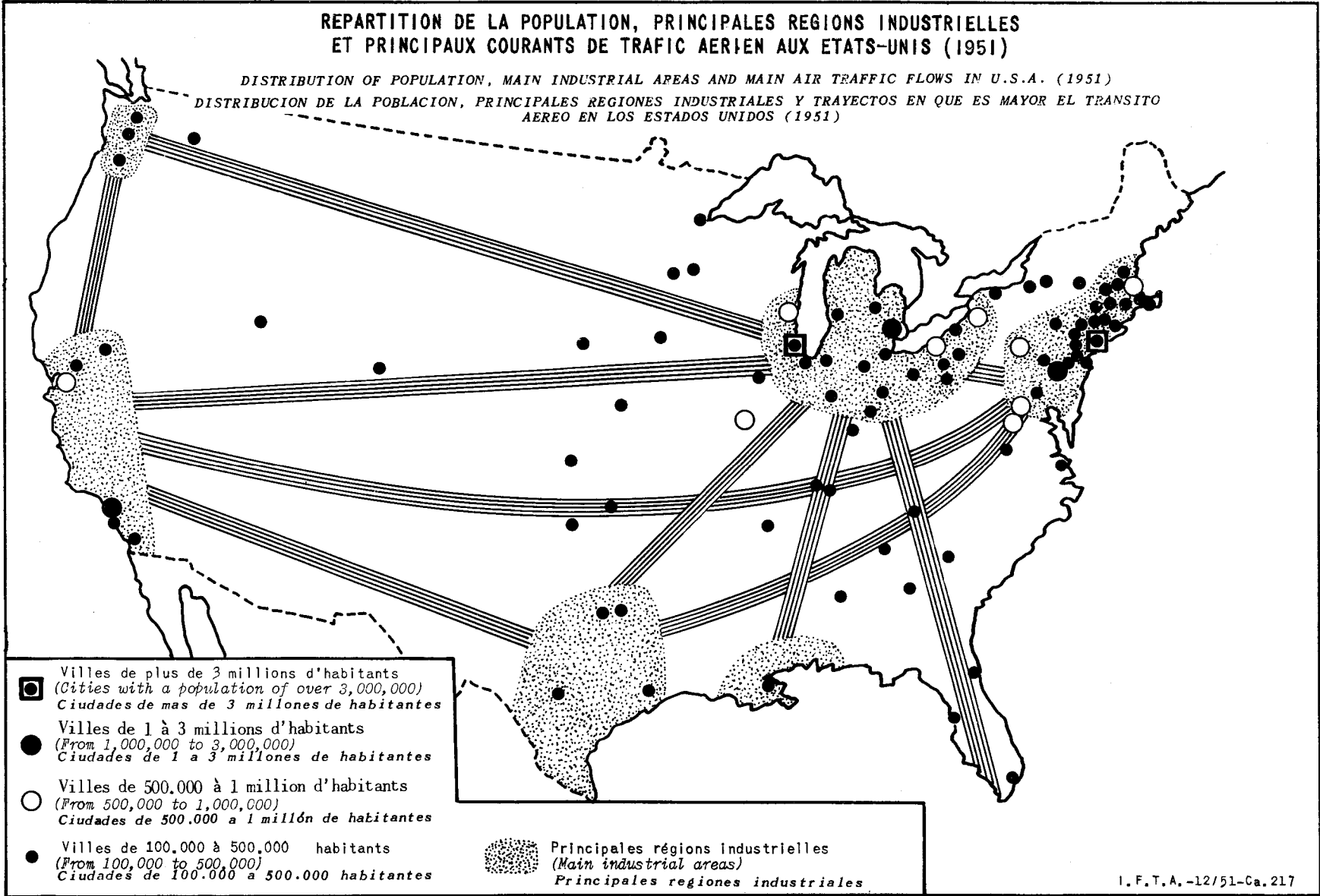
DISTRIBUCION DE LA POBLACION EN LA EUROPA OCCIDENTAL
Y PRINCIPALES REGIONES INDUSTRIALES (1951)

-  Principales régions industrielles
(Main industrial areas)
(Principales regiones industriales)
-  Villes de plus de 3 millions d'habitants
(Cities with a population of over 3,000,000)
(Ciudades de más de 3 millones de habitantes)
-  Villes de 1 à 3 millions d'habitants
(From 1,000,000 to 3,000,000)
(Ciudades de 1 a 3 millones de habitantes)
-  Villes de 500.000 à 1 million d'habitants
(From 500,000 to 1,000,000)
(Ciudades de 500.000 a 1 millón de habitantes)
-  Villes de 100.000 à 500.000 habitants
(From 100,000 to 500,000)
(Ciudades de 100.000 a 500.000 habitantes)



REPARTITION DE LA POPULATION, PRINCIPALES REGIONS INDUSTRIELLES
ET PRINCIPAUX COURANTS DE TRAFIC AERIEN AUX ETATS-UNIS (1951)

DISTRIBUTION OF POPULATION, MAIN INDUSTRIAL AREAS AND MAIN AIR TRAFFIC FLOWS IN U.S.A. (1951)
DISTRIBUCION DE LA POBLACION, PRINCIPALES REGIONES INDUSTRIALES Y TRAYECTOS EN QUE ES MAYOR EL TRANSITO AEREO EN LOS ESTADOS UNIDOS (1951)



- Villes de plus de 3 millions d'habitants
 (Cities with a population of over 3,000,000)
 Ciudades de mas de 3 millones de habitantes
- Villes de 1 à 3 millions d'habitants
 (From 1,000,000 to 3,000,000)
 Ciudades de 1 a 3 millones de habitantes
- Villes de 500.000 à 1 million d'habitants
 (From 500,000 to 1,000,000)
 Ciudades de 500.000 a 1 millón de habitantes
- Villes de 100.000 à 500.000 habitants
 (From 100,000 to 500,000)
 Ciudades de 100.000 a 500.000 habitantes

Principales régions industrielles
 (Main industrial areas)
 Principales regiones industriales

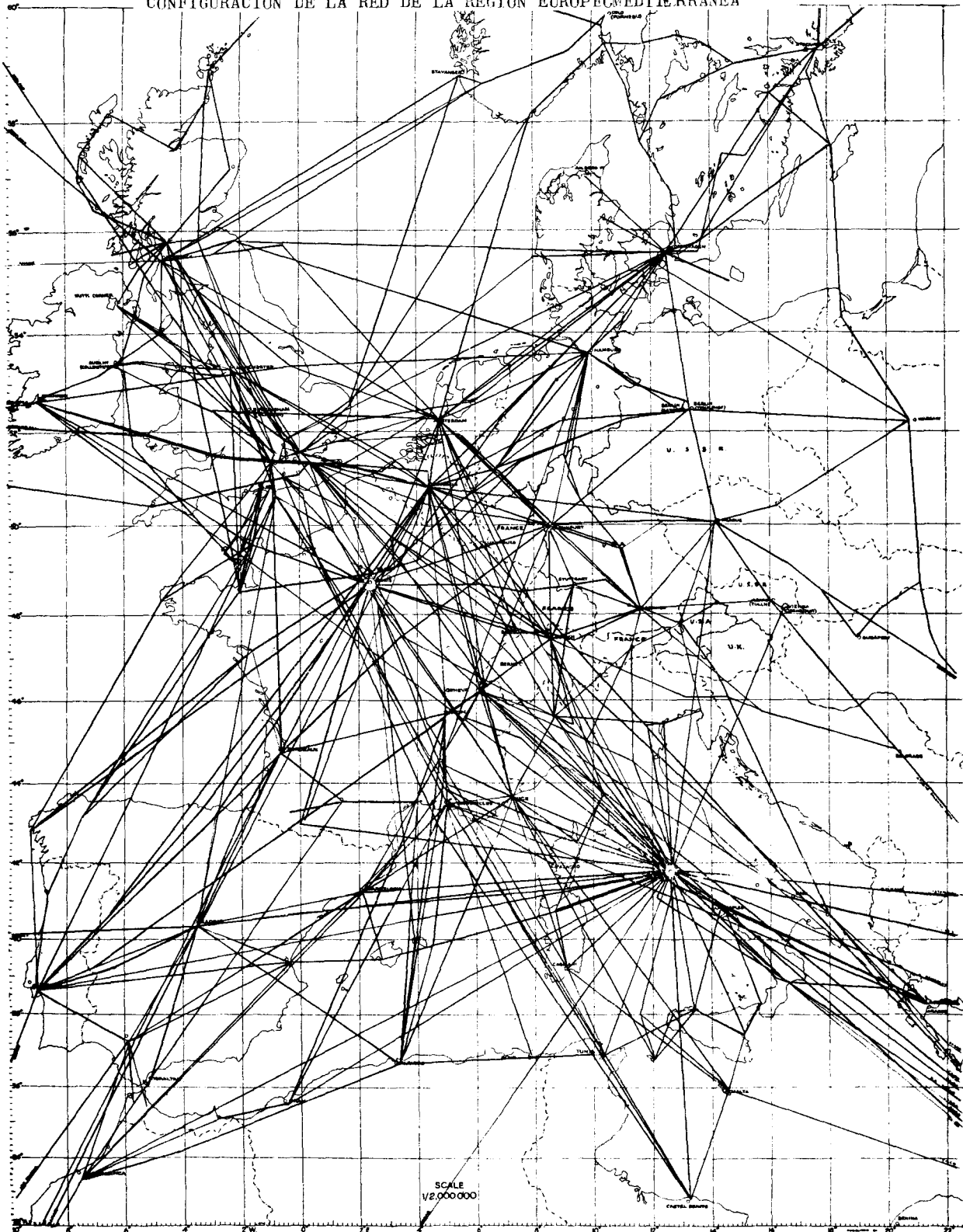
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CARTE III

MAP III

CARTA III

CONTEXTURE DU RESEAU AERIEN DE LA REGION EUROPE-MEDITERRANEE
CONFIGURATION OF AIR NETWORK IN EUROPE-MEDITERRANEAN AREA
CONFIGURACION DE LA RED DE LA REGION EUROPEO-MEDITERRANEA



Voir notes page 17

See notes page 17

Véanse notas página 17

SOURCE

Ce document a été transmis à l'OACI par l'IATA pour la Réunion spéciale sur la coordination de la circulation aérienne en Europe occidentale, octobre 1951 (EUM-RAC-WP/3).

SOURCE

This document was submitted by IATA to ICAO for the special Meeting on Co-ordination of Air Traffic in Western Europe, October 1951 (EUM-RAC-WP/3).

PROCEDENCIA

Documento enviado a la OACI por la IATA para la Conferencia especial de coordinación de Tránsito Aéreo en Europa occidental, Octubre 1951 (EUM-RAC-WP/3).

NOTE

Les traits correspondent à des services réguliers, mais beaucoup de ces services ont une fréquence assez faible, si bien que l'activité réelle se concentre sur certaines routes beaucoup plus qu'il n'apparaît sur la carte.

NOTE

The straight lines represent scheduled services. Since many of these, however, are relatively low-frequency services, airline activity is actually concentrated over certain routes to a greater degree than would appear from this chart.

NOTA

Las líneas representan servicios regulares, pero como la frecuencia de muchos de estos servicios es relativamente baja, la actividad de las líneas aéreas se concentra sobre ciertas rutras mucho más de lo que parecería por la carta.

a minor part of the activity of the major European commercial airlines. In other words, with the exception of British European Airways, the air network of the European-Mediterranean Region is operated by airlines which are concerned and must essentially be concerned with other fields.

However, the problem of regional operations in Europe, if expressed in terms of services rendered within the European-Mediterranean Region itself, is an extremely difficult one. There are all the frontiers and the resulting multiplicity of crossing formalities. There is the fact that there already exists a dense and excellent surface communications network. There is the type of climate and physical relief, which have always hindered the installation of effective ground facilities in Europe for night flying over short and medium distances. There is the fact that almost all the major industries are concentrated within the area between Glasgow, Barcelona, Milan and Stockholm, which takes at most three or four hours to cross by air. Maps I and II show in a striking manner the contrast, in this connection, between the economic structure of the American continent and that of Western Europe. In the United States, the industrial centres and their respective production areas are so distributed as to create clearly-marked traffic currents carrying a heavy volume of traffic. In Western Europe, on the other hand, there is only a compact block, without any particular traffic currents, which naturally tends to produce a criss-crossing of direct point-to-point services over very short distances (Map III)*. An additional factor to be considered is the relative poverty of the European-Mediterranean area, where the average annual income is only 340 dollars (as compared with \$ 1,500. in the United States). In particular, there are the direct effects of the political partitioning of the region: 34 scheduled operators of 18 different nationalities offering 340 different services to the public; and to these must be added the services operated by non-European airlines, the most important of which are the American companies. In this connection there is a further contrast, no less striking than the previous one, in the extent to which the United States and Europe allow their respective airlines to fly into each other's territory. Whereas the long-haul routes of the European operators end at three or four points on the land or sea frontiers of the United States, or run along the Atlantic coast of the continent, between Canada and the Caribbean, the American airlines fly right across Europe in several directions and provide a network of services linking the main European traffic centres (Maps IV and V).

Some figures are essential at this stage.

The 340 services offered to the public cover a network of 300,000 kilometres, whereas the corresponding domestic network in the United States covers only 150,000 kilometres in all.

* A traffic current should also be noted, which is becoming apparent between industrial Northern Europe and the agricultural regions extending round the western border of the Mediterranean Basin. This is an economic link of a very general character, however, which can be defined only on the basis of the complementary nature of areas which are, in themselves, fairly extensive and varied. Several additional currents of tourist traffic (from Scandinavia, the Netherlands and Belgium to the Riviera, for instance) appear to be developing in the last few years.

The number of seat-kilometres available to the public daily on the United States domestic network is 58 million; in Europe the figure is only 11,700,000, which is for the same year 1950 exactly the traffic availability figure of the U.S. Company "American Airlines" alone.

Thus, on a network which is twice as highly developed, or extensive, the airlines of the European-Mediterranean Region offer only a fifth of the number of seats offered by the American airlines. The European seat-availability is therefore only one-tenth of the American per network-kilometre.

Finally, these services, which are too numerous, and operated at too low frequencies, are offered to a poorer public at rates (20 French francs per kilometre, the IATA rate) which are 60 to 100 per cent higher than those in the United States (the equivalent of 13 francs per kilometre on ordinary services, and 10 francs on the coach services-rates approved by the Civil Aeronautics Board*).

The principal comparative figures which have been quoted are given in Table II.

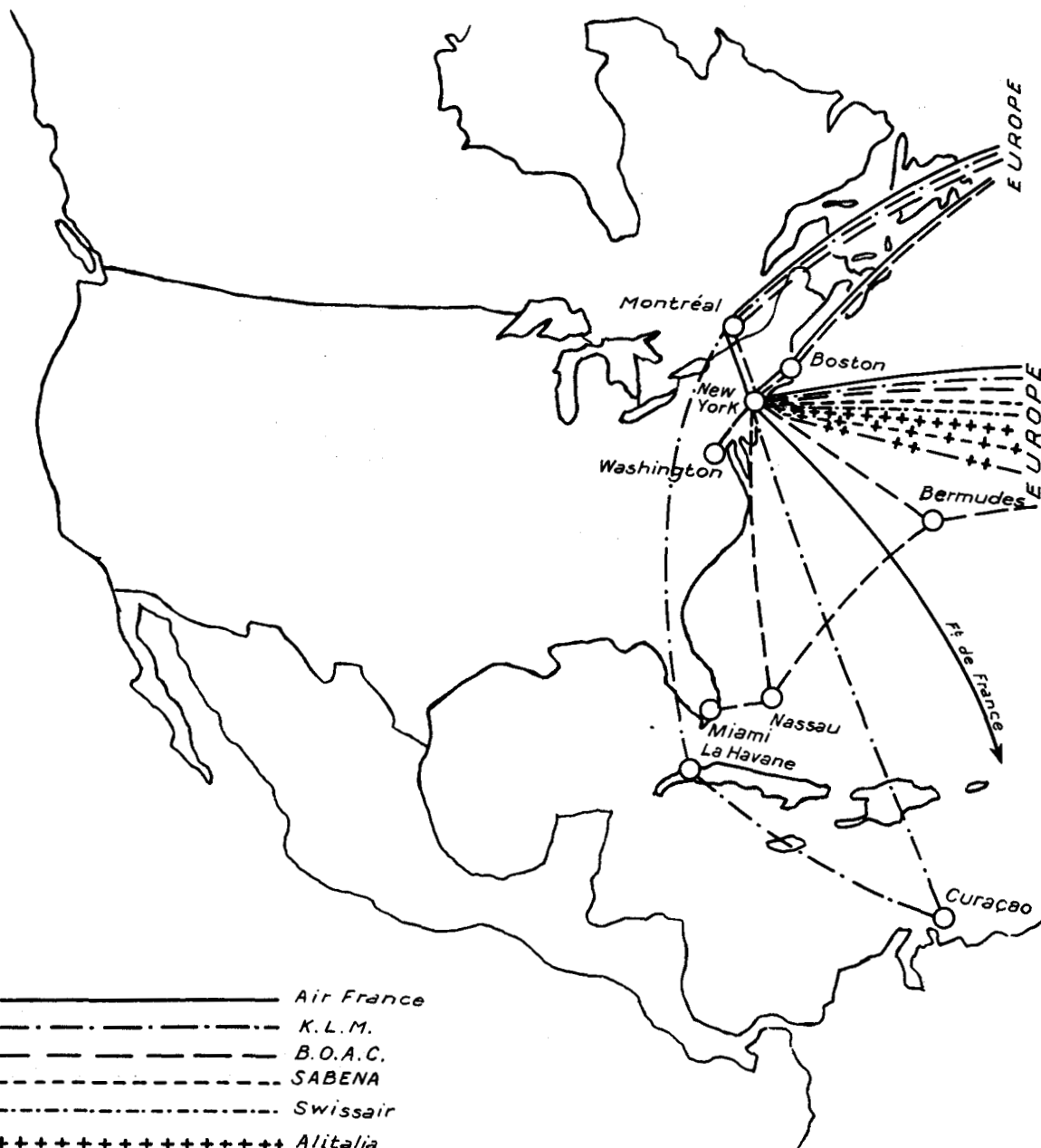
On the basis of the foregoing analysis, regional air transport in the European-Mediterranean area would appear to represent a very special case in commercial aviation. We shall now consider how conventional or new methods of co-operation are being applied to it.

* The data summarized in the last three paragraphs are given with many others, together with particulars of their source, in IFTA Research Paper No. 201: Air Transport in Europe and the United States Compared (May 1951).

PENETRATION DU TERRITOIRE DES ETATS-UNIS PAR LES COMPAGNIES DE LONG-COURRIERS EUROPEENNES (Eté 1951)

LONG-HAUL ROUTES PENETRATING INTO U.S. TERRITORY (Summer 1951)
(EUROPEAN AIRLINES)

ENTRADA EN EL TERRITORIO DE LOS ESTADOS UNIDOS DE LAS LINEAS AEREAS EUROPEAS DE TRANSPORTE A LARGA DISTANCIA (Verano 1951)



- Air France
- - - - - K.L.M.
- - - - - B.O.A.C.
- - - - - SABENA
- · - · - Swissair
- +++++ Alitalia
- + · + · + S.A.S.
- + - + - EL AL

CARTE V

MAP V

CARTA V

PENETRATION DU TERRITOIRE EUROPEEN PAR LES COMPAGNIES DE LONG-COURRIERS DES ETATS-UNIS (Eté 1951)

LONG-HAUL ROUTES PENETRATING INTO EUROPEAN TERRITORY (Summer 1951) (U.S. AIRLINES)

ENTRADA EN EL TERRITORIO EUROPEO DE LAS LINEAS AEREAS DE LOS ESTADOS UNIDOS DE TRANSPORTE A LARGA DISTANCIA (Verano 1951)

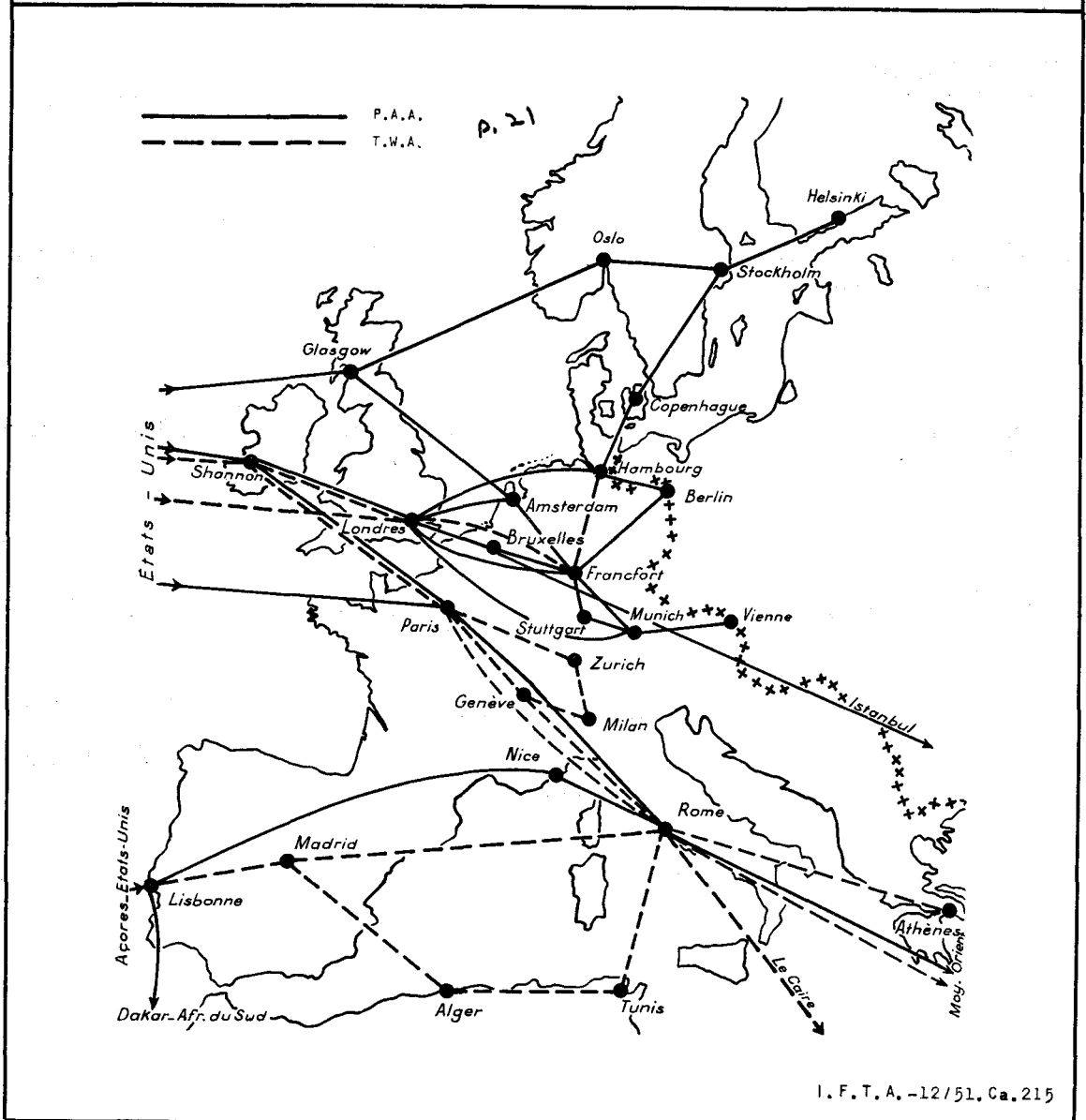


TABLE II
COMPARATIVE AIR TRANSPORT
DATA IN EUROPE AND U.S.A.

	<u>UNITED STATES</u>	<u>EUROPE</u>
LENGTH OF ROUTES	150,000 km	300,000 km
DAILY AVAILABLE SEAT-KM	58,000,000 seat-km	11,700,000 seat-km
AVAILABLE SEATS-KM PER ROUTE-KM	390 seat-km	39 seat-km
AVERAGE ANNUAL INCOME PER HEAD	\$1500 per head	\$340 per head
RATE PER KILOMETRE	13 fr. - 1st class 10 fr. - 2nd class	20 fr. - 1st class
	<u>At Exchange at Dec. '51</u>	(Fr. 1 = U.S.¢ 0.2857)
	3.73¢ - 1st class 2.86¢ - 2nd class	5.71¢ - 1st class

CHAPTER II

COMMERCIAL AGENCY AGREEMENTS

Under the general heading of commercial agency agreements are included all agreements under which the airlines conduct, on each other's behalf, the various operations relating to traffic promotion, ticket sales and handling of traffic on their connecting routes. These agreements include both bilateral agency agreements and standard agreements drawn up by IATA, the parties to which undertake to honour certain of each other's transportation documents, in order to facilitate movement of traffic to its destination. Although the latter case does not actually constitute an agency, it nevertheless falls within the general programme of facilitation of operations which the airlines have agreed to implement by using co-operative methods. The detailed provisions of these agreements are very significant, particularly as regards the type and extent of co-operation desired. In the long run, the effectiveness of such co-operation depends, essentially, on the policies of the airlines themselves, which have complete freedom in this field. In this connection, the position of the European airlines is in sharp contrast with that of the airlines in the United States, where the administration itself controls co-operation between the operators. This point will be referred to again and illustrated by a concrete example in the course of this chapter.

Before the war, it was current practice for one airline to validate tickets of another, although such validation was not covered by any formal agreement. However, this was generally associated with more extensive co-operation in the field of commercial representation and ground services.

Today, two main factors modify the nature of this mutual assistance.

The first of these, a technical one, is the development of aviation itself, which has necessitated increased specialization by the various services.

The second, an economic one (but essentially a political one, as is well known) is the intensification of international competition, which has driven the airlines to define these various forms of mutual assistance in

more precise and formal contracts, at a time when they are endeavouring to find means of co-operation recognized as essential.

Today, as a result of these new circumstances, different types of agreements are being concluded, which make it possible to draw a distinction between the various types of assistance; such distinction being either between the different types of agreement, or within one agreement.

Thus when an airline entrusts its commercial representative to another airline, it very often specifies whether such representation shall cover all types of traffic handled and sold, or whether it shall be limited to certain types of traffic, for instance, to regional traffic only, and exclude trunk route traffic.

However, this mutual assistance between operators, although now more clearly marked and more formally approved, represents, just as it did in the past, only subsidiary operational aspects of the overall air transport picture. It will be noted, therefore, that the airlines continue to a great extent to combine the agreements which they conclude and which meet their essential needs, and this in spite of the discriminations allowed under the present system, which are justified, in certain cases, in the eyes of the airlines, by the increased competition. Conditions today are just as if, with a need for co-operation just as imperative as it was in the past, the operators had had to provide themselves with additional protection.

In the first part of this chapter we will study current practices in connection with the actual machinery of general traffic agencies, i. e., agencies governed by bilateral agency agreements, together with the results of, and the problems connected with, such activity.

The second part will consist of a similar analysis of the interline traffic agreements, bilateral agreements, and standard agreements prepared by IATA. These agreements define the inter-availability of transportation documents between companies.

A. - AGENCY AGREEMENTS

1. - OPERATION

For operators, commercial agencies present the problem of organizing their relations with the intermediaries (agencies) performing the following operations: traffic promotion, centralization of reservations and ticket sales.

In practice, the question of the choice of the agency to be appointed commercial representative is solved in two ways.

First case

The foreign company with which the represented company has concluded a General Agency Agreement is required to carry out all the commercial operations of the represented company: traffic promotion, reservations, ticket sales, checking of freight, and administrative services (accounts, statistics, etc.). In this case, the sub-agencies (travel agencies or offices, specialized or otherwise) must, under the terms of the agreement, be selected by the representing company. The represented company reserves the right, however, to disapprove the selection of any such agent. If the appointment is approved, it is the representing company which concludes the necessary contracts with the sub-agents.

Second case

In this case, the foreign company appointed as General Agent is not given responsibility for conducting all the commercial operations of the other. For example, the represented company may reserve for itself the handling of long-haul traffic. In such case the represented company itself appoints agencies, intermediaries, forwarding agents, canvassers, etc. for this type of traffic. In addition, if warranted by the importance of the location, it can itself establish an office for its commercial services.

The appointed agency or airline office which is established is thus required to handle the reservations end of the long-haul passenger business, which is the main one, since it ensures the represented company the carriage of this traffic. Once a reservation is made, transportation may be sold, and generally is, using the forms employed by the representing company which, in all other matters (including reservations and regional traffic sales, if the represented company has reserved for itself the long-haul traffic) acts as General Agent for the represented company.

The system of payment for commercial agency services is as follows:

Under the regulations laid down by IATA, the agencies collect a commission which is a percentage of the sale price of the carriage involved. The commissions are:

- The Travel Agency Commission (reservations and sales):
passengers: 7.5 per cent; freight: 5.5 per cent;

- The General Agency Commission (overriding commission):
2.5 per cent.

Where a ticket has been sold by the representing company acting both as General Agency and Sales Agency, the represented company pays the agency both commissions on the ticket, the Travel Agency Commission (7.5 per cent of the price of the ticket) and the General Agents' overriding commission (2.5 per cent of the price of the ticket) making a total commission of 10 per cent.

If the sale is made by a different travel agency appointed by the represented company, the representing company, acting as General Agent for the other, will collect the total commission of 10 per cent, but will itself pay the 7.5 per cent to the sales agency (see text of standard type Agency Agreement in Appendix I).

2. - ADVANTAGES OF THESE AGREEMENTS

Although we have no figures on the savings which can be effected through these agency agreements (such data were not supplied to us), it is nevertheless possible to analyze the more obvious reasons why such agreements are extensively used today.

The savings made by airlines by appointing foreign airlines as their agents in the latter's countries are, from information we have received, mainly on the premises used and also on staff.

The prices at which premises used for publicity and sales purposes are purchased or rented by the airlines are frequently high, since such premises are usually located in the business centres of cities. It is therefore to the advantage of airlines to avoid such costs by availing themselves of the assistance which can be provided by the facilities of the foreign company on the spot. Even when representing companies do not give complete satisfaction to the opposite number they represent, the latter, for the reasons we have indicated, often hesitate to repudiate the agreement.

Certain savings on staff can usually be made. However, as we shall see, this aspect of co-operation does not rest on very sound foundations, since, even when they are represented in foreign countries, the airlines must exercise a certain degree of control there, which implies sending a

representative, generally with a staff of assistants who will vary in number according to whether the airline concerned considers it necessary to retain authority over certain departments handling its interest in certain fields, particularly that of long-haul traffic.

3. - PROBLEMS AND DIFFICULTIES OF COMMERCIAL AGENCIES

Many difficulties are encountered in implementing traffic agency agreements. The main difficulties are due to the following:

- a. - the existence of very strong competition in the field of long-haul traffic;
- b. - the possible inadequacy of the co-operative efforts of the airlines;
- c. - the effect, on the traffic policies of airlines, of inequalities in the means at their disposal.

a. - Competition in the field of long-haul traffic

The airlines frequently appoint foreign companies to act as their agents for regional traffic purposes; but they almost always reserve the long-haul traffic field for themselves, since, for most European airlines, this traffic is their main source of revenue. In the circumstances, too much is at stake if promotion of this highly profitable traffic and its sale are entrusted to representatives who can only be relied upon to a certain extent. In most cases, when operators appoint a foreign national airline as general agent, it is not so much for reasons of economy as to neutralize the assistance the latter may render to the other airlines it represents. In its own country, the national airline has more well established connections than have the foreign airlines. Through its knowledge of the language, customs, markets and all the factors directly or indirectly connected with air transport activity, it has an unquestionable advantage. To the extent to which it gives certain foreign airlines which it represents the benefit of these factors, those airlines will have an advantage over the others. The feeling of distrust which nevertheless prevails among the represented companies with

regard to the impartiality of the representing company usually leads them to maintain their own agencies and sales promotion staff. The cost of this has to be added to the commissions paid to the representing company. Thus, Air France, KLM and Sabena have appointed Swissair as their general traffic agent in Switzerland for both regional and long-haul traffic, but have nevertheless set up, in Zurich and Geneva, offices to handle their long-haul ticket sales. Consequently, these sales are effected in Switzerland for Air France, KLM and Sabena, both by these airlines themselves and by the local company acting as their general agent. By thus maintaining a physical presence in the foreign country, the represented companies keep a close watch over their own interests, as they themselves admit*.

From this point of view, therefore, the general policies of the European airlines show certain non-co-operative features. It is as if there were an actual incompatibility between the co-operative formulae adopted and the interests of the airlines as long-haul operators**.

Table III gives a list of the ticket sales offices of European airlines in foreign countries of the European-Mediterranean Region for the years 1950 and 1951. The list does not include:

- 1) Ticket sales offices of foreign airlines, located in the offices of the national airline of the country concerned;
- 2) Ticket sales offices at airports.

* "As was mentioned in our last Annual Survey, KLM continued to look after its own interests in countries outside the Netherlands to an increasing extent in 1948 . . ." (KLM Annual Survey for 1948, page 23).

** Although it is not intended to list the practices to which this competition currently gives rise - which would lead us far from our subject - it may be recalled that certain airlines offer their long-haul passengers free transportation on the regional services feeding the starting points of their long-haul services. Newspapers publish advertisements to this effect.

TABLE III

Ticket sales offices of European airlines in foreign countries*

	Summer 1950	Summer 1951
Abo	SAS	SAS
Alexandria	Air France - BOAC - Hellenic Airlines - LAI	Air France - BOAC - Hellenic Airlines - LAI
Amsterdam	BEA - Air France	Air France - BEA
Antwerp	KLM	KLM
Athens	Air France - BEA - BOAC - KLM - ALI - Swissair - CSA - LAI - Sabena - SAS - SAIDE	BEA - KLM - Alitalia - Sabena - SAS - Swissair - Air France - El Al - LAI - SAIDE
Barcelona	Air France - LAI - Swissair - ALI	Air France - BEA - LAI - Swissair - ALI
Basel	KLM	
Belfast	Air France	Air France
Berlin	Air France - BEA - KLM - SAS - CSA - LOT	Air France - BEA - KLM - LOT
Beyrouth	Air France - CSA - Cyprus Airways - KLM - Misrair - ALI	Air France - Alitalia - Misrair - KLM - SAS - Swissair - ALI
Brussels	Air France - BEA - CSA - KLM	BEA - KLM
Cairo	Air France - LAI - SAS - BOAC - KLM - Sabena - Swissair	Air France - LAI - BOAC - Hellenic Airlines - KLM - Sabena - Alitalia - SAS - Swissair
Cologne	Sabena	Sabena - KLM - BEA
Copenhagen	Air France - BEA - KLM - Sabena	Air France - BEA - KLM
Damascus	Air France - BOAC - KLM - Misrair - SAS	Air France - BOAC - SAS - KLM - Misrair
Deauville	BEA	
Dublin	KLM	KLM
Düsseldorf	BEA - SAS - KLM	Air France - BEA - SAS - Sabena - KLM - Aero O/Y
Frankfurt	Air France - Sabena - BEA - KLM - SAS	Air France - JAT - BEA - KLM - SAS - Swissair - Sabena
Geneva	Air France - KLM - Sabena - SAS	Air France - BEA - KLM
Glasgow	Air France	Air France - Swissair
Göteborg		KLM
Gránada		BEA
Haifa	Air France - CSA - KLM	Air France - KLM - LAI - SAS - Cyprus Airways
Hamburg		Sabena - BEA - KLM - Air France - SAS - Swissair - Aero O/Y
Helsinki	KLM - SAS	KLM - CSA - SAS

* From "Bradshaw's International Air Guide".

T A B L E I I I (Cont'd)

	Summer 1950	Summer 1951
Istanbul	Air France - BEA - CSA - KLM - LAI - LOT - SAS - Swissair	Air France - BEA - El Al - KLM - Misrair - LAI - SAS - Swissair
Jerusalem	BOAC - CSA - KLM - SAS -	Air France - BOAC - KLM - SAS - Swissair
Lisbon	ALI - BEA - Iberia - KLM - Sabena - Swissair	BEA - BOAC - Iberia - KLM - Sabena - Swissair
London	Air France - El Al - KLM - Sabena - SAS - Hellenic Airlines	Air France - El Al - KLM - Sabena - Hellenic Airlines - SAS - Iberia
Madrid	Air France - BEA - KLM - Swissair	BEA - BOAC - Air France - KLM
Malaga		BEA
Manchester	KLM - Sabena	Air France - Swissair - KLM - Sabena
Marseilles	SAS	
Milan	KLM - Air France - Sabena - SAS	Air France - SAIDE - KLM - Sabena - SAS
Munich	Air France - BEA - KLM - SAS - Swissair	Air France - BEA - KLM - Sabena - SAS - Swissair
Nice	KLM	KLM
Nuremberg	KLM - SAS	Air France - Sabena - KLM - Swissair
Oslo	Air France - BEA - KLM	BEA - KLM
Paris	Aer Lingus - BEA - KLM - Sabena - El Al - Iberia	Aer Lingus - BEA - SAIDE - Swissair - El Al - KLM - Hellenic Airlines - KLM
Prague	KLM	KLM
Rome	Air France - BEA - BOAC - Iberia - KLM - SAIDE - SAS -	Air France - BEA - BOAC - El Al - Hellenic Airlines - Iberia - KLM - SAIDE - SAS
Salzburg	Sabena	
Seville		BEA
Stockholm	Air France - BEA - KLM	Air France - BEA - KLM
Stuttgart	KLM - SAS	KLM - SAS - Swissair
Tehran	Air France - BOAC - KLM - SAS	Air France - BOAC - KLM - Misrair - SAS
Tel Aviv	Air France - BOAC - CSA - KLM - Misrair - Sabena - SAS - Swissair - LAI	Air France - BOAC - KLM - LAI - Hellenic Airlines - Sabena - SAS - Swissair - LAI - SAIDE
Tunis	LAI	LAI - SAIDE
Vienna	Air France - BEA - KLM - SAS	Air France - KLM - Sabena - ALI - BEA - SAS - Swissair - CSA
Zurich	Air France - El Al - KLM	Air France - BEA - BOAC KLM - El Al

The offices listed in Table III therefore represent expenditure incurred by airlines solely in order that they may be able to sell their own tickets, but generally not those of their competitors, in the cities listed.

On comparing, in the above table, the position in 1950 with that in 1951, it will be noted that the number of airline sales offices abroad has increased. The tendency would therefore appear to have been towards non-co-operation and the airlines would appear to have been somewhat distrustful of foreign competitors, even when these were their general agents. Some recently established companies are indicating by such action their intention to gain a foothold in the regional traffic market (El Al); but this individualistic policy is also to be noted among the older companies which are firmly established in that market. This is particularly apparent in the case of Swissair and BEAC, the number of whose offices abroad increased respectively from 8 to 18 and 16 to 24. Between 1950 and 1951 the total number of offices increased from 159 to 196, i. e. by 23 per cent.

Table IV below shows this trend in detail.

TABLE IV

Increase in the number of sales offices
of European airlines in foreign countries between 1950 and 1951

	Summer 1950	Summer 1951	Percentage increase
KLM	34	37	
Air France	26	30	
BEAC	16	24	
SAS	21	19	
Swissair	8	18	
Sabena	12	14	
Italian Airlines	9	14	
BOAC	8	10	
CSA (Czechoslovakia)	8	2	
El Al	3	6	
SAIDE	2	5	
Misrair	3	4	
Iberia	3	3	
Hellenic Airlines	2	4	
LOT	2	1	
Aer Lingus	1	1	
Cyprus Airways	1	1	
Aero O/Y (Finland)		2	
JAT (Yugoslavia)		1	
	159	196	
Total			23%

b. - Inadequacy of the co-operative efforts of the airlines

Moreover, disagreement is not restricted to the long-haul field. Experience shows that it sometimes occurs in connection with regional traffic, resulting in total or partial repudiation of the agreement in force. For instance, BEA and Swissair, who were parties to a reciprocal agency agreement covering both passengers and cargo, early in 1951, denounced those sections of the agreement relating to passenger-traffic. The British company has since opened its own offices in Zurich and Geneva, while Swissair soon after opened its own in London, Manchester and Glasgow.*

In the case of two other European companies, the same partial denunciation occurred, but this time in respect of the cargo agency. In both cases the represented company must have considered the efforts of the representing company to be inadequate.

c. - Disparities in the available resources of the airlines

Finally, special difficulties may arise where agency agreements are concluded between companies of unequal resources or divergent traffic policies.

One airline may consider that ample resources must be used to attract and hold customers. Such a policy may be dictated by ambition or by a belief that efficiency is the overriding consideration. In so doing, however, an airline may be acting in keeping with the scope of its operations; if its resources are greater than those of an airline in a neighbouring country, it will have greater available marginal capacity, which may be consistent with its operating programme. It will devote to the commercial side of its operations a budget half again as large as that of its less powerful partners or even larger. In the distribution of traffic stops within jointly served territory, varying traffic policies will clash. In such cases co-operation can be maintained only at the cost of an almost constant search for compromise.

B. - INTERLINE TRAFFIC AGREEMENTS

1. - BILATERAL AGREEMENTS

When passengers, baggage or cargo are carried on the services of several companies between their point of departure and their final destination,

* "Flight", 25 January 1951, p. 111.

it is in the interest of all the companies concerned to simplify formalities and to reduce the number of documents required. This programme of simplification or, to use the customary term, "facilitation", requires airlines to honour each other's transportation documents. The so-called interline traffic agreements sanction this obligation and lay down detailed procedure for its implementation.

We would recall that this exchange practice was current before the war. When applied again in commercial aviation after the war, the formula was first of all the subject of bilateral agreements between companies. Table V gives an idea of the extent of the use of this type of agreement. It shows the interline bilateral traffic agreements concluded between the domestic airlines of the United States and the international airlines (including the major international airlines of the United States). Although it deals with cargo alone, which is only one category of traffic, the table indicates the need met by the interline agreements on long-haul networks. In this case the bilateral agreements facilitate shipment of cargo between the continental territory of the United States and other world points served by the major international airlines. Obviously, the advantage of these agreements for the international long-haul companies other than those of the United States (the European companies which are of most concern to us here), is all the greater in that the latter companies do not have access to the United States' interior. The development of interline agreements therefore appears to be very directly related to the present national partitioning of air space.

2. - THE STANDARD IATA AGREEMENTS

The International Air Transport Association (IATA), considering the interline exchange of transportation documents to be a basic factor in commercial operations, has endeavoured to establish a standard form which can be adopted by the individual airlines if they so desire. This is the purpose of the agreement known as the "IATA Interline Traffic Agreement", the text of which was published on 18 June 1948, the agreement itself becoming effective on 9 July 1948.

The other standard agreement more recently drawn up by IATA (30 December 1950) extends the facilities provided by the previous agreement to cover passengers' baggage. It is called the Interline Baggage Agreement. This agreement is additional to the Interline Traffic Agreement and applies only between companies which are already parties to that Agreement.

TABLE V

Bilateral Interline Traffic Agreements (Cargo)*
Domestic airlines of the United States and international airlines

The symbol x signifies: party to an interline agreement

International airlines	U.S. domestic airlines		Air France	Aero Lineas Argentinas	American	Avianca	Braniff	BCPA	BOAC	Canad. Pacific	Chicago & Southern	Colonial	Eastern	KLM	LAI (Italie)	LAV (Venezuela)	National	Northwest	Panagra	PAA	Philippine AL.	Sabena	SAS	Swissair	TACA	Trans Canada	TWA	United
	All American				X							X	X	X							X	X						X
American	X	X	X		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
Bonanza				X									X					X								X	X	
Braniff	X		X	X	X			X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
Capital	X	X				X	X	X	X		X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
Central																												
Chicago & South.	X		X		X	X	X				X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X
Colonial	X		X		X	X	X	X				X	X	X			X	X	X		X	X	X		X	X	X	X
Continental						X						X	X	X			X	X	X		X	X		X	X	X	X	X
Delta	X		X		X	X	X	X			X	X	X	X			X	X	X		X	X	X	X	X	X	X	X
Eastern	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X
Empire					X						X	X	X	X				X			X	X	X			X	X	X
Flying Tigers	X						X	X			X	X					X	X	X		X	X	X		X	X	X	X
Frontier					X	X					X	X	X	X			X	X	X		X	X	X		X	X	X	X
Inland					X	X	X					X	X	X							X	X	X		X	X	X	X
Mid-Continent					X	X	X	X	X		X	X	X	X			X	X	X		X	X	X	X	X	X	X	X
National	X	X	X		X	X					X	X	X	X			X	X	X		X	X	X		X	X	X	X
Northeast	X	X			X	X	X	X			X	X	X	X			X	X	X		X	X	X		X	X	X	X
Northwest	X		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
Piedmond					X						X	X	X	X			X	X	X		X	X	X		X	X	X	X
Pioneer						X					X	X	X	X			X	X	X		X	X	X		X	X	X	X
Robinson											X	X	X	X			X	X	X		X	X	X		X	X	X	X
Slick	X					X					X	X	X	X	X		X	X	X		X	X	X		X	X	X	X
Southern											X	X	X	X			X	X	X		X	X	X		X	X	X	X
Southwest						X											X	X	X		X	X	X		X	X	X	X
Trans-Texas							X				X	X	X	X			X	X	X		X	X	X		X	X	X	X
Trans-World (TWA)				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Turner																												
United	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
U.S. Air Lines											X	X	X	X			X	X	X		X	X	X		X	X	X	X
West Coast				X	X	X					X	X	X	X			X	X	X		X	X	X	X	X	X	X	X
Western				X		X					X	X	X	X			X	X	X		X	X	X		X	X	X	X
Wiggins											X	X	X	X			X	X	X		X	X	X		X	X	X	X
Wisconsin Central						X					X	X	X	X			X	X	X		X	X	X		X	X	X	X

* From "Air Shipping Digest", 21 March 1951.

a. - Main provisions of these agreements

1) The Interline Traffic Agreement

The main provisions of this agreement can be summarized as follows:

The text includes a single "Whereas" clause at the beginning indicating the desire of the parties, which is "to enter into arrangements under which each may sell transportation over the routes of the others".

In the first part are defined the terms used: ticket, exchange order, consignment note, issuing airline, carrying airline, transferring airline (airline which effects transfer carriage over intermediate route segments), cargo, baggage, tariffs and sale.

Then follows a provision governing the various types of operation: issuance or completion by the issuing airline of tickets, exchange orders, consignment notes and all other documents provided for in regulations applied by the carrying airline and which the latter undertakes to honour.

A Liability Clause exempts the issuing airline from any liability for claims, demands, costs, etc. arising from the issue, completion, or acceptance of transportation documents, which liabilities are assumed by the carrying airline, except in the case of gross negligence of the issuing airline.

Other provisions govern the granting of commissions due on sales, settlement, arbitration and, finally the method of application to become a party to the agreement.

2) Interline Baggage Agreement

This agreement is intended "to supplement the Interline Traffic Agreement in order to provide for through interline connecting transportation of baggage".

After first defining various terms (originating carrier, connecting carrier, stopover etc.), the Agreement provides for the methods of connecting transportation of baggage by the connecting services of the companies concerned in the various cases which may arise in practice: stopover en route, increase in weight of baggage en route, liabilities incurred, etc.

b) Advantages of interline agreements and problems associated therewith

The advantages of the interline agreements benefit both the users and the operators, it being in the interest of both to simplify formalities. From the point of view of the user, this problem was being solved in what appeared to be a satisfactory manner by means of the many bilateral agreements

concluded between airlines. Table V above shows the growth of these agreements. Bilateral agreements, however, impose on the airlines a heavy administrative burden which standardization of agreements tends to alleviate. It is therefore the airlines which benefit most from the formulae established by IATA.

On the other hand these formulae have not been adhered to by all operators, however. Table VI, below, lists the European parties to the two complementary IATA agreements (traffic and baggage). It shows that these agreements have not met with great success in Europe. Doubtless this is partly due to the fact that, in Europe, a regional traffic network is involved, practically all the main traffic points of which are served by a large number of airlines. In contrast with the territory of the United States, of which foreign operators, with certain exceptions, can only serve the fringe, Europe offers a perfect example of an air space which is accessible to both internal and external international carriers, and consequently the necessity for interline systems is less felt.

Interline agreements are of just as great importance, however, on the over-seas extensions of the European network, i. e., on the international long-haul routes. This situation is brought out in Table VII which follows the one just mentioned.

CONCLUSION

In concluding this chapter on commercial agreements, it is necessary to stress that these are elementary forms of co-operation which are, after all, almost a necessity. Their main purpose is not to reduce competition, but rather to bring into operation a practical system of obtaining revenues, mainly intended to reduce commercial costs, while still assuming and accepting the existence of competition. Nothing demonstrates this more clearly than the obstacles encountered by these forms of co-operation, in spite of IATA's efforts to regulate and standardize interline agreements. The activities of airlines acting as agents for one another, far from contributing to general co-operation, often appear to have been inspired by a desire to evade the control which it is desired to impose. This, in any event, is the conclusion to be drawn from facts such as the following, recently commented on in the aviation press. A check carried out early in 1951 at Rio de Janeiro by an IATA inspector revealed that out of eleven airlines whose activity as agents for other airlines or whose relations with travel agents were supervised by IATA, ten had engaged in practices which contravened the IATA regulations. The most usual form of infraction was either an increase in commission, or issue of tickets free of charge or at reduced rates. In South America in particular, the financial situation makes it possible for international airlines, by playing on exchange rates, to take advantage of all sorts of complex arrangements which it is difficult to control.

TABLE VI

Standard Interline Traffic Agreement

and

Standard Interline Baggage Agreement (1)

Between European Airlines (June 1951)

x : parties to the Interline Traffic Agreement

B : parties to both agreements

Airline	YAT (Yugoslavia)	TA Portugueses	Swissair	Saudi Arabian Airl.	SAS	SABENA	Misrair (Egypt)	Middle East Airlines (Lebanon)	LOT (Poland)	KLM	Iraqi Airways	Iranian Airways	Icelandic Airways	Iberia	Hellenic Airlines	Greek Airlines	El-Al (Israel)	CSA (Czechoslovakia)	CGT (Lebanon)	BOAC	BEAC	Arab Airways (Transjord.)	Alitalia	Ali-Flotte Riunite	Air France	Aero Portuguesa	Aero O/Y (Finland)	Aer Lingus Teoranta
YAT (Yugoslavia)			x																									
TA Portugueses																												
Swissair			x																									
Saudi Arabian Airl.																												
SAS					B	x																						
SABENA					x	x	x																					
Misrair (Egypt)																												
Middle East Airlines (Lebanon)																												
LOT (Poland)																												
KLM										x	B				B	x												
Iraqi Airways										B	x	B			B													
Iranian Airways																												
Icelandic Airways																												
Iberia																									x			x
Hellenic Airlines										x	x				x	x												x
Greek Airlines																												
El-Al (Israel)																												
CSA (Czechoslovakia)											x	x			x	x												
CGT (Lebanon)																												
BOAC											x	x			B	B												
BEAC																												
Arab Airways (Transjord.)																												
Alitalia																												
Ali-Flotte Riunite																												
Air France																												
Aero Portuguesa																												
Aero O/Y (Finland)																												
Aer Lingus Teoranta																												

(1) See IATA Interline Agreements Manual.

TABLE VII

IATA Standard Interline Traffic Agreement and Standard Interline
Baggage Agreement *

European and non-European airlines (June 1951)

x : parties to the Interline Traffic Agreement - B : parties to both agreements

	Aerovias Guest (Mexico)	Aerovias Mac. de Colombia	Air-India International	Air India Ltd.	American Airlines	Australian Nat. Airways	Braniff Airways	B.C.P.A.	Canadian Pacific Airl.	Central African Airways	Chicago & Southern Airl.	China Nat. Aviat. Corp.	Compania Cubana de Av.	East African Airways	Eastern Airlines	Hong Kong Airways	Linea Aeropost. Venez.	National Airlines	New Zealand Mt. Airways	Northwest Airlines	Papair do Brasil	P.A.S.A.	P.A. Grace Airways	Philippine Airlines	Qantas Empire Airways	South African Airways	Tasman Empire Airways	Trans Canada Airlines	T.W.A.	United Air Lines	West African Airways
Aer Lingus Teoranta	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Aero O/Y (Finlande)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Aero Portuguesa			x	x	x		x		x						x				x		x			x	x	x		x	x	x	
Air France															x																
Ali-Flotte Riunite			x	x	x		x	x	x	x					x				x	x		x			x	x	x		x	x	x
Alitalia	x	x	x	x	x		x	x	x	x	x			x					x	x	x	x	x	x	x	x	x	x	x	x	x
Arab Airways (Transjord.)																															
BEAC	x	x	x	x	x	x	x	x	x	x	x			x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
BOAC	x	x	x	x	B	x	x	x	x	x	B	x		B	x		x	B	x	B	B	B	B	x	x	B	B	B	B	B	B
CQT (Liban)																															
CSA (Tchécoslovaquie)			x	x	x			x	x	x					x		x		x		x	x	x		x	x	x	x	x	x	x
El-Al (Israël)																															
Greek Airlines																															
Hellenic Airlines	x	x	x	x	x		x	x	x	x					x		x		x	x	x	x	x	x	x	x	x	x	x	x	x
Iberia	x		x	x	x		x	x	x	x	x				x			x	x	x	x	x	x	x	x	x	x	x	x	x	x
Icelandic Airways																															
Iranian Airways																															
Iraqi Airways	x	x	x	x	B	x	x	x	x	x	B			B			x	B	x	x	x	x	x	B	x	B	B	B	B	B	B
KLM	x	x	x	x	B	x	x	x	x	x	B	x		B	x		x	B	x	B	x	x	B	B	x	B	B	B	B	B	B
LOT (Pologne)																															
Middle East Airl. (Liban)																															
Misrair (Egypte)																															
SABENA	x	x	x	x	x	x	x	x	x	x	x			x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SAS	x	x	x	x	B	x	x	x	x	x	B			x	B	x	x	B	x	B	B	B	B	x	B	B	B	B	B	B	B
Saudi Arabian Airlines																															
Swissair	x		x	B		x		x		B					x			B	x	B		B	x		x	B	x		B	B	
TA Portugueses	x	x			x	x		x	x	x				x					x	x	x	x	x	x	x	x		x	x		
YAT (Yougoslavie)																															

* See IATA Interline Agreements Manual.

However, IATA has recently been studying the possibility of setting up more effective machinery to obtain strict compliance with regulations in this field: (Investigating Committee on Travel Agencies.)

These results are sufficiently indicative of the freedom taken advantage of and, in fact, abused by a number of operators, in the absence of an adequate controlling authority which would be exercised either nationally or internationally. In this connection, therefore, it is necessary to recall the contrast mentioned in the introduction to this chapter between this type of situation and that prevailing in certain countries where the civil aviation organization involves control of the operators by the competent government administration. Thus, in the United States, the Civil Aeronautics Board has opposed a reciprocal international agency agreement, implementation of which it considered to be incompatible with a basic principle of United States air transport policy.*

* Under the proposed reciprocal agency agreement between Air France and United Airlines of the United States, Air France would pay United a commission of 10 per cent on all transportation sold by United for air transportation across the North Atlantic and 7.5 per cent on all other transportation routed over Air France's routes. United would pay 10 per cent commission on transportation sold by Air France over United in connection with flights over the North Atlantic route of Air France and 7.5 per cent for domestic transportation sold by Air France over United routes.

The CAB declared its intention to oppose such an arrangement because it would give an incentive to the American airline concerned to favour traffic of a foreign company at the expense of competing American airlines. (American Aviation - 1 June 1947.)

CHAPTER III

GROUND SERVICES AGREEMENTS

The category of so-called "handling" agreements is intended to reduce the expenses of airlines at airports and at city terminals. The operations which are covered by these agreements are partly commercial and partly technical.

A. - Most of the handling agreements currently in force are bilateral; either one of the two parties to the agreements undertakes to provide services on behalf of the other, or else the undertaking is reciprocal.

B. - There is one instance where the provisions of bilateral agreements covering handling at a particular traffic point have been standardized: This is the case of the transatlantic airport at Shannon. The standardized agreements are nevertheless the subject of bilateral contracts between the handling company, Aer Lingus, and the companies for which it acts.

C. - Airport handling between KLM, Sabena and Swissair is covered by a special agreement entitled the "Beneswiss Agreement". These three airlines have agreed to apportion among each other at a certain number of airports inside and outside Europe the responsibility for maintaining stocks of spares as well as engineering services. In this chapter will be considered co-operative measures taken with regard to the latter services, while provisions regarding stocks of spares will be studied in the next chapter which deals with technical co-operation agreements.

D. - One handling agreement, concluded between a certain number of European airlines whose routes serve German territory, is of particular interest in view of its clearly multilateral nature, which makes it possible to eliminate the discriminations and abuses inherent in bilateral agreements. Its effectiveness from the point of view of economy has been so evident that the participants are now seeking means of making its use more general. Outside the particular territory in which it has been possible to conclude this agreement, these airlines have encountered the usual difficulties inherent in the structure of European air transport.

A. - STANDARD TYPE
BILATERAL HANDLING AGREEMENTS

1. - THE STANDARD TYPE BILATERAL AGREEMENT:
PROVISIONS AND OPERATION

The standard bilateral handling agreement includes the following provisions:

- a. - a description of the handling operations to be performed;
- b. - a provision concerning payment and methods of settlement;
- c. - a liability clause;
- d. - an arbitration clause;
- e. - an appendix listing the airports covered by the agreement.

a. - Handling operations

Where one airline undertakes to carry out services for another at agreed airports, the handling which it will perform for the latter is specified in the agreement between the two airlines in the following manner:

1) Airport handling

- operations involved in loading and unloading passengers, baggage, cargo and mail;
- assistance in the various arrival and departure formalities (customs, immigration, health, etc.);
- preparation and dispatch of traffic documents and aircraft papers;
- receipt and delivery of mail in accordance with arrangements concluded with postal administrations;
- provision of overnight accommodation and meals for passengers and crews of the operating airline, where necessary;
- preparation, issue and receipt of messages concerning the operations of the operating airline, in so far as this is not the responsibility of airport administrations, and without any assumption of responsibility by the handling airline;
- any necessary liaison between airport administrations and crews, enabling the latter to avail themselves of navigation services (radio, meteorology, etc.);

- any special services which may be required for special flights, forced landings or accidents;
- cleaning of aircraft cabins and galley equipment;
- normal pre-flight servicing (filling up with water, fuel and oil, starting of engines, removal of chocks, etc.);
- any necessary towing of aircraft of the operating airline upon the airport;
- taking of any steps necessary to ensure the safety of aircraft of the operating airline while they are at the airport. The handling airline undertakes to do its utmost to ensure that aircraft of the operating airline shall receive treatment as favourable as that given other users of the airport (housing, picketing, towing and general protection).

This list is not exhaustive; any other services which may reasonably be included under the heading of airport handling may be added.

2) City terminal handling

All handling connected with arrival and departure of passengers (checking-in of passengers and their baggage, collection of excess baggage charges, etc.).

3) Ground transport of passengers and crews

The handling airline provides automobile service between the city and the airport for passengers and crews of the operating airline. Where the vehicles for the carriage of passengers are not also able to carry the crews, the handling company shall endeavour to place a special car at the disposal of the latter.

The question of vehicles for ground transportation raises difficult financial problems for the airlines. It will be noted that it is frequently excluded from the handling services and is covered by a separate arrangement.

4) Customs clearance, storage in bond and cartage of cargo

This service is performed by the handling airline just as for its own cargo.

5) Technical services

The handling airline assumes responsibility, on behalf of the other airline, for everyday maintenance of the latter's aircraft while at the

airport (minor repairs; provision of materials and small parts; purchase of necessary parts locally for the operating airline). The supplies thus provided to the operating company include only articles of current use such as spark plugs, gaskets etc. The agreement specifies that actual replacements parts, instruments and accessories will not be provided by the handling company except in very special cases and then only on the basis of a temporary loan.

b. - Payment

1) Payment for touchdown charges so called because they relate to airport handling, including technical handling, performed every time the aircraft passes through the particular base.

The agreement includes a table of touchdown charges based on aircraft types and the type of base. Naturally these charges vary with the weight of the aircraft: being higher at a terminal base than at a transit base and higher at a transit base than at a technical base.

Touchdown charges are fixed by each airline on the basis of actual costs. Naturally, they are somewhat arbitrary. It will be seen however that the arbitrary features do not appear in the multilateral agreement which uses a system of open accounts instead of a table of touchdown charges.

2) Ground transportation charges (buses for passengers and crews between airports and departure terminals). These transportation charges are generally based on a flat rate for the season, itself based on the number of touchdowns, making allowance for a certain number of empty trips of the buses for positioning purposes.

3) Exceptional provision of supplies and equipment, and provision of accommodation and meals for passengers and crews. These are charged at cost price increased by an agreed percentage to cover the overhead expenses of the handling company.

c. - Liability clause

This clause specifies that the operating airline assumes full responsibility for the maintenance and operations of its aircraft and exempts the handling airline from all responsibility for delays in transportation and for accidents of any type, except in the case of gross negligence on the part of the latter. In the case of positioning flights, storage and parking of aircraft at the airport, the handling airline undertakes to safeguard the equipment of its partner as it would its own. It assumes no liability, however, for damage or loss as a result

of the various handling operations. Similarly, the operating airline assumes all fire risks.

d. - Arbitration clause

This clause provides for the appointment of arbitrators by the airlines. In the event of excessive delay or disagreement, each of the parties may appeal to IATA, the Director General of which will make such appointment.

e. - Lists of airports

Finally, the standard type bilateral agreement includes, in an Annex, a table of the airports at which the services specified are to be performed (see specimen of a standard type ground service agreement in Appendix II).

2. - PROBLEMS AND DIFFICULTIES INVOLVED IN IMPLEMENTING BILATERAL AGREEMENTS

a. - Advantages

The advantages of the handling dealt with here are essentially that it reduces the necessity for the provision at certain points of airport equipment, coaches, trucks, and cars, and that it reduces airport expenses (staff, ground transportation, rent of offices and stores and overhead).

For the following reasons it is difficult to determine exactly the financial benefits this system provides:

1) Calculations cannot be based on a typical example because conditions vary considerably from one airport to another in view of differences in the following factors:

- volume of traffic;
- type of traffic (passengers or cargo);
- type of aircraft;
- equipment and facilities;
- the cost of living in the countries concerned.

2) The volume of traffic at a given airport varies greatly from one season to another and the traffic flow at the various times of day is also subject to seasonal fluctuation. These factors have a considerable bearing on the performance of staff and on the cost of ground transportation.

3) The capacity of staff and vehicles varies greatly from one airline to another, since it is based mainly on organization of work and the discipline of the airport staff. This factor, incidentally, is one of the main obstacles to the general conclusion of such agreements, since an airline whose staff, if trained to provide a higher degree of efficiency, will hesitate to conclude a poor bargain by signing a reciprocal agreement with another airline which is less well organized.

4) The flat rate remuneration tables used between companies are governed to a great extent by arbitrary decisions of each airline which frequently attempt to make a profit rather than to reduce the handling charges of their partners*.

5) The procedure whereby costs at each airport are compared both before and after the agreements come into force is likely to produce misleading results, as traffic varies considerably from one year to the next and the effect of this variation, which is difficult to determine quantitatively, leaves a great deal to personal evaluation.

6) Whatever the method employed, it is necessary, in order to make effective use of it, to analyze airport handling accounts from year to year and from season to season, and to compare them with traffic and schedule statistics. The airlines, however, are particularly unwilling to disclose such figure since they all are endeavouring to make a profit on the services they provide to other airlines. Publication of these figures would make such action very difficult and would make discrimination impossible. Furthermore, the work of analysis required to determine the financial benefits obtained from such agreements would need a well-trained staff and would involve a considerable amount of work. For this reason most companies do not bother with it. On the other hand, it is fairly easy for them to estimate the profits they make on their co-parties when they perform handling operations for them. But even if each airline does make such profits, their overall effect is negative since they increase the handling charge which the agreements are intended in principle to reduce.

* "... It is perhaps not always remembered that part of the work of this staff (of Swissair), the ground service staff, consists in handling not only Swissair aircraft, but also aircraft of most of the foreign airlines whose routes touch Switzerland. You are aware that these services provided to foreign airlines brought Swissair the amount of 4,412,000 francs in 1949. This staff therefore pays its way financially." (Underlining provided) (From debate in Swiss Parliament on Swissair. "Bulletin sténographique de l'Assemblée fédérale". Meetings of 25 and 26 September 1950, page 491.)

Several European airlines estimate that their handling costs and commercial agency costs represent approximately 25 per cent of their total costs. BEAC states that the variable handling costs of the Paris-London service represent 22.4 per cent of the total cost of that service*. If to this are added the fixed costs, a proportion far higher than 25 per cent is obtained. Other European airlines state that their handling and commercial agency costs are much lower, some quote 12 to 15 per cent. These enormous differences, doubtless partly due to the fact that all airlines do not include the same categories of expenses in their handling costs, are sufficient to indicate the unreliability of such estimates.

In the United States, on the other hand, some figures on ground service co-operation have been published in the aeronautical press. According to a statement by Mr. Robert F. Six, President of Continental Airlines, that company made a saving of approximately 50,000 dollars in 1947, thanks to an agreement with Braniff Airways Inc., covering eight airports in United States' territory which they both served. The total expenses of Continental Airlines for that year were 4,300,000 dollars, of which 670,000 dollars or 16 per cent was for handling costs**.

b. - Adequacy of means available for all handling services

The adequacy of these means is the main factor contributing towards economy, staff being the most important item. One airline, more concerned with the quality than with the cost of its air services, and having considerable means at its disposal, will assign a large staff to handle its operations. If it concludes a reciprocal agreement with a less powerful company whose prime concern is economy, it runs the risk of not obtaining at airports served by that company the high quality services which it deems necessary. These different views constitute a partial explanation of the differences in handling fees from one airline to another, which were mentioned earlier. The disparity in the number of staff available may be further aggravated in the future by disparities in equipment (cargo loading and unloading equipment, equipment for air-conditioning aircraft cabins while on the ground, etc.). So long as there are no generally accepted standards in this field, these disparities between airlines will constitute a serious obstacle to co-operation, obstacle which can be overcome only through a re-grouping of the airlines into a smaller number of companies of approximately equivalent strength. This problem of re-organization arises at the present time even in the United States where air transport has developed under the actual control of the federal authorities.

* Estimation by Mr. P. Masefield, Brancker Memorial Lecture, February 1951. "The Journal of the Institute of Transport", March 1951, p. 96).

** "Pooling of facilities pays off", Aviation Week, 17 May 1948, p. 54).

c. - Disadvantages of the preferential system

The total volume of traffic at an airport is not the sole factor governing the number of staff and the equipment required to give efficient service. The distribution of touchdowns throughout the day is at least as important. During periods of heavy traffic there are, at almost all airports, peak hours during which a large number of touchdowns take place. The company acting as handling agent for several airlines will naturally tend to give priority to its own aircraft and to those of airlines whose co-operation it deems more important. The regularity of the services of the other airlines will suffer as a result, and the least powerful airlines will usually be the ones to suffer from such discrimination.

d. - Difficulties arising from the dual nature of handling services

These services come partly under the technical operations departments and partly (traffic handling) under the traffic departments.

The former services include aircraft servicing and, sometimes, navigational control during flight in the neighbourhood of the airport. The latter services include those required for passengers and cargo. Discussion and drafting of the various provisions of handling agreements therefore concern, in each airline, both the technical and commercial departments (not to mention the administrative department, where accounting problems are involved). These two aspects of the problem have led airlines to establish a so-called "operations" department responsible for co-ordination of all these services. In discussing handling agreements, such a combined department is obviously a great advantage as compared with departments which specialize either in operations or in commercial traffic. Airlines which have formed such a department are at a considerable advantage in negotiating co-operative agreements.

e. - Effect of handling agreements on passenger recruitment

Where one airline carries out various departure station formalities on behalf of several others, such as checking of tickets and air waybills and customs handling, that airline gains a certain amount of useful information concerning the clientele of other airlines. It may be tempted to use this information either for its own purposes or for those of certain airlines with which it may have certain relations, such as, for instance, an arrangement to send via their services transit passengers who have no special preference for any particular company. This constitutes a possibility of discrimination which it would be surprising to learn no airline had made use of in the present atmosphere of keen competition.

f. - The language problem

One of the most important handling services is that dealing with flight responsibility. The service responsible for this aspect of handling must keep in constant touch with any aircraft flying to or away from the airport, for which it is responsible, in order that it may be able to give its pilots-in-command any necessary instructions. Since this service is of prime importance to safety, no airline will leave the responsibility for it to another, in whose agents it has not full confidence in this particular field. In Europe this question raises the problem of languages, as radiotelephony is used for conversations between aircraft commanders and airport officials. This raises an additional problem in the case of airport handling between companies of different nationalities. Only the more powerful companies can bear the cost of training crews and airport representatives in handling the problems of air traffic in areas of heavy traffic density. This training must include special attention to the question of languages. It will readily be appreciated that co-operation between European airlines in the provision of ground services can never be complete until a satisfactory solution to this important problem has been found.

g. - Heavy traffic airports

Once the number of touchdowns per day of an airline is sufficient to occupy a team of airport agents more or less fully, that airline may find little advantage in entrusting its handling to another company. This is particularly true if the latter also has a considerable volume of traffic, because it will then inevitably devote its main efforts towards its own traffic and tend to neglect that of the airline which it should be assisting. This will occur, for instance, at airports such as those of Paris and London. The attempts at co-operation made in the United States, and which were mentioned earlier, would seem to lead to the same conclusion. According to statements of competent authorities,* joint handling operations have proved most effective at small airports and at intermediate stops on major air routes, which are served by several companies with a frequency of one or two round-trip flights per day. However, at the major continental airport of Kansas City, where Continental Airlines and Braniff Airways Inc. had combined their reservations, sales and airport handling services, the results were sufficiently unfavourable to induce the participants to give up this co-operation after a period of a year.

h. - Difficulties arising from legislation in certain States

Astonishing as it may seem, there are States whose legislation forbids the national airline to give assistance to foreign companies. This is true, in the European-Mediterranean Region, in the case of Egypt and Israel. (Other examples are the regulations of the Union of South Africa and of the Port of New York Authority.)

* Aviation Week, 17 May 1948, p. 54 op. cit.

B. - A PARTICULAR CASE OF BILATERAL
GROUND SERVICE AGREEMENTS

THE SHANNON AGREEMENTS

Shannon Airport, in Ireland, just as Gander, in Newfoundland, was essential during the first years of operation of the transatlantic services, owing to the inadequate range of the aircraft used. This airport was therefore established and operated at considerable expense by Ireland, which country, in return, requested those States with which it had concluded bilateral air transport agreements to undertake to use Shannon in order to guarantee Ireland sufficient revenue to maintain the airport in operation. The following nine airlines therefore concluded bilateral agreements with Aer Lingus, entrusting that company with their handling at the airport: Air France, BOAC, KLM, LAI, PAA, Sabena, Swissair, TCA and TWA.

Until recently, these agreements, which were concluded at different dates, differed from one another either as regards the services they covered or as regards their detailed implementation provisions. This gave rise to serious complications for the handling company both in organizing the services and in keeping separate accounts. Aer Lingus finally succeeded in standardizing these on the following basis:

- 1) Passenger service: assistance to passengers on arrival and departure; hotel arrangements, etc.;
- 2) Traffic counter service: assistance of passengers through customs, immigration and health controls; carrying of baggage; information, etc.;
- 3) Aircraft traffic documentation: manifests, consignment notes, aircraft customs documents;
- 4) Aircraft loading and unloading: transportation of baggage and cargo from aircraft to terminal or to stores;
- 5) Cabin cleaning;
- 6) Mail: Transportation of mail from airport post office to aircraft and from one aircraft to another; preparation of any documents required;
- 7) Cargo handling: preparation of any documents required; clearance and forwarding of cargo to Irish destinations, on request;

8) Porter service;

9) Catering: meals on the ground provided by Shannon Airport restaurant; aircraft meals supplied by the Aircraft Catering Organization attached to the airport restaurant;

10) Accountancy: dispatch to the operating company of all documents relating to the services rendered, provided such documents are for accounting purposes only and not for statistical or other purposes.

A comparison of these provisions with the standard bilateral agreements described above reveals an important difference: the Shannon agreements do not include any services which are of a truly technical nature. Normal pre-flight and maintenance services are excluded, as are, for even more obvious reasons, major repairs which might require spare parts. It is readily understandable that the handling airline, in this particular case, is not in a position to provide the assistance required for the many long-range aircraft operating on this route, as these require a very specialized staff (Lockheed Constellation, Douglas DC-6 and Boeing Stratocruiser).

This standardization of agreements represents a step forward, not only because it simplifies a very complex system, but also because it has the effect of eliminating discrimination, which can be practised with far greater facility when the agreements differ.

The Shannon agreements nevertheless have certain arbitrary features, since the methods of payment are determined by the handling company and the operating airlines do not have access to the accounts for these services. As will be seen later, only a multilateral agreement can completely eliminate arbitrary features and discrimination, and it alone can provide the full co-operation which is aimed at.

C. - TECHNICAL HANDLING UNDER THE BENESWISS AGREEMENT

The use by Sabena, Swissair and KLM of aircraft of similar types (Convair 240, DC-3, DC-4, and DC-6) has led these airlines to seek some method of technical co-operation. For the last two years they have been endeavouring to perfect a system based on an allocation among the three airlines of a certain number of airports at which the responsible airline will provide, for the benefit of all three:

- a stock of spare parts; and
- a ground mechanic service.

Their efforts have resulted in the conclusion of two agreements commonly known as "Beneswiss Agreement I" and "Beneswiss Agreement II".

Beneswiss Agreement I, which was concluded in 1949, covered only one type of aircraft, the Convair, hence the name "Convair Agreement" by which it was also known. The provisions of this agreement applied, however, to a certain number of European airports only.

Beneswiss Agreement II, which replaced the previous one in June 1951, extends the provision of these services, both to the three other aircraft types used by the participants (DC-3, DC-4 and DC-6), and to certain airports outside Europe.

We will limit ourselves here to a description of the provisions of Beneswiss Agreement II which may be considered as an improved version of Beneswiss I.

In this chapter, dealing with ground services, only co-operation in the ground mechanic service will be considered.

1. - OPERATION

a. - Assignment of airports

The Beneswiss ground mechanic service operates only at bases outside the metropolitan territory of the three airlines*. At Amsterdam, Brussels and Zurich, these services are provided by the national airline to its partners under the bilateral handling agreements in force.

The ground mechanic services provided under the tripartite agreement were initially assigned between the airlines on the fairest possible basis, taking into account the means of the companies and the use they make of the bases. The distribution is modified periodically according to seasonal or other requirements of their operations, but it may also vary according to the staff available to the participants. During the summer of 1951 (15 April to 22 October), this distribution was as follows (see also Map VI):

* There is only one exception to this principle: Geneva, where a ground mechanic service is provided by Swissair under the Beneswiss Agreement.

SABENA	SWISSAIR	KLM
Nice	Copenhagen	Stockholm
Milan	Paris	Munich
Düsseldorf	Hamburg	Frankfurt
	Geneva	Rome

It will be noted that this list includes only European bases. Under a recent decision, Sabena is to provide, from October 1951, ground mechanic service at Cairo, Gander, Tripoli and New York. Additional services are at present under consideration.

Owing to the fact that this is a specialized service for specific aircraft types, should one of the airlines decide to withdraw its mechanic from a base, the service must be provided by joint agreement by one or other of its partners. Thus, for instance, the three airlines are at present conducting negotiations for the replacement of the mechanic at Copenhagen (which base was assigned to Swissair in the summer of 1951), by a mechanic from KLM or Sabena.

At each base the services listed in the agreement may be provided by one, two or three mechanics according to the requirements and the capacities of the airlines. The assignments for the summer of 1951 are shown in the map.

b. - Type of services covered by the agreement

The ground mechanics are responsible for providing two types of service:

- ordinary aircraft servicing;
- exceptional servicing.

Ordinary aircraft servicing is defined as follows in the agreement (section 5):

The mechanic shall:

- be present at the ramp, on arrival of an aircraft, with the hand tools which are most frequently used;

CARTE VI

MAP VI

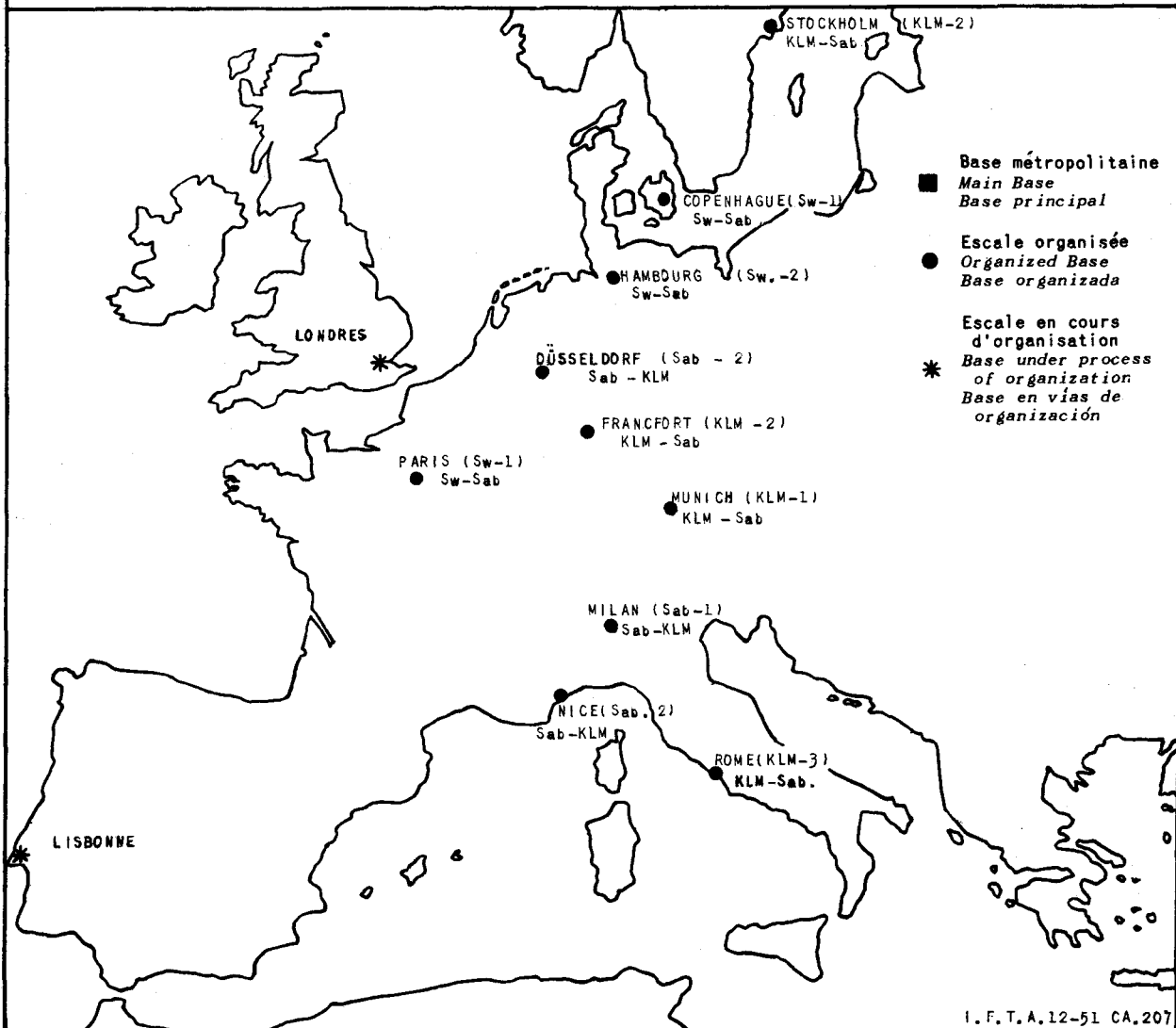
CARTA VI

ACCORD BENESUISSE II - SERVICE DE MECANICIENS D'ESCALE (Eté 1951)

BENESWISS AGREEMENT II - GROUND MECHANIC SERVICE (Summer 1951).

ACUERDO BENESUIZO II - SERVICIO DE MECANICOS EN TIERRA (Verano 1951)

- La compagnie figurant entre parenthèses est celle qui a la charge de l'escale.
- The airline whose name appears in brackets is the servicing airline.
- La empresa cuyo nombre se halla entre paréntesis es la que tiene a su cargo el servicio.
- Le chiffre indique le nombre de mécaniciens employés à l'escale.
- The figure indicates number of mechanics stationed at the base.
- La cifra indica el número de mecánicos que prestan servicio en la base.
- Les compagnies dont le nom figure sous celui de l'escale sont celles qui participent à l'organisation conjointe du service de mécaniciens.
- The airlines whose names appear under that of the base are those participating in the joint organization of the ground mechanic service.
- Las empresas cuyos nombres se indican debajo del de la base son las que participan en la organización conjunta del servicio de mecánicos de tierra.



- contact the crew immediately after the engines have been stopped in order to be informed of any technical troubles which may have occurred;

- be present, at the aircraft's departure, with the hand tools which are most frequently used, to assist (if necessary) when the engines are started and to supervise the proper use of battery carts, fire extinguishers, etc. by ground personnel;

- be available for 30 minutes after the departure in case the aircraft returns because of mechanical trouble.

In practice, all these duties are covered by the term "standby" which sums up the mechanic's obligation to be available when an aircraft movement takes place at the airport.

Exceptional servicing includes any action taken by the mechanic at his base, which is necessitated by major technical trouble: repair, replacement of a part, etc.

c. - Method of utilizing the services provided in the agreement

There are two systems for using the services listed above, according to whether or not the airline is a participant in the joint organization. Thus, this participation operates more or less like a subscription system, giving greater benefits to the airline which "subscribes".

Participation in the joint organization entitles the airline to:

- standby service: the servicing company responsible at the airport is required to make its mechanics available to the "subscriber";

- exceptional services: free of charge for up to two hours of the mechanic's time and at a rate of \$1.80 per hour thereafter.

An airline which does not participate in the joint organization has the benefit of the ground mechanic service (ordinary or exceptional servicing) only if the mechanic is available, and pays for it at the rate of \$2.80 per hour.

Handling costs for airlines participating in the joint organization are calculated in advance for each IATA season. Each airline contributes towards the cost in proportion to the number of mechanic hours it may require at the airport concerned, based on the services listed in its schedules. The rates of pay of the mechanics, which may vary according to local conditions and according to whether they belong to the servicing company or are recruited locally, is agreed jointly, the servicing company then assuming the responsibility for all accounting.

The joint handling organization is open to the three parties to the Beneswiss Agreement, but, in practice, it has so far operated only in favour of two of the airlines at each airport, the third airline being satisfied with the limited advantages specified for airlines which participate in the agreement without participating, at a given airport, in the joint organization. Thus, during the summer of 1951, Swissair did not participate in the cost of maintaining mechanics at Düsseldorf and Frankfurt, the former assigned to Sabena, the latter to KLM, and jointly organized by these two airlines. Likewise, KLM did not participate in the service at Paris which was assigned to Swissair and organized jointly by the latter and Sabena. The nature of the technical services thus provided explains how this dual system works, and each of the airlines can accept the risk of not enjoying at an airport assistance of the optimum standard provided by the co-operation of its two partners. This leads us to consideration of the advantages offered by this agreement as well as of the problems and difficulties it involved (see text of Beneswiss Agreement II in Appendix III).

2. - ADVANTAGES OF THE AGREEMENT AND PROBLEMS RAISED

a. - Usefulness of the service to the operators

The presence of a mechanic provides, for the company which uses him, a safeguard against the consequences of technical trouble which can be remedied at the airport. This safeguard is only fully effective, however, if the airline participates in the joint organization at the airport, since, if it does not participate, it runs the risk of the mechanic not being available. His not being available may result in flight delays which are a major disadvantage in a short-haul network such as that in Europe. An instance of this was the case of a DC-6 which was immobilized for three hours at a European airport where the Beneswiss ground mechanic had not yet been appointed and where the local staff was unable to carry out a minor repair. This shows the value of the specialized service provided by the Beneswiss Agreement and the maximum advantages to be obtained from it under the maximum co-operation formula.

b. - Economic advantages of the joint service organization

For normal work, the "subscribing" airline has the benefit of the reduced rate on which the subscription terms are based and, it enjoys particularly advantageous terms for exceptional servicing.

Airlines, which are constantly economy-minded, naturally weigh the advantages and disadvantages of the "subscription system". The fewer the technical troubles revealed by operating statistics, the less will be the benefit obtained from the provision of this service. It appears, however, that the quality of the aircraft used and of the maintenance services of an airline do not safeguard it entirely against the risk of such troubles. In any event, the "subscription system", i. e. the more co-operative of the two forms of organization, is tending to develop between the partners under the agreement.

Swissair, which formerly did not participate in any joint ground mechanic organization, assumed responsibility for three airports during last summer (1951). After having dispensed with these services at Nice for some time, KLM has again requested Sabena to provide them.

c. - Problems to be solved

In addition to the establishment of a ground mechanic service, the Beneswiss Agreement provides for a pooling of stocks of spares at airports. In practice, the agent responsible for the stocks held in bond and who holds the keys to the store is the airport ground mechanic. How can an airline requiring a spare part obtain it if that airline is not a subscriber to the ground mechanic service or if the mechanic is not available? In certain countries the customs administration is opposed to the responsibility for such stocks being shared by several employees. Astonishing as this may seem, no adequate solution to this practical problem has yet been found. The customs problem will be referred to again in the next chapter in which establishment of stocks is considered.

There is still a further problem however. The variation in the rates of pay of mechanics in the various countries complicates very considerably the accounts of the handling companies; and there is the additional inconvenience of sometimes having to use, at the same airport, staff paid at different rates for the same job. According to the scale drawn up for the summer of 1951, the ground mechanic service at Milan, provided by a single mechanic belonging to Sabena, costs the two participating airlines more for 18 working hours per week than the service at Nice provided by locally-recruited mechanics for 51 working hours per week.

The foregoing indicates to what extent the effectiveness of co-operative methods in Europe is dependent upon the solution of economic and social problems which are outside the scope of those responsible for specialized forms of co-operation.

D. - THE MULTILATERAL AGREEMENT ON AIRPORTS IN GERMANY

1. - CIRCUMSTANCES WHICH MADE POSSIBLE THE CONCLUSION OF A MULTILATERAL AGREEMENT

Germany, deprived of its sovereignty and operating no air service, was neutral ground.

Moreover, the European airlines are well aware of the deceptive nature of the bilateral agreements which favour particularly the handling company at each airport and do not reduce the costs of the operating companies to the extent which could be achieved by full co-operation.

Taking advantage of the fact that there was no national airline in Germany to "handle" for them, four foreign airlines agreed to organize among themselves a really effective system of co-operation which would eliminate all possibility of discrimination. The result was the conclusion of a multilateral agreement which places all the parties on an equal footing both as regards the sharing of handling costs and the control of expenditure. The results of this organization were the following:

- costs were reduced;
- costs were shared fairly between the parties; Air France, KLM, Sabena and Swissair.

Such important results naturally justify a detailed study of the agreement.

2. - OPERATION OF THE SYSTEM

a. - Assignment of the airports

Each of the contracting airlines undertook to provide at certain airports in Germany, for the benefit of its three partners, the services specified in the agreement. The particular assignments were as follows:

- KLM : Munich, Nuremberg, Frankfurt;
- SABENA : Düsseldorf;
- SWISSAIR : Hamburg, Stuttgart;
- AIR FRANCE : Berlin.

Under the quadripartite agreement the Swiss airlines also assumed responsibility for the Austrian airport at Innsbruck.

b. - Sharing of handling costs

At all airports, accounts of expenditure are kept in a uniform manner. These accounts are constantly available for inspection by all the parties.

In principle, the cost is divided each month in proportion to the number of touchdowns made by each party, each category of touchdown being modified by a coefficient which varies according to the type of aircraft and the nature of the touchdown (in transit, terminal, technical, etc.). The arrangement is studied and discussed at the beginning of each season on the basis of current costs and then agreed jointly.

c. - Classification of services

The quadripartite agreement includes a detailed list of the services provided by the participating airlines. These services, which are divided into ten groups, are more or less the same as those listed in the bilateral handling agreements.

The German quadripartite agreement contains one new feature, however, which is a provision concerning the establishment of a combined technical service (messages, flight control, flight planning).

It is specified, however, that this provision must receive the prior approval of the parties. The reason for this special system is the highly technical nature of the services involved and their bearing on the safety of operation. Co-operation in this field is hindered by certain factors, which have been mentioned previously but deserve stressing again. These are the varying structures of the airlines, their different operating practices and methods, and finally, their different languages. An effort is being made, however, to overcome these difficulties. The classification of services permitted under the four-party agreement and the flexibility of its provisions indicate, as has been seen, a desire to establish, for the European airlines, a multilateral agreement framework, which, in this field, would be more acceptable to most of them than would a fixed form of agreement. The aim, therefore, is to extend the scope of the agreement; first of all, internationally, by obtaining a greater number of participants, and then operationally, by extending it to cover long-haul as well as regional operations.

This twofold programme has already borne fruit. Sabena and KLM, which initiated the plan for the German airports, were joined by Swissair, and, more recently, by Air France. Operationally, the co-operation provided under this agreement now extends to European airports outside Germany (Athens), to the Middle East (Baghdad and Damascus), and to the North Atlantic (Santa Maria, Azores). Other plans are under consideration and are the subject of discussion among the airlines.

d. - Results

The multilateral formula just considered appears to have eliminated the main causes of friction and suspicion between participants, thanks to a system of double invoicing, which makes possible joint control of handling costs. The sharing of duties also lightens, to some extent, the burden of administrative and accounting work of the airlines. It is particularly in savings on operations that specific and useful results have been obtained. At certain German airports touchdown charges were 10 per cent to 35 per cent lower than the flat rates charged by the handling companies before this co-operation.

CONCLUSION

The greater the number of airports served and the smaller the volume of traffic at each airport, the greater is the percentage of total costs represented by handling costs. In Europe, therefore, this problem requires special attention in view of the structure and general economic position of the air network.

This shows that a more general use of the multilateral agreement formula for handling services would be the most effective solution, if not the only effective one. Two questions arise, however:

- Is such general use possible?

- Can this be achieved by the airlines without government intervention?

It would appear that both these questions can be answered in the affirmative, at least as regards the main European airlines and the airports located in the States whose nationality these airlines bear. In fact, the experience gained in Germany appears so convincing that it would be unreasonable not to draw the obvious conclusions. Moreover, from the point of view of competition for long-haul traffic, the handling agreements are not as important as the agency agreements, and the relative degree of publicity given to the accounts of the secondary airports would not reveal to the participants any very important secrets. In practice, therefore, extension of this type of multilateral agreement to include many secondary airports served by the main European airlines should not encounter any insurmountable difficulties.

For the very small airlines and their national administrations this would probably not be the case, since both of these would naturally be inclined to seek, from the provision of assistance to foreign airlines, income which would alleviate their financial burdens. Moreover, these small airlines do not always have sufficient means to provide handling services meeting present air transport requirements, particularly in the case of flight operation services. To sum up, therefore, any rationalization of regional air transport will always encounter the difficulty caused by the great disparity between the nationally licensed companies which are the subject of the present study.

CHAPTER IV

TECHNICAL CO-OPERATION AGREEMENTS

This chapter deals with purely technical forms of co-operation. Certain practical problems in this field, if not the basic problems, may be solved more easily than those involving commercial competition, directly or otherwise. In this particular instance the favourable conditions are both the specialized nature of the activity, which makes it possible to narrow down the joint effort, and the existence of a common factor, namely the use by several airlines of similar types of aircraft or, at least, the purchase of aircraft from a single supplier. While the airlines jealously protect their commercial activity through secrecy, their technicians willingly exchange information of mutual benefit. This contrast is significant and deserves to be stressed.

The first co-operative effort which we shall consider was made in the field of telecommunications. It took the form of the establishment of the Société Internationale de Télécommunications Aéronautiques (SITA), the purpose of which was to assist the airlines in transmitting messages essential for their operations, mainly those essential from the commercial point of view.* In this organization an effort was made to combine efficiency of service with operating principles capable of extensive international application.

It will be seen later how the main European airlines eventually agreed to facilitate the purchase of certain items of aeronautical equipment from their joint supplies, the American manufacturers or, in certain cases, from each other. This is the main purpose of the Committee for Purchases of Aviation Materials (CPAM). In addition, a more extensive programme of facilitation in the technical field was undertaken (standardization of methods and practices, exchange of information, etc.).

* In the beginning, certain airlines were somewhat hesitant with regard to SITA, fearing that commercial secrets might be revealed through it. In practice, however, this risk was found to be negligible as compared with the services provided. This fact nevertheless shows to what extent an effort towards technical co-operation may be hindered when it bears even remotely on the field of economic competition in air transport.

The Beneswiss Agreement, the ground service provisions of which were studied in the previous chapter, enabled Sabena, Swissair and KLM to establish joint stocks of spares at a certain number of airports which they used.

Finally, various attempts were made in Europe to provide aircraft maintenance and overhaul facilities. In this connection, we would mention the establishment of the KLM workshops at Schiphol airport, those of the Société Française d'Entretien et de Réparation de Matériel Aéronautique (SFERMA) at Bordeaux and those of the Société d'Exploitation et de Constructions Aéronautiques (SECA), at Paris. Although these are national undertakings, they nevertheless have had occasion to assist various European airlines, which shows the need which exists in this field and the obvious advantage there would be in organizing joint services.

A. - THE SOCIETE INTERNATIONALE DES TELECOMMUNICATIONS AERONAUTIQUES (SITA)

Since international co-operation in the field of telecommunications and radio aids to navigation has been the subject of various undertakings in continental Europe, in Great Britain and in the United States, it would appear to be necessary to explain briefly the reasons for the establishment of the Société Internationale des Télécommunications Aéronautiques (SITA) on the Continent, of International Aeradio Ltd. in Great Britain and of Aeronautical Radio Inc. (ARINC) in the United States. A look at the origins of these three organizations makes it possible to understand their respective natures which reflect the major differences of viewpoint on international co-operation held by their founders.

1. - ORIGINS OF SITA, AERADIO LTD. AND ARINC

a. - SITA

When the first airlines were established in Europe, the European States assumed responsibility for air safety services. This led to the creation of telecommunications networks, the main purpose of which was to transmit messages concerning safety, meteorology, navigation, etc. The airlines themselves retained responsibility for operational and traffic messages. For transmission of these messages they could use either the public telegraph and telephone services or the telecommunications system of the air navigation services. Messages sent over the public telegraph and telephone services were frequently so delayed as to render them useless. Those sent over the air navigation telecommunications network were given only second priority, after safety messages, and were therefore likely to be delayed or even not transmitted. This situation was acceptable as long as the volume of traffic was small and the speed of aircraft remained low. It is understandable,

however, that, after the last war, the airlines could no longer put up with such conditions. The major European airlines felt the need for a telecommunications network reserved exclusively for their own use. They therefore rented wire circuits from the postal administrations. At the main airports of their European network they established either telephone exchanges or teletype offices which were operated by their own personnel. This organization proved to be costly, since the capacity of each network to handle messages far exceeded the needs of one single airline. Hence the idea of a pooling of networks which led to the establishment of the Société Internationale des Télécommunications Aéronautiques, the structure of which is outlined below. The coverage of this organization actually extended outside Europe as a result of the following circumstances. When Air France established its long-haul routes, in the period between the two wars, it found itself compelled to establish radio-telegraph networks in other continents in order to provide for its navigation services. It retained most of these networks, making them available to SITA for the benefit of the member airlines wishing to use these services.

b. - International Aeradio Ltd.

International Aeradio Ltd. was established in 1947 as a limited liability company with its head office in London. It was originally intended to take over, for civil aviation purposes, the facilities and services of the RAF. Its coverage extended over the main Commonwealth and Empire routes. The IAL programme includes, inter alia:

- installation, operation and maintenance of aids to navigation (telecommunications radio and radar);
- establishment of airport technical services;
- air traffic control;
- flight planning and transmission of information;
- study of equipment purchase programmes;
- planning and co-ordination of services;
- compilation of flight documents, (manuals, charts, etc.);
- an advisory service.

Since the Commonwealth and Empire network extends the world over, it was to the advantage of airlines other than those of the British system to contribute to the work of IAL at those airports which they serve. The work undertaken by the company was to prove particularly useful in areas lacking in facilities (Africa, Middle and Far East). Participation in IAL gradually increased, therefore, and now includes the following companies:

Air France	KLM
Air India	Qantas-Empire Airways
Alitalia	Sabena
Australian National Airways	SAS
BEAC	Swissair
BOAC	TWA
China National Airways	

From this list it will be seen that the major European long-haul operators are co-operating in International Aeradio. However, all the directors of IAL are British technicians and most of the shares of the company are held by BEAC and BOAC.

c. - Aeronautical Radio Inc.

Aeronautical Radio Incorporated was established in the United States in 1929 in the following circumstances. The airlines, which had signed contracts with the Government for the carriage of mail, were to establish and operate their own telecommunication services necessary for the safety of the flight of their aircraft. This obligation constituted a heavy burden on the airlines which were then relatively small undertakings. It was this circumstance that led them to establish, jointly, a company specializing in radio communications in order to work out the necessary systems for the airlines and to operate their telecommunication networks where necessary.

Aeronautical Radio Inc. was established as a non-profit corporation subject to the control of the Federal administration (the Federal Communications Commission). It has two main objects:

- the organization and operation of telecommunication services at airports (Station Service); and
- advice and research in operational matters (technical operation practices and equipment).

The services involved are operated either directly by the Corporation or by the United States airlines under the co-ordinating control of the Corporation. The shareholders number approximately fifty, most of them United States operators. Among the European participants are Air France, KLM, SAS and Sabena. For the latter, the usefulness of ARINC lies mainly in the benefit to be derived from its advisory and research service. In fact, this Corporation has been able in certain cases, through its constant co-operation with manufacturers, to improve considerably the performance of certain items of flight equipment. As ARINC members only can avail themselves of its facilities, the European airlines have had to become members in order to enjoy its benefits.

ARINC later extended its activities abroad, particularly in South America, where it supervised the establishment of radio networks required by the American airlines.

Since one of the purposes of this study is to point out the various features of inter-line co-operation, it might be useful to quote the following extract from a criticism of International Aeradio Ltd., which appeared in the aviation press:*

"The original conception of the British company was to cut right through national rivalries and function as an entirely international body. As things are now, the existence of three separate bodies, each with national bases, merely serves to confuse the issue and waste money and energy. . . . Another undesirable feature of these rivalries is that the separate companies inevitably act as 'ambassadors' for the products of their respective radio industries, thereby only confusing the air route aids situation, the very thing each of these companies was originally intended to overcome.

It seems that the reason why International Aeradio Ltd. failed to take on with IATA was because it was formed as a British Company, in the first place with British directors. Obviously this immediately caused other countries to be suspicious of its intentions and encouraged them to think that they must go into competition, hence CITA.** Anyway, the result is that today, two years after International Radio Ltd. was formed, it is no more international than the American outfit. . . . I suggest that the sensible thing to do to get a truly international body would be to merge Aeradio, ARINC and SITA and put them at the disposal of IATA."

This article brings out clearly one of the main obstacles to international co-operation in this field. It does not appear, however, that the same criticisms can be levelled at SITA, for reasons which will be given later. In the case of this particular organization, the airlines of Continental Europe have set an example of true international spirit. It may therefore be useful to describe the structure and organization and operation of SITA in some detail.

* "The Aeroplane", 10 December 1948, p. 737.

** SITA was originally called the Compagnie Internationale des Télécommunications Aéronautiques.

The international value of SITA lies partly in its development from a system of separate agreements to a co-ordinated organization, which permits a greater degree of co-operation between the airlines. Before considering the statute and operation of the company and the results it has achieved, we will recall briefly its history.

2. - THE DEVELOPMENT STAGES

a. - First stage: bilateral agreements

In the immediate post-war period, a number of airlines had concluded agreements which aimed at facilitating the operation of their "point-to-point" telecommunications, either on certain well-defined traffic routes or within a particular area. However, this co-operation was, in practice, merely on a bilateral basis. For instance, Air France had an agreement with TWA for the transatlantic service and its European extensions beyond Paris (Geneva, Rome), and in their territories, the three Scandinavian countries were also co-operating in this field.

b. - Second phase: centralization of efforts and establishment of SITA

The idea of centralizing these various activities, which had already been envisaged by some experts, took shape early in 1949. This development facilitated by a meeting in Paris of the International Telecommunication Union (ITU), at which the principle of sharing rented circuits was considered. It was in February of that year (1949) that the company was formed under its present statutes.

c. - Third phase: from co-ordination to operation

The present organization of SITA represents a third phase in the development of European aeronautical telecommunications towards a close co-operative system. Until recently, the purpose of the company was to co-ordinate transmission between the airlines and to channel such transmission through a certain number of centres in order to rationalize receipt and dispatch of messages. The company's main function remained an accounting one, however, and SITA did not engage in any managerial activity.

Today, however, instead of acting merely as a co-ordinator at those centres where it operates, the company itself now operates the centres. In addition to simple liaison, the company now has the added responsibility for administration and management, which has increased its responsibilities, but has ensured a higher degree of efficiency by means of this system. This development was possible under the constitution of the company, the detailed provisions of which are considered below.

3. - STATUTES AND METHODS OF OPERATION

SITA was officially established on 23 February 1949, as a co-operative society organized under the laws of Belgium, and having its principal offices in Brussels.

The following are the main outlines of the statutory objects and working methods of the company:

a. - Objects

"The objects of the Company are to study, establish, acquire, use and operate communication facilities in all countries, with a view to ensuring transmission of all categories of messages useful to the operations of its member airlines, with the exception of messages of a personal nature and intended for members of the public. The Company shall have the additional object of providing, at the request of Governments or international bodies, air-ground communications and navigational radio aid facilities, provided agreement can be reached on the financing thereof. The Company may also engage in activities in the technical field of radio communications." (Article III of Articles of Association)

b. - Participation

"Each airline shall contribute towards the capital of SITA in proportion to its liability for the total operating expenses of the Company. For working purposes, accounts shall be kept to determine the cost of handling messages of each airline on SITA networks or on those of contracting companies.

The amount of such costs shall serve as the basis for apportionment of the capital of the Company between the member airlines. This apportionment shall be made each year one month after the date of the annual general meeting, the first apportionment to be made in 1951 on the basis of the preceding year's figures." (Article 11)

c. - Apportionment and limitation

"The member airlines undertake to relinquish or acquire the number of shares required by this apportionment as provided by the Board of Directors. However, no airline may hold nor be later required to hold less than one share. No group of airlines of the same nationality or belonging to the same financial group shall contribute more than twenty per cent of the capital of the company. Any such airlines of the same nationality or belonging to the same financial group shall themselves indicate in what manner they propose to divide among themselves the shares forming twenty per cent of the capital of the company which are apportioned to them." (Article 12)

Thus it is seen that the principle of apportionment laid down in Article 11 is qualified to a great extent by the 20 per cent maximum share-holding rule of Article 12. If the principle were applied that each member should contribute towards the capital in proportion to the use it makes of the Company, certain members would inevitably gain a predominant influence. It was in order to avoid this difficulty that the rule was adopted that each associate should hold not more than twenty per cent of the capital of the Company, each associate being liable only up to the amount of its holding without any possibility of there being any joint and several liability. The manner in which transfers of holdings shall be effected under the annual apportionment of the capital of the Company is laid down by the Board of Directors. The latter may also authorize any other transfer of shares, provided the consent of at least three-quarters of the Directors is obtained and that the decision is taken by unanimous vote of those attending. (Article 13)

d. - Capital

The initial minimum capital was fixed at 190,000 Belgian francs divided into 950 registered shares of 200 Belgian francs each.

Most of the equipment used by SITA remains the property of the participating airlines which have agreed to place it at the disposal of the company. In certain cases, SITA has had recourse to local facilities (hire or hire purchase of equipment by various airlines). The company has not therefore had to incur much capital expenditure. The capital required for its administrative facilities (premises, offices, etc.) has been provided in the form of advances by the member airlines. However, as SITA grows it is anticipated that a working capital will be required and this matter is under consideration at present.

e. - Administrative bodies

The administration of SITA is shared by three bodies:

- the Board of Directors;
- an Executive Committee;
- the General Meeting of Shareholders.

The Board of Directors is formed of not less than three and not more than eleven members. Each associated airline holding at least fifty shares is entitled to appoint a Director who must be a representative of that airline or a member of the staff of a telecommunication agency established by the airline. Airlines which do not hold the minimum number of shares required may combine and appoint a joint director.

The Executive Committee is a body of limited membership responsible for the everyday conduct of the company's business. Its three members are appointed from among the directors by the general meeting of shareholders.

The ordinary General Meeting of Shareholders is held annually on 31 March and extraordinary meetings may be held whenever necessary.

4. - MEMBERSHIP AND ACTIVITIES OF SITA

Membership of SITA is restricted to airlines which are members of IATA.

The membership at present includes the following fourteen companies:

ABA	DDL	KLM	TCA
AIR FRANCE	DNL	SABENA	TWA
BEAC	EL AL	SWISSAIR	
BOAC	IBERIA	TAE (National Greek Airlines)	

Table VIII shows the telecommunication (teletype circuit) centres of the European-Mediterranean Region. It will be seen that, out of the twenty centres shown, nine, or almost half, are operated directly by SITA. As mentioned previously, the development of the company's activities led to an increase in its direct operating responsibilities. Among the centres it has acquired recently are Düsseldorf, formerly operated by Sabena, and Salzburg.

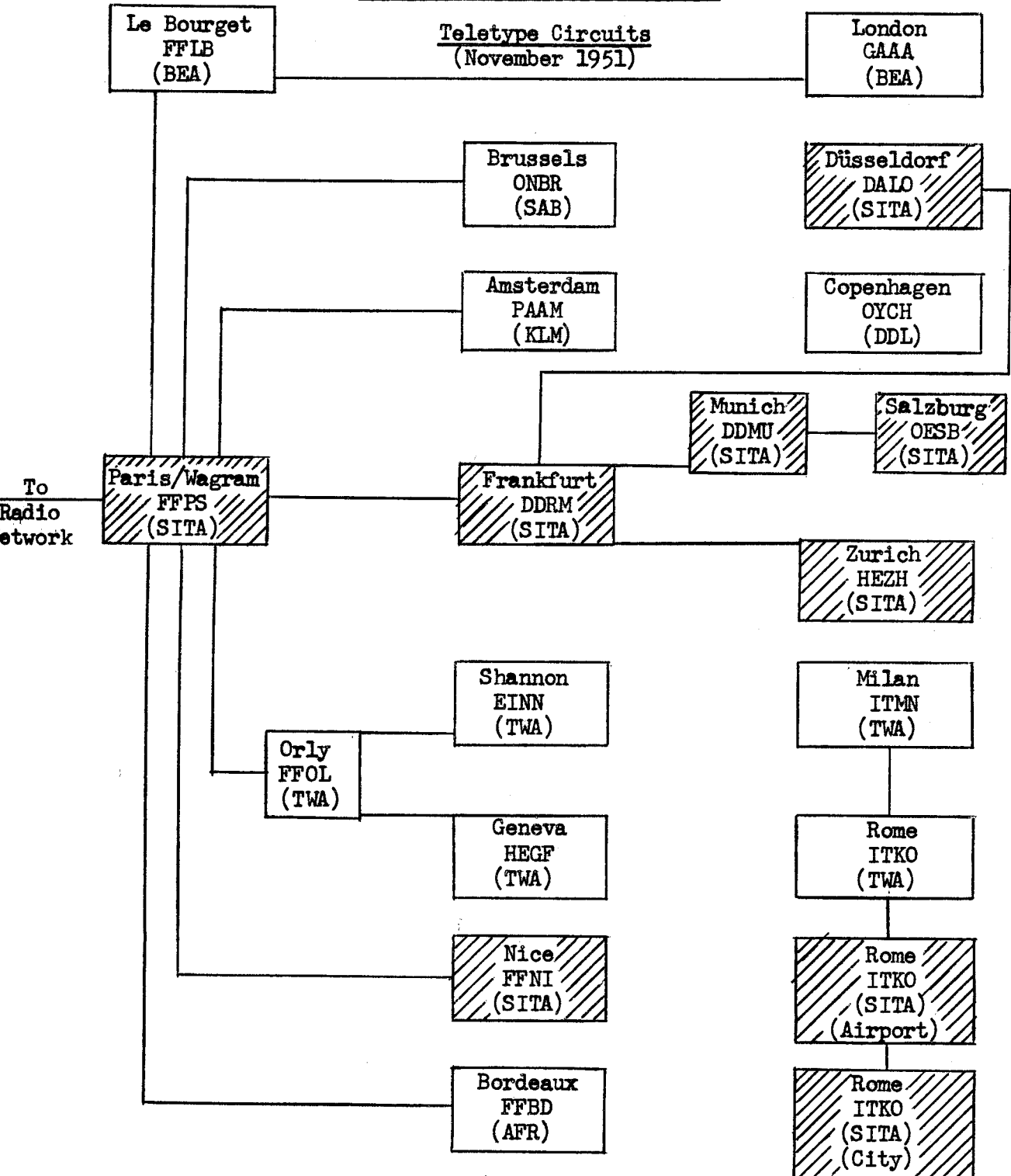
Since its foundation, new members have joined SITA. The new members include airlines of the European-Mediterranean Region (Iberia, TAE (Greece), EL AL) and one non-European company, Trans-Canada Airlines.

The following results give an idea of the activity of SITA over a recent period:

TABLE VIII

TELECOMMUNICATION CENTRES

European-Mediterranean Region



Upper letters represent the ICAO place name abbreviations: e.g., Brussels-ONBR
 Lower letters represent the abbreviation of the airline or of the agency
 responsible for operation of the centre: e.g., Brussels:SABENA.

May 1950 - May 1951

- Telegraphy traffic:	10 814 591 words
- Radio traffic:	<u>16 792 833</u> words
Total traffic:	27 607 424 words

The proportions of the different types of message in this total are as follows:

- Traffic messages:	65 per cent
- Operational messages:	30 per cent
- Administrative messages:	5 per cent

These results show the very great importance of the traffic aspect of this activity. Under this general heading are included, mainly, any messages regarding load capacity of an aircraft departing from a given airport, which can be received by an operator in time for him to make use of them. When an airline is able to ascertain the number of seats or the non-utilized load capacity on its aircraft departing from one airport, it is in a position to prepare its loads at the next stops on the route. This advantage is all the more important in that it benefits the user as much as it does the operator.

5. - BENEFITS DERIVED FROM SITA

The benefits derived can be evaluated from two different aspects:

- firstly, the material benefits (economic and financial) derived from the company by the participating airlines;

- secondly, the value of the international co-operation which SITA represents, is a definite asset from a political point of view.

a. - Material benefits

The establishment of SITA has enabled the airlines to effect substantial economies. In their provision for telecommunications, the most costly items were equipment and personnel. By relieving the airlines of the necessity of investing considerable sums in equipment and by reducing staff costs, SITA has contributed towards a reduction in the cost of this essential means of

communication. Likewise, the centralization of effort in a combined organization has contributed to greater efficiency in this field. The material benefits are therefore twofold. On the one hand, the airlines avoid the waste of money and effort which inevitably results from individual action and, on the other, they achieve far greater efficiency through joint action.

b. - Political benefits

The idea behind the establishment of SITA can be compared and even favourably contrasted with the organization of Aeradio Ltd. and ARINC, since, as will be recalled, the former is based on a desire to maintain a reasonable balance between the nationalities represented by neutralizing the effects of actual inequalities. Not only do the clauses limiting financial and administrative participation in the company prevent any national groups from gaining a dominant influence, but, in the case of multiple national airlines, these very clauses make a standard telecommunications policy essential, thus simplifying the task of SITA and strengthening its co-ordinating and controlling activity.

Another positive result is obtained, from the policy and general organization point of view, in that the development of the company to its present stage enables it to function as an actual operator of telecommunications. When the company was responsible for co-ordination only, certain disadvantages were found in the use of staff seconded from the airlines but which did not come entirely under the control of SITA. This situation was clarified, however, when the company assumed responsibility for operation of the transmission centres. SITA has thus gradually assumed managerial and administrative control over a staff formerly having various allegiances. This was an important step in the development of the company towards a position where it was officially entitled to act as the governing body in the field of telecommunications.

Finally, the national airlines have collectively derived from their participation in SITA a further benefit that might be described as the anonymous character inherent in sound internationalism. In the present circumstances, the airlines, which are instruments of States, are at the mercy of forces, which may have disastrous effect unless a sound world-wide organization is achieved. The small airlines and the beginners in the field are frequently dependent on the larger and more ambitious ones. In certain regions in particular, several powerful companies may compete bitterly for the traffic of the smaller local companies. In such cases, rather than risk the disadvantages of making a delicate choice between one foreign company or another offering its services (including telecommunications), the local airline will turn to SITA. The existence of such an international company may thus appear to be a refuge. From this point of view, it provides, particularly for small countries, the safeguards inherent in a truly international organization. This is a valuable and important role which, although performed on a limited scale and in a specialized field, nevertheless produces positive results. It may well also serve as an example and may lead to similar action in certain other specialized fields of European air transport.

Since their establishment, these three organizations, SITA, IAL and ARINC, have had many useful contacts. Quite conceivably a wider basis of co-operation may be sought in future in this field of joint effort. In the interests of efficiency and economy, it might be decided in such a case to replace the present system by a new system of co-operation, under which the benefits of the various services at present provided by separate bodies - operations, planning, research and dissemination of information - would be extended to a larger international community.

B. - THE COMMITTEE FOR PURCHASES OF AVIATION MATERIALS (CPAM)

After the end of the war the European airlines went about purchasing their main equipment (aircraft and engines) outside any programme or even thought of co-operation; they soon realized, however, the benefits which could result from joint purchasing from the United States, the common supplier of certain items of their aeronautical equipment. Nevertheless, the results achieved in this field of co-operation have hitherto been very limited. Not only has each company followed its individual policy in purchasing aircraft and engines, but no agreement has been reached, even in principle, for the establishment of common stocks of the very costly spare parts (tail units, controls, landing gears, etc). Only in respect of spare parts held at airports has there been any co-operative effort, either within the terms of special agreements concluded between several companies using the same type of equipment (Beneswiss Agreement), or through a body known as the Committee for Purchases of Aviation Materials, commonly known as CPAM, which is described below:

1. - MEMBERSHIP

At present CPAM is made up of eight European airlines:

Aer Lingus	BOAC	SAS
Air France	KLM	Swissair
BEAC	Sabena	

Participation in CPAM is limited to IATA member airlines. The Head Office is in London and has been entrusted to a member of BOAC.

2. - OPERATION AND RESULTS

The establishment of CPAM was designed to meet the following needs:

- a. - to facilitate the purchase of spare parts in the United States and in soft currency countries;
- b. - to manufacture certain items of equipment in Europe;
- c. - to study various problems of technical co-operation.

a. - Facilitation of purchases in the United States

The intention is to provide European companies with better purchasing and delivery conditions from their common supplier, the United States. Both the customers and the manufacturers should benefit from this arrangement, since the customers would have improved facilities for payment and shorter delivery dates, while the manufacturers, as a result of the joint action of CPAM, would be able to plan their manufacturing and delivery programmes. Political events, forcing the United States to give priority to its rearmament effort, have in fact prevented this co-operation from producing all the results anticipated. Nevertheless, the work done by CPAM in the United States has been useful, owing to the direct contacts established with the US authorities. In fact, representatives from the Department of State and the Civil Aeronautics Administration take part in the periodic meetings held on the other side of the Atlantic. A number of difficulties arising out of complex administrative formalities have been solved by this co-operative effort.

CPAM has also opened up an internal European market, of which members have made good use. Some European airlines had substantial stocks of spare parts, upon which their colleagues have been able to draw - particularly through regional arrangements - with the twofold advantage of avoiding dollar expenditure and obtaining immediate delivery.

b. - Manufacture of components in Europe

It would be far easier for European operators to obtain certain items of American equipment if they could be manufactured under licence in Europe. An attempt is being made at present to have this done by European firms. The Société Hispano-Suiza has obtained a licence from Pratt & Whitney to manufacture components of the R-2000 engine, used on the DC-4. The FIAT company is trying to do the same with the R-2800 engine (DC-6 and Convair 240). However the possibilities of the European manufacturers are still limited. Hispano-Suiza is not equipped for completely independent production. At present the casting and stamping of some parts (e.g., crankcases) is done in the United States and only the machining in France. In the case of FIAT, the

matter is still under consideration. The Italian airlines do not belong to CPAM and the facilities at the disposal of the Italian industry have not yet been fully investigated.

Only under certain conditions can such a system develop. To begin with, it is necessary for the licensees to prove that their production is first class. In addition, the efforts towards collective organization should not be hindered by intra-European currency exchange and customs problems.

c. - Study of technical co-operation problems

Among the problems studied by CPAM is that of pooling stocks of costly spare parts. These units, known as "major components" or "insurance parts", are indeed very expensive and the investment involved may place a heavy burden on the budgets of the airlines. Joint action in this field would consequently enable airlines to make substantial economies in capital investments. However, as mentioned previously, this matter is still only in the study stage.

Less ambitious no doubt, but of unquestioned value, are the efforts of CPAM towards effective co-operation in the following fields:

- extension of the exchange of information on technical matters;
- standardization of methods of classifying equipment and establishing standard check lists;
- unification of conditions for charter, hire and loan of equipment.

The scope of CPAM is limited by the very concept underlying it. Since it is composed of technicians from the various companies, its purpose cannot be other than to reach agreement among technicians. It has been found, however, that the items on which agreement has been reached cover but a small proportion of the capital invested in stocks by the operators. Fully effective co-operation between airlines in this field is conditional upon the adoption of identical equipment programmes. However, in the matter of fleet programmes, each of the major European airlines is known, at the present time, to follow its own policy which - in most cases - merely reflects the policy followed by the State whose "chosen instrument" it is. The problem, therefore, is really beyond the scope of the airlines themselves. International co-operation through the standardization of aircraft fleets thus hinges on the solutions adopted by the individual States in dealing with questions of national policy.

C. - ORGANIZATION OF STOCKS OF SPARE PARTS
UNDER THE BENESWISS AGREEMENT

The main objective of the Beneswiss Agreement has been the joint organization of stocks of spare parts for the aircraft used by the three participating airlines. In a previous paragraph the application of this Agreement to the maintenance services at airports was discussed. It will be recalled that the organization of these stocks, initially for the Convair 240 (Beneswiss I), was later extended to DC-3, DC-4 and DC-6 aircraft.

1. - ASSIGNMENT OF AIRPORTS

The three airlines were assigned a number of airports initially in the European region only, and later elsewhere. At the airport assigned to it, the airline providing the service (called "Servicing Company" in the Agreement) takes over a stock of spare parts and tools which are made available to the participants ("operating companies") under conditions described further on*.

Organization differs according to whether the airports are the main bases of the companies or bases organized ** outside their national territory.

In the three bases (Amsterdam, Brussels, Zurich) the metropolitan company takes charge of and makes available to its co-members a more complete stock of spare parts for each of the four types of aircraft, than the stocks held for each aircraft at the other airports. The composition of these base stocks is fixed according to the terms of special agreements, independently of the Beneswiss Agreement.

Pooled stocks held at the bases may consist of spare parts for the four types of aircraft, or only for certain types. It may consist, on the other hand, of spare parts for one type of aircraft belonging to one airline and spare parts for another type of aircraft belonging to another airline. For instance, in Paris, where the servicing airline is Swissair, Convair 240 spares are held for KLM, and DC-3 spares for Swissair. The composition of the stocks held at

* The text of the Beneswiss Agreement II is given in Appendix III to this study.

** Geneva airport is the only organized base located within a metropolitan territory. It is deemed an "organized base" under the terms of the Agreement, but in practice Swissair maintains a complete stock at that airport, as it does at its main base in Zurich.

the airports is laid down in the Agreement, an Annex to which (Annex B) contains a list and the number of spare parts (landing gears, items of electrical equipment, engine components, propeller parts, etc.) and tools which the servicing company undertakes to make available to the other partners at specified airports.

The assignment of airports to each airline and of stocks for each type of aircraft, appears in Annex A to the Agreement. The series of maps which follow indicates the locations where stocks for each type of aircraft are kept. Since stocks have recently been organized at a number of stations outside Europe, it was thought better to show the present situation (September 1951) rather than that existing during the 1951 summer period. The organization of the bases is modified according to the requirements and the means of the participants, either extending the system to new stations or improving the existing ones. Thus, at Hamburg, where Swissair is the servicing company, the Convair stock provided by KLM during the 1951 summer period has now been replaced by a Convair stock provided by Swissair. At Paris, another base handled by Swissair, only a stock of DC-3 spares belonging to Swissair was held this summer. A Convair stock provided by KLM has since been added. At times difficult problems arise in connection with this co-operation. This is the case, particularly at the important London base which the three companies have not yet succeeded in organizing very satisfactorily. Responsibility for servicing has not yet been assigned and the airlines lend each other, under temporary arrangements, spare parts from the stocks which the three companies have provided at that airport (see Maps VII, VIII, IX and X).

The Annexes to the Agreement (spare parts and mechanic services) may be cancelled by any of the parties subject to 30 days' prior notification. In practice, any changes in the co-operative organization involve frequent consultation between the three airlines.

2. - OPERATION OF THE SERVICE

Spare parts are provided on a temporary loan basis and every item that is lent must be returned in good condition to the servicing airline at its main base within eight days. A fine is imposed for delays, even those due to force majeure, or defect of the part returned. This is done by debiting the defaulting company the list price plus 25 per cent. A part which has been lent may be replaced in the stock by another of the same type, but this principle of equivalent replacement is only allowed in exceptional cases and after agreement between the parties. Any item which is not covered in the contractual list and is supplied by the servicing company shall be repaid by the operating company at cost price. In the event of aircraft types used by other members not being used by the servicing company at bases which have been assigned to it, the operating companies may require the servicing company to take charge, without payment, of a "reasonable quantity" of spare parts to be supplied by the operating companies. The servicing company is then responsible for customs clearance, storage, safe-keeping, etc. However this formula applies only in respect of bases provided with mechanics and is subject to the user companies sharing the cost of maintaining these mechanics according to the "payment" system previously described.

CARTE VII

MAP VII

CARTA VII

ACCORD BENESUISSE II - STOCKS DES PIECES DE RECHANGE CONVAIR 240 (octobre 1951)

BENESWISS AGREEMENT II - STOCKS OF SPARE PARTS CONVAIR 240 (october 1951)

ACUERDO BENESUIZO II - EXISTENCIAS DE PIEZAS DE RECAMBIO CONVAIR 240 (octubre 1951)

- La compagnie figurant entre parenthèses est celle qui a la charge de l'escale et qui, sauf indication contraire, y fournit le stock de rechanges. Lorsque le stock est fourni par une autre compagnie que la compagnie assistante, on l'a indiqué par une S, suivie du nom de la compagnie fournissant le stock.

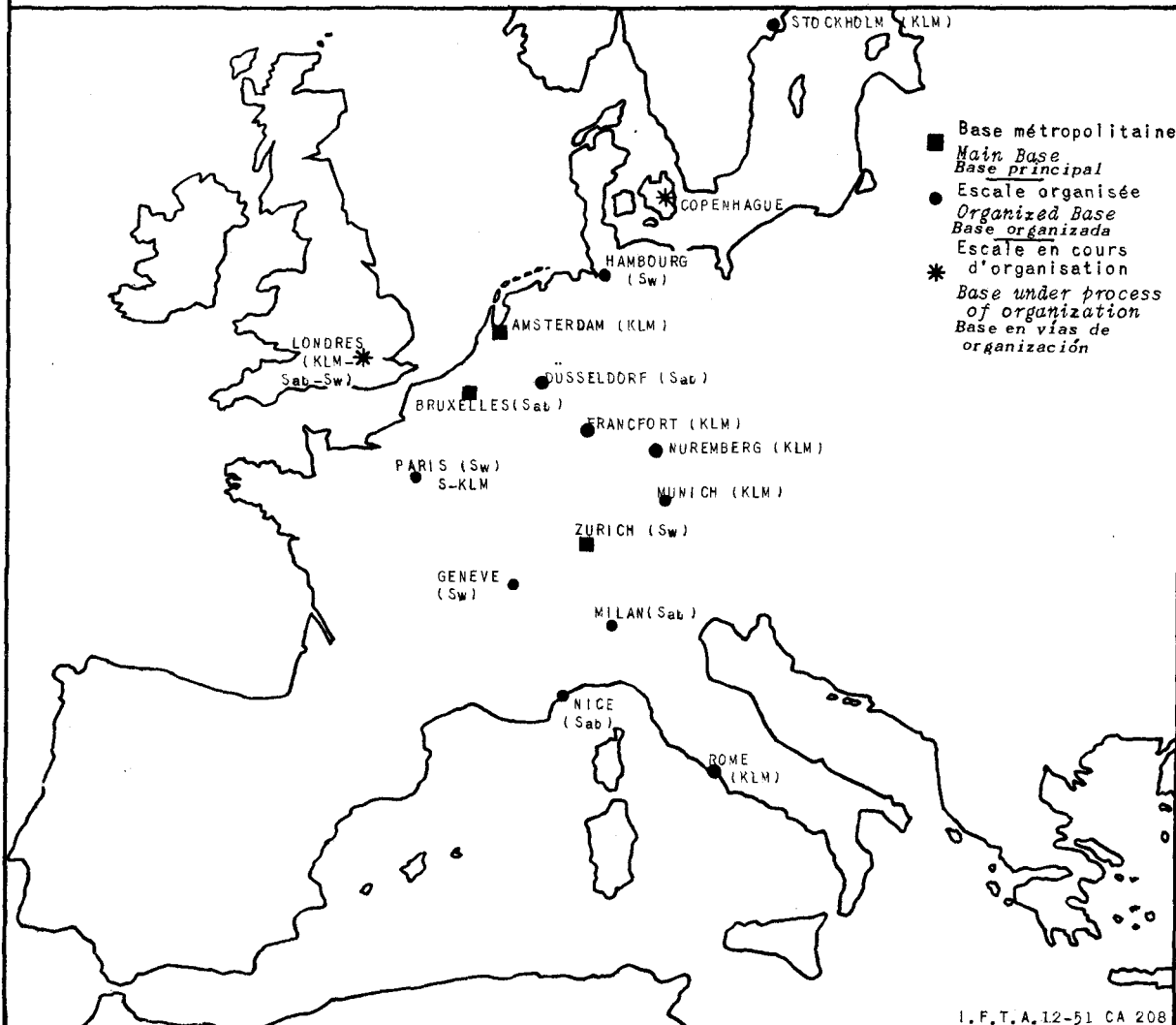
Ex.: PARIS (Swissair)
S - KLM

- The airline whose name appears in brackets is the servicing airline at the base and, except otherwise indicated, provides the stock of spare parts. Stocks provided by other airlines than the servicing airline are indicated by an S followed by name of providing airline, thus:

PARIS (Swissair)
S - KLM

- La empresa cuyo nombre aparece entre paréntesis es la que tiene a su cargo el servicio de la base y la que, salvo indicación contraria, suministra las piezas de recambio. Si los suministros se hacen por empresa distinta que la que presta el servicio aéreo, se indica tal circunstancia con una S seguida por el nombre de la empresa que suministra las piezas de recambio.

Ejemplo: PARIS (Swissair)
S - KLM



CARTE VIII

MAP VIII

CARTA VIII

ACCORD BENESUISSE II - STOCKS DES PIECES DE RECHANGE DOUGLAS DC. 3 - (octobre 1951)

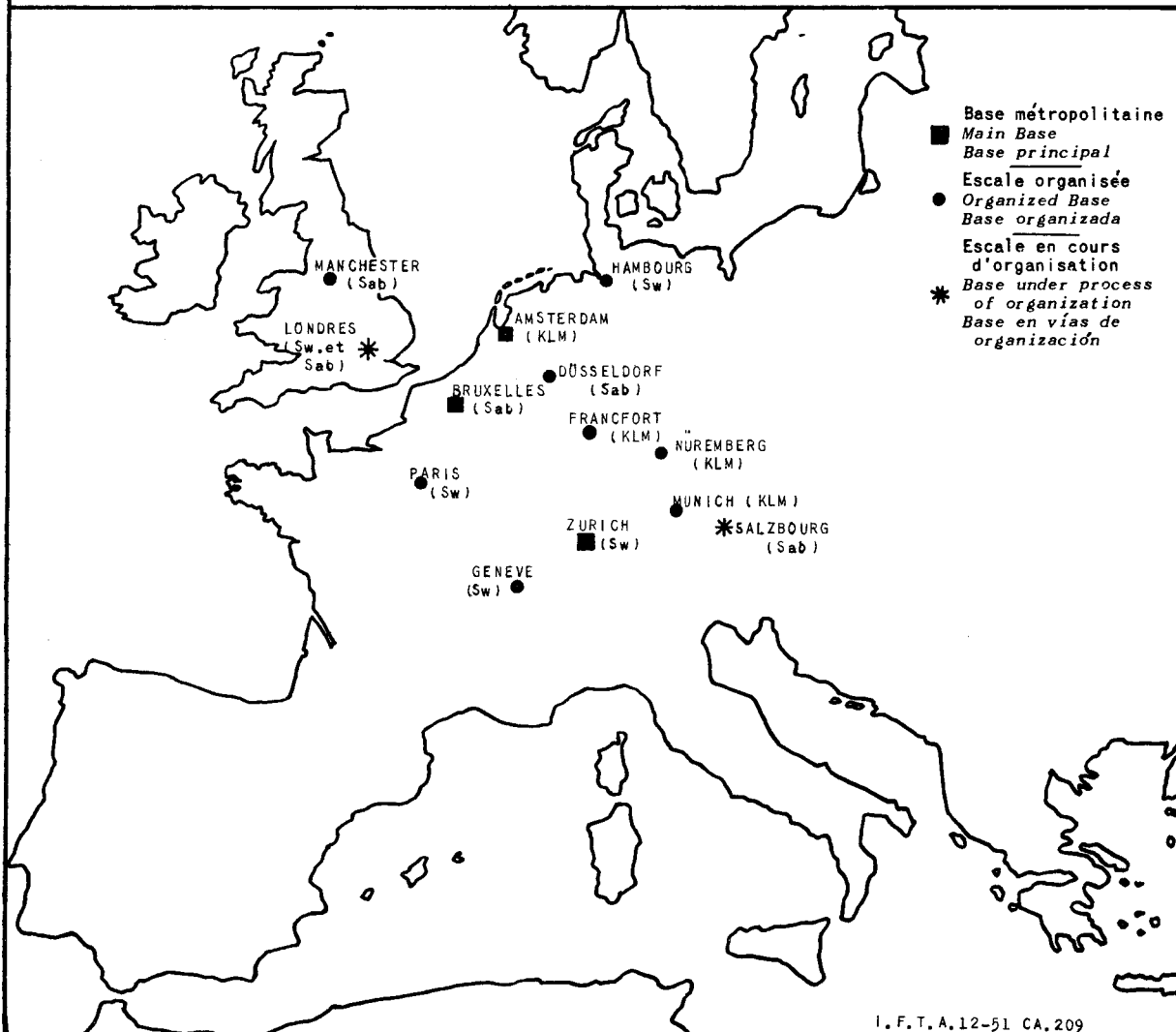
BENESWISS AGREEMENT II - STOCKS OF SPARE PARTS DOUGLAS DC.3 - (october 1951)

ACUERDO BENESUIZO II - EXISTENCIAS DE PIEZAS DE RECAMBIO DOUGLAS DC. 3 - (octubre 1951)

La compagnie figurant entre parenthèses est celle qui a la charge de l'escale et y fournit le stock de rechanges.

The airline whose name appears in brackets is the servicing airline at the base and that which provides the stock of spare parts.

La empresa cuyo nombre aparece entre paréntesis es la que tiene a su cargo el servicio de la base y la que suministra las piezas de recambio.



CARTE IX

MAP IX

CARTA IX

ACCORD BENESUISSE II - STOCKS DES PIECES DE RECHANGE DOUGLAS D.C. 4 (octobre 1951)

BENESWISS AGREEMENT II - STOCKS OF SPARE PARTS DOUGLAS DC.4 (october 1951)

ACUERDO BENESUIZO II - EXISTENCIAS DE PIEZAS DE RECAMBIO DOUGLAS DC.4 (octubre 1951)

La compagnie figurant entre parenthèses est celle qui a la charge de l'escale et qui, sauf indication contraire, y fournit le stock de rechanges. Lorsque le stock est fourni par une autre compagnie que la compagnie assistante, on l'a indiqué par une S, suivie du nom de la compagnie fournissant le stock.

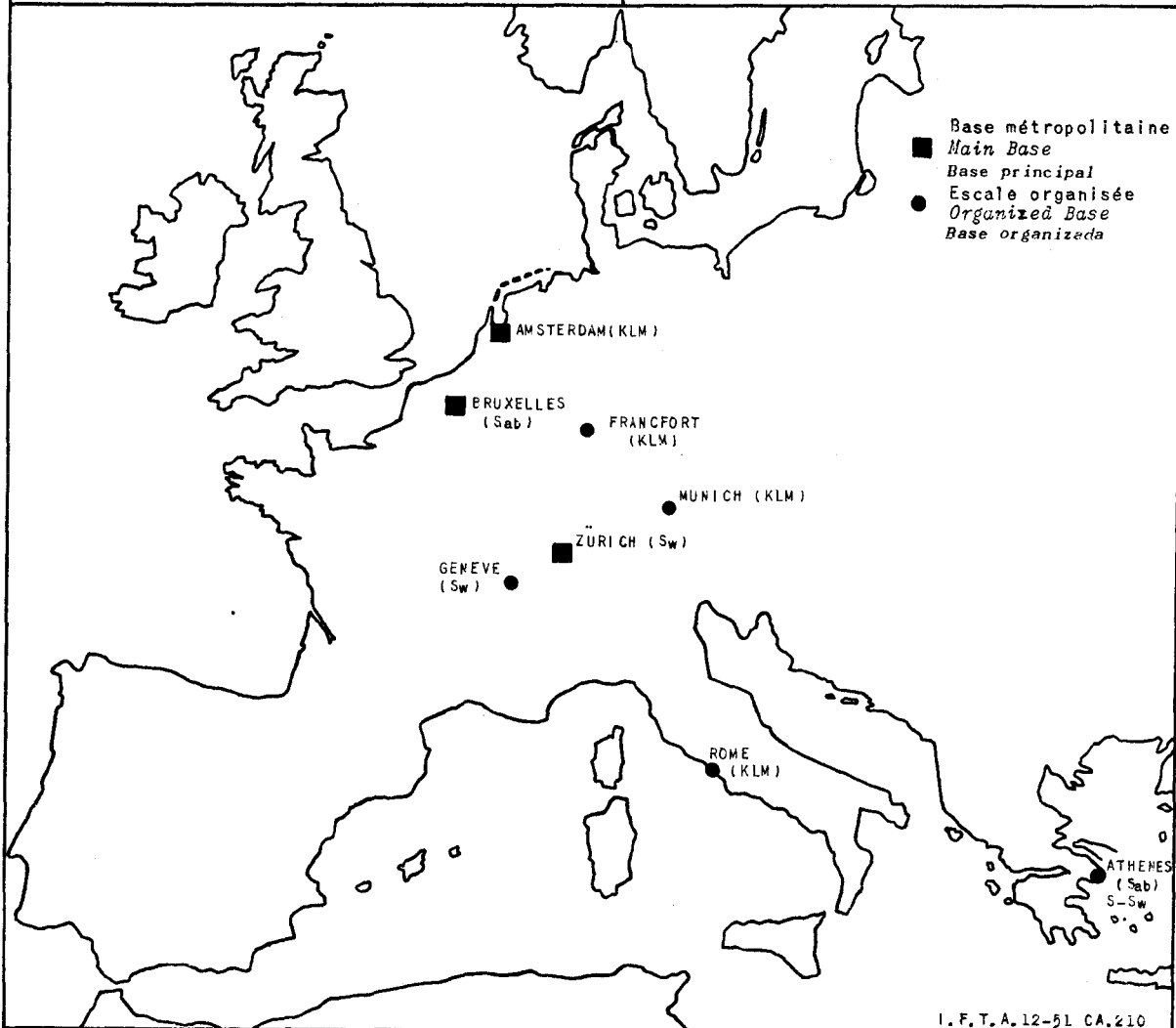
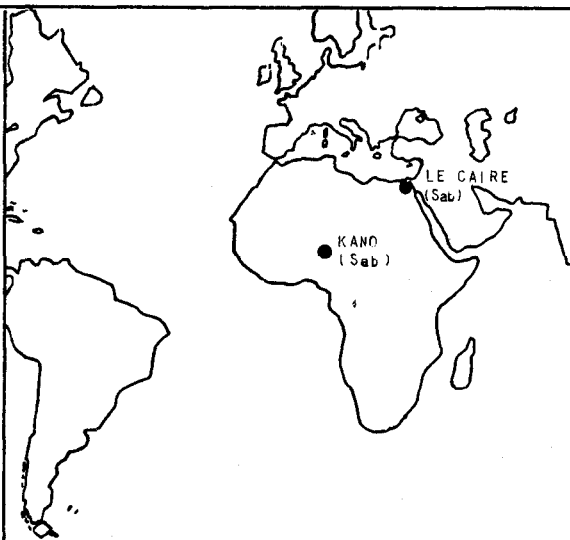
Ex. ATHENS (Sabena)
S Swissair

The airline whose name appears in brackets is the servicing airline at the base and, except otherwise indicated, provides the stock of spare parts. Stocks provided by other airlines than the servicing airline are indicated by an S followed by name of providing airline, thus:

ATHENS (Sabena)
S Swissair

La empresa cuyo nombre aparece entre paréntesis es la que tiene a su cargo el servicio de la base y la que, salvo indicación contraria, suministra las piezas de recambio. Si los suministros se hacen por empresa distinta que la que presta el servicio aéreo, se indica tal circunstancia con una S seguida por el nombre de la empresa que suministra las piezas de recambio.

Ejemplo: ATENAS (Sabena)
S Swissair



CARTE X

MAP X

CARTA X

ACCORD BENESUISSE II - STOCKS DES PIECES DE RECHANGE DOUGLAS DC.6 & DC.6 B (octobre 1951)

BENESWISS AGREEMENT II - STOCKS OF SPARE PARTS DOUGLAS DC.6 & DC.6 B (october 1951)

ACUERDO BENESUIZO II - EXISTENCIAS DE PIEZAS DE RECAMBIO DOUGLAS DC.6 Y DC.6 B (octubre 1951)

La compagnie figurant entre parenthèses est celle qui a la charge de l'escale et y fournit le stock de rechanges pour le type d'appareil indiqué. Lorsque le stock est fourni par d'autres compagnies, on l'a indiqué par le type d'appareil suivi du nom de la compagnie fournissant le stock correspondant.
 Ex. GANDER (KLM)
 DC.6 Sabena
 DC.6 B Swissair

The airline whose name appears in brackets is the servicing airline at the base and that which provides the stock of spare parts for the type of aircraft indicated. Stocks provided by other airlines are indicated by the type of aircraft and name of providing airline, thus:
 GANDER (KLM)
 DC.6 Sabena
 DC.6 B Swissair

La empresa cuyo nombre aparece entre paréntesis es la que tiene a su cargo el servicio de la base y la que suministra las piezas de recambio para los tipos de aeronaves indicados. Cuando los suministros se hacen por otras empresas, se indica por el tipo de aeronave seguido del nombre de la empresa que suministra las piezas de recambio correspondientes.
 Ejemplo: GANDER (KLM)
 DC.6 Sabena
 DC.6 B Swissair

- Base métropolitaine
- Main Base
- Base principal
- Escale organisée
- Organized Base
- Base organizada
- Escale en cours d'organisation
- * Base under process of organization
- * Base en vías de organización

3. - ADVANTAGES OF THIS CO-OPERATIVE FORMULA

a. - Reduction of capital investment charges

According to the companies, this is the main advantage of the formula. In the absence of figures, which were not provided, an appreciation of the results can be obtained by an analysis of the task jointly undertaken in relation to the sum of the individual efforts which would be required. (This analysis is given in Table IX)

It will be seen that the total stocks provided co-operatively represent a reduction of 30 per cent as compared with the total which the companies would have to provide if they acted separately. This total, however, represents a maximum, since all the companies do not use the four types of aircraft at all airports. Allowing for this factor, the difference between the two systems appears to be sufficiently important to conclude that the co-operation in this case results in substantial economy.

TABLE IX

Type of Aircraft	Distribution of stocks provided by each company	
Convair 240	(Sabena	5
	(KLM	8
	(Swissair	4
	Total	17
DC-3	(Sabena	5
	(KLM	4
	(Swissair	5
	Total	14
DC-4	(Sabena	3
	(KLM	4
	(Swissair	3
	Total	10
DC-6 and DC-6 B	(Sabena	7
	(KLM	6
	(Swissair	5
	Total	18
General total		59
- Number of bases		25
- Number of co-operative stocks provided		59
- Number of stocks which would have to be provided in the absence of co-operation (Maximum)		100

b. - Other advantages

To some extent, the division of the burden helps to reduce administrative work. This effect appears to be less marked than the one just mentioned, however, since co-operative action itself entails certain requirements such as the exchange of documents, meetings, travel, etc.

On the other hand, among the very positive advantages to the participating airlines is the assurance that all necessary spare parts will be available at the airports served; an assurance which could not be provided if each airline had to establish all these stocks separately.

4. - BARRIERS TO CO-OPERATION AND PROBLEMS REQUIRING SOLUTION

a. - Diversity of methods and practices

The fundamental advantage of using the same aircraft and equipment should carry with it uniformity in conditions of utilization. However, at the present time, although the three Beneswiss parties use the same spare parts, these are frequently listed with the same number in the nomenclature of each company. It is easy to imagine the complexity of trying to prepare, as in the case of the Beneswiss technical Annexes, a detailed and accurate list of a large number of components. Under the present conditions, it is necessary to show, in each of these contractual documents, the number of each part in the nomenclature of each of the three companies. Consequently, as previously mentioned, one of the tasks undertaken by CPAM has been to study the possibility of standardization in this field, and some useful results have already been achieved.

b. - Customs problems

The utilization of stocks held in bond at the various bases raises difficulties to which reference has already been made. Certain national administrations (e.g. Italy) allow storage of stocks only upon payment of a fairly substantial deposit. The custody by a national airline of stocks belonging to another in a third country is not in every case a simple matter. It is essentially in order to avoid customs complications that the Beneswiss Agreement imposes very strict restitution conditions on airlines borrowing spare parts.

D. - ORGANIZATION OF MAINTENANCE AND OVERHAUL SERVICES

It has been considered useful to mention, in this chapter on technical agreements, certain results which have been achieved in Europe in the field of maintenance and overhaul of aeronautical equipment.

The organization of services of this type has been undertaken either by certain airlines (KLM, Air France) or by companies specially established for that purpose. Two cases in France might be mentioned, the Société Française d'Entretien et de Réparation de Matériel Aéronautique (SFERMA), and the Société d'Exploitation et de Constructions Aéronautiques (SECA).

KLM has installed workshops at Schiphol Airport where work is done under contract for various foreign companies. The KLM Report for 1949 gives the figure of 774 engines overhauled during the year, of which 312 belonged to foreign airlines. These include, or included in previous years, both European airlines (the private French company Transports Aériens Intercontinentaux (TAI)) and non-European airlines (the Argentine company FAMA).

Contracts have been concluded between Air France and TWA for the overhaul of the latter's aircraft accessories (flying instruments, electrical equipment, radio, etc.). This is a temporary arrangement, physical circumstances having prevented TWA from doing this work in California. However, Air France has recently been licensed by the Civil Aeronautics Administration of the United States to carry out engine overhauls and maintenance. Negotiations are now under way to extend the scope of this certification to other types of maintenance (airframes, etc.).

The Société Française d'Entretien et de Réparation de Matériel Aéronautique (SFERMA) is a limited company (société anonyme) which since September 1949 has had its workshops at the Bordeaux factory of the Société Nationale de Constructions Aéronautiques du Sud-Ouest (SNCASO). SFERMA has the status of a mixed company, part of its capital coming from SNCASO and part from French private airlines (Transports Aériens Intercontinentaux and Air Maroc).

The work of SFERMA covers maintenance, overhaul, conversion and repair of commercial and military aircraft. The company has a Douglas licence for DC-3 and DC-4 aircraft, and therefore has been able to build up stocks of basic components for these types of aircraft.

The SFERMA Report for 1949 indicates 86 aircraft overhauled, repaired or converted, and 158 emergency and miscellaneous repairs. Up to the present, the Company has worked for French customers only (Air France; private airlines in France, North African and French Union airlines and the French Air Force). Its business has not therefore been international but this fact, as mentioned in our conclusion, is doubtless partly due to the competition of similar foreign organizations.

The Société d'Exploitation et de Constructions Aéronautiques (SECA) on the contrary is a case of international co-operative effort in view of the participation of a large British manufacturing firm and the number of foreign operators among its customers.

SECA is the first of such undertakings in France. It evolved from a company founded in 1946 on the initiative of a group of French technicians, and in June 1949 was transformed into a limited company with financial participation of the British company "Bristol Aeroplane Company". The present capital is 60 million francs with Bristol contributing about one-third and French private companies the remainder.

SECA, which holds a Bristol overhaul licence, has its workshops at Le Bourget and carries out the repair and overhaul of engines and aircraft constructed by that firm (daily checks on the BEA Vickers Vikings equipped with Bristol Hercules engines; overhaul and repair of Bristol Freighters used by the companies Air-Transport, Aviación y Comercio, Air Vietnam). Other types of aircraft overhauled are the DC-3's of Iranian Airways and Compagnie Aérienne de Transports Indochinois, the DC-4's of the company Transports Aériens Intercontinentaux, French military aircraft of the Centre d'Entretien des Réserves Ordinaires and finally aircraft belonging to various other companies as well as privately-owned aircraft. The different work done by SECA (repair, overhaul conversion) is performed under the control of the Civil Aeronautics Administration, the Air Registration Board or the Bureau Veritas respectively, according to whether the aircraft are American, English or French.

From the foregoing remarks, it will be noted that these achievements in the field of aircraft maintenance are the result of independent efforts. Up to the present there has been no attempt towards international organization in this field in Europe. However, the results obtained by the various services which have been set up indicate that these services are needed. The KLM organization at Schiphol and that of SECA at Le Bourget have attracted an international European clientele. Companies from other continents also make use of these services, and this is important since it shows that while the European companies may not be sufficient to provide the revenue to justify a large scale co-operative organization, such an organization could profitably operate if supported by non-European airlines also. The Compagnie Aérienne de Transports Indochinois, for instance, whose DC-3's were previously overhauled at Hong Kong at a cost of 12 million francs, has now signed a contract with SECA which provides the same service at a third of the price. Under these conditions, it is to the interest of the Far Eastern company to obtain this assistance in Europe, particularly if there is a possibility of making the flight with a load. The temporary contracts concluded between TWA and Air France, which have been executed to the full satisfaction of the American Company show that the quality of the services offered in Europe may meet the most severe national standards, and in this respect the approval extended by the United States Civil Aeronautics Administration to the French Company is a particularly interesting and encouraging indication.

A result of this co-operative organization would be the elimination of competition which is already becoming evident in this field also. The financial statement of SFERMA for the year 1950, the first full year of operation of the

company, showed a deficit of almost six and a half million francs. In its report the Board of Directors indicated that the company "has had to face strong competition from other French enterprises and above all from well-organized foreign companies". It would seem, therefore, that the dispersal of efforts has already produced certain negative results. Provided a solution is found to certain problems which have been referred to in this chapter (diversity of languages, standardization of overhaul and maintenance methods and practices), a policy of international co-operation could be extremely useful in this field; and no doubt it is only within this framework that a solution can be found to certain difficulties resulting from the national organization of these services, such as, for example, the taxation of fuel used in engine tests and the extension of laws on working hours to work carried out for foreign companies.

CHAPTER V

POOLING AGREEMENTS

This chapter deals with commercial air transport pooling arrangements. Although this system of co-operation has been applied in other regions of the world, it has always found its main field of application in Europe. Our study of pooling arrangements is divided into three parts:

- A. - Definition, juridical status and general principles of operation of the system;
- B. - Individual analysis of the existing European pooling arrangements;
- C. - Conclusion: comparison with the pre-war system; importance and value of co-operation organized on these bases; lessons which may be drawn for future co-operation in Europe.

A. - DEFINITION AND OPERATION

1. - DEFINITION OF A POOLING AGREEMENT

First of all it is essential to have a clear understanding of what is meant by a pooling agreement. On the one hand, in fact, this type of agreement is frequently associated with others such as Agency Agreements and Agreements on Airport Services which are dealt with elsewhere in this report. On the other hand, it is appropriate to establish a distinction between actual pooling agreements and the category of agreements which, under the title of "Operating Agreements" have, together with the pooling agreement, the common characteristic of leading to specific regulations for the provision of contractual services.

Various works devoted to pooling agreements* concur as to the essential characteristics to be found in this type of agreement, i. e. :

* Study on "Joint Ownership and Operating Arrangements in International Air Transport" prepared by the PICA Secretariat in 1946 - Sub - AT 1 (Working Draft) No. 5, of 28/10/46, p.15 - "Pooled and Joint Operation of International Air Lines", address given at McGill University, Montreal, 14 March 1947, by Capt. Gert Meidell, Vice-President of Scandinavian Airlines System. In addition, a specimen form of pooling agreement is given in Appendix IV.

- the regulation of the services involved;
- the pooling and allocation of revenue.

On examining these two fundamental elements, it will be seen that, while the former may be the subject of an agreement without the latter (as in the case of Operating Agreements), the latter cannot be included in an agreement without the former. Therefore a pooling agreement and the allocation of revenue imply, per se, an operating agreement.

It follows that an adequate definition of a Pooling Agreement should, in our opinion, include the two foregoing elements. The following definition appears to satisfy this requirement:

"An agreement between air carriers for the operation by them of one service or one group of services, including the allocation of revenue derived from such operation".*

This is a brief and simple definition which can be adopted provided a "group of services" is understood to include different systems of co-operative operation. In actual practice, either the participants operate jointly all the services covered by the agreement; or services are allocated among the participants, each one of which operates separately; or the group of services is operated under any combination of these two patterns.

2. - LEGAL STATUS OF POOLING AGREEMENTS

Since the legal nature of pooling agreements may be a matter of discussion, it might be appropriate to specify the nature of these arrangements. The following comment appears in the review "Espaces" referred to above:

"A pool does not constitute a merger, since strictly speaking, it does not mean merging operations; moreover, one of its purposes is, if not to allocate profits, at least to allocate revenue. Neither is it in any way a partnership, since there is no joint contribution of capital, and each of the parties works for his own account, bearing the losses and keeping the profits severally. Thus, it is evident that a pool is a commercial agreement, without special legal status, and that, as such, it is governed by the general law of contracts."

* "Les Pools dans l'Aviation Commerciale", by Mr. Lemoine, Secrétaire Général d'Air France, "Espaces", April 1946, p.15.

** "Les Pools dans l'Aviation Commerciale", by Mr. Lemoine, op. cit.

In the light of this comment, it does not seem that difficulties could arise in the international sphere as a result of the juridical status of the typical Pooling Agreement. It is known that some national legislations contain provisions aimed at eliminating the dangers inherent in the establishment of commercial associations or monopolies of different forms (anti-trust laws). There is hardly any possibility of conflict arising in this connection.

3. - SYSTEMS OF DIVIDING REVENUE

a. - General Principles

The pool may be either a complete or only a partial one.

A complete pool is one involving the pooling of all the revenue derived from the various categories of traffic.

A partial pool may be of two types, according to whether it affects categories of traffic operated or the proportion of the revenue deposited into the joint account.

Certain categories of traffic are usually excluded from the pool: this applies, particularly, in the case of European companies, to cabotage traffic and traffic between certain metropolitan countries and overseas territories over which they exercise some form of sovereignty, thus permitting them to incorporate this traffic into cabotage traffic.

The scope of the pool may be also limited by the pooling of part of the revenue, for example, only 60 per cent or 80 per cent of such revenue.

These two limiting elements may be combined. For instance, the case of a pool excluding cabotage traffic and comprising the pooling of 80 per cent of the revenue derived from the other categories of traffic.

b. - Formulae for the allocation of revenue

In the division of the revenue two basic elements of the operation are taken into account:

- 1) the capacity offered by the aircraft on the routes which are operated under the pooling agreement;
- 2) the number of flights performed on these routes taken as a unit.

These two elements combined define the overall capacity offered by each of the participating companies over a specific period.

On this basis, if R represents the total revenue pooled, C the overall capacity of one of the companies and C' the overall capacity of the other company, the proportion of the revenue accruing to each of the companies is given respectively by the following formulae:

$$\frac{RC}{C + C'} \quad \text{and} \quad \frac{RC'}{C + C'}$$

When the participating companies use different equipment, various correction systems are used, the principles of operation of which are outlined hereunder.

1. - System of aircraft co-efficients

Each type of aircraft brought into service on the route in question is given a coefficient based on its capacity; the mileage performed by each type is multiplied by this coefficient to obtain the sharing ratio. In the case of parallel routes operated by the participants, this sharing ratio may be obtained with less difficulty by multiplying the capacity coefficient by the number of services performed by each type of aircraft.

An example would be the pooling agreement concluded between ABA and Air France for the Paris-Stockholm route, dated 2 June 1945*, specifying the following coefficients of capacity:

- Dewoitine 338 (Air France) - 1.2
- Boeing B-17 F (ABA) - 2
- DC-3 (ABA) - 1.4

If over a specific period the total number of services performed by each type of aircraft is 10 for the first, 8 for the second and 10 for the third, the sharing ratio will be 12, 16 and 14 respectively, and the proportion of revenue corresponding to the operation of each type of aircraft will be 12/42, 16/42 and 14/42 respectively.

* Agreement No. 89 registered with ICAO.

This system is no doubt the most equitable which can be found when the participants use different equipment, since it is based on the relationship between the capacity of each type of aircraft and the traffic potential over the route in question. However, since in practice this second element is only estimated and since, on the other hand, the service provided may be evaluated in terms of quality rather than quantity, the fixing of the capacity coefficient is a source of dispute between the parties negotiating the pooling agreement. If company A uses a 30-seater aircraft and company B a 20-seater aircraft which is more comfortable and reliable than that used by A, B will endeavour to offset the advantage which A would obtain from the use of the larger aircraft, by having A agree to a reduction of the capacity coefficient applicable to that aircraft. For instance, agreement might be reached on a capacity of 25 seats for A's aircraft and 20 for B's aircraft.

2. - System of ceilings

A "ceiling" is established for the traffic the revenue of which is to be pooled; this ceiling is equal to the payload which can be carried, on each flight, by the lowest capacity aircraft flown on the route. This revenue is then allocated in proportion to the mileage performed by each airline. The revenue derived from traffic over and above the fixed ceiling is retained by the airline which has carried that traffic.

If the payload of airline A's aircraft is 30 seats, and that of airline B's aircraft 20 seats, the ceiling is fixed at 20 passengers. If on a flight over the same route A carries 25 passengers and B 15, A will pool the revenue corresponding to 20 passengers and B the revenue for 15 passengers, that is a total revenue corresponding to 35 passengers, of which each then receives half. Airline A will retain the revenue from the excess traffic which it has carried, i. e. the revenue from 5 passengers.

In general, provided the service is of equal quality, this system favours the airline using the aircraft with lower capacity, since the coefficient of utilization of the larger aircraft normally is greater than the fixed ceiling and it may be considered that the airline using the larger aircraft, in practice, always puts into the pool more than it takes out. The airline using the larger aircraft will then endeavour to restore the proper balance by having the other party agree to setting the ceiling at a lower level than the normal capacity of the smaller aircraft, bearing in mind the fact that the public's preference will inevitably go to the larger aircraft on a given route.

However, this calculation may prove to be false if the service offered by the larger aircraft is not qualitatively equivalent to that offered by the other. If, for instance, the larger aircraft has a lower level of comfort or suffers from technical incidents resulting in delays, or failures, the company using that aircraft will suffer from the establishment of a lower ceiling than that which it has requested since, all in all, the smaller aircraft provides more traffic than the larger. The only course of action then

open to the company using the larger aircraft will be to have the other party agree to a modification of the system for dividing revenue or, in the case of refusal, to withdraw from the pool.

The ceiling system may be combined with the coefficient system, thus constituting a third formula for the allocation of revenue which is described below.

3. - Combination of aircraft coefficients and ceiling

This system consists in establishing for each aircraft type a capacity coefficient which shall be considered to be a ceiling for each aircraft and any traffic over and above such ceiling will accrue to the benefit of the company which has produced it. If the capacity of one of the aircraft is set at 35 seats and that of the other at 20, traffic will be pooled to the amount of 35 passengers for the first and 20 for the second, revenue being divided in the proportion of 35 to 20.

This is a compromise formula that is used when no agreement can be reached either on the basis of the system of aircraft coefficients or by the system of ceilings, because of substantial differences in capacity between aircraft used. If one airline uses a DC-3 and the other a DC-4 -- the capacity of one being approximately twice that of the other -- the operator of the DC-3 will favour the ceiling formula, but will be unwilling to lower it to the level desired by the other party. The operator of the DC-4 will prefer the coefficient system, while the other will object to it, for fear of the competitive effect of the larger aircraft, his argument being that the capacity offered by the DC-4 is excessive on a route which he serves with a DC-3. Under these circumstances the operator of the DC-4 could accept a reduction in the agreed capacity of his aircraft to 35 seats for instance, which would be considered a ceiling, and he would retain any excess traffic in its entirety. This would be more satisfactory to the DC-4 operator than setting the ceiling at the capacity of the DC-3, while the DC-3 operator would reduce the disadvantage he would find in the coefficient system, since he rightly contends that actual traffic demand would require an aircraft with a capacity mid-way between that of the DC-3 and the DC-4.

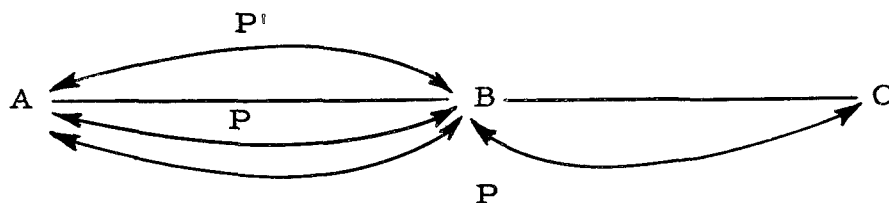
c. - Provisions applicable to transit traffic

The allocation of revenue from transit traffic is calculated according to the rates paid, and the methods differ according to whether or not through rates have been established for this category of traffic.

1. - Case where there is no through rate

Let us assume a route A B C, on the segment A B of which exchange traffic between A and B is pooled by companies of these two countries,

P and P' respectively, with in addition company P operating services to C.



There are several solutions open to the members:

- not to pool, on segment A B, the transit traffic A C operated by P;

- to pool part of this traffic. If the ceiling system is adopted for through traffic A B, company P', which in this particular case does not handle any transit traffic, may request its co-member to pool transit traffic on segment A B up to the ceiling adopted for the direct traffic A B;

- pool all transit traffic on the segment A B. This would result in a complete pooling of all through and transit traffic. Company P would pool the revenue corresponding to the rates paid in accordance with the methods indicated below.

2. - Case where there is a through rate

If a through rate has been established for traffic A B C and this traffic is pooled, company P will pool a portion of the through rate charged for the carriage of this traffic over the segment A B. This system requires the prior establishment by the co-members of an agreement known as a "pro-rata" agreement, by which they undertake to bear together the possible difference between the sum of the revenue paid for carriage on segments A B + B C (cumulative rate) and the through rate A B C. If the rate on segment A B is 500 francs and 1,000 francs on B C, the cumulative rate for A B C will be 1,500 francs. If a through rate A B C is established it may have been set, for instance, at 1,300 francs. In this case, company P pools 300 francs and the difference between the cumulative rate and the through rate, that is 200 francs, is borne by each of the members in proportion to the mileage which they perform, in application of their pro-rata agreement. In the absence of an agreement of this type, company P' would require P to pay into the pool the revenue derived from the transit traffic carried on this segment on the basis of the local rate A B. Therefore it is always to the interest of the company operating this transit traffic to conclude a pro-rata agreement with its co-member.

If two companies P and P' operate between their respective countries A and C, in the one case a direct service A C, in the other an indirect

service A B C, a problem arises as regards the extent to which the company operating the indirect service may establish through rates A B C. This has been settled by IATA with the "15 per cent rule", according to which any indirect route may justify the establishment of a through rate provided the mileage for the indirect route does not exceed that of the direct route by more than 15 per cent.

d. - Calculation of the mileage performed

Calculation of the mileage may give rise to litigation among the parties to a pooling arrangement when they operate a service between two points over different routes. One airline may have found it necessary, for technical or for commercial reasons, to follow a route that is less direct than that used by the other airline. For instance, the aircraft of one of the airlines may be unable to fly over high mountains, or their operating range may require that an intermediate stop be made between the two points served. In such a case, it is practically impossible to find a suitable correction factor within the framework of the pool, and the airline using the less suitable equipment will have to face the consequences of this operational disadvantage. If the operator follows the longer route in order to make traffic stops at intermediate points, his purpose as regards the pooling arrangement will be to endeavour to make up for the increased mileage with the additional traffic obtained from serving such intermediate points. If he is able to do this, he will be satisfied with the pooling arrangement. If he is not, and if, for example, the mileage travelled exceeds that of the direct route by more than 20 per cent -- while the intermediate traffic that he collects provides additional revenue of 10 per cent over and above through traffic -- the operator would have no other recourse but to withdraw from the pooling arrangement. In one case however there is an overriding reason for remaining in the pool, namely, when the intermediate traffic sought by the operator is long-haul traffic extending beyond the regional segment organized under the pooling arrangement. In this case, the airline may consider that the revenue provided by this long-haul traffic compensates for the disadvantages of the pooling agreement. In other words, it will be induced to sacrifice its regional organization to its long-haul policy. This case probably arises in Europe; the individual analyses of pooling arrangements given below may help to form an opinion in this respect.

From the foregoing brief analysis of the operation of pooling agreements, it may be concluded that the main difficulty arises from the diversity of equipment used. Irrespective of adjustments in the system, such agreements will always require negotiation, sometimes delicate negotiation, and the very diversity of systems serves to underline the difficulty of striking a proper balance between the services offered by the participants. The dual character of the criteria applied to services, which is expressed both in qualitative and quantitative terms, inevitably introduces an arbitrary factor. Airlines using superior types of equipment are known to fear the adverse publicity that may result from the use of inferior aircraft, and therefore are reluctant to enter into pooling agreements with operators of such aircraft. However, even under these conditions, the characteristics of services operated in a network of "point-to-point" routes

such as in Europe, may militate in favour of such agreements: in such cases, full use is made of the methods of correction provided under the terms of the contracts which, it should be remembered -- and we will return to this point later on -- are concluded on a short-term basis and are frequently adjusted to traffic conditions.

B. - INDIVIDUAL ANALYSES OF POOLING ARRANGEMENTS

In the subsequent pages, specific attention is given only to such "pools" as were in force during the 1951 summer period. We have excluded "pools" which were in operation during the recent past (e.g. Air France - Alitalia pooling agreement), pools which, while already in operation, are not covered by a formal contract (Swissair - JAT), and also those which were in the process of development during the summer and will be implemented in the near future (Air France - El Al).

On the other hand, we have preferred to separate from the group of pooling agreements reviewed all air services operated over German territory either independently or co-operatively. The use of this territory, which, as is known, has been deprived of its sovereignty since the War, has given rise to a special situation characterized by an influx of foreign airlines which, in the absence of a German national airline, are competing for German domestic and international traffic.

In their desire to offset in advance the possible handicap resulting from not being occupying powers, and in the knowledge of Germany's traffic potential, Belgium and the Netherlands became interested in this market immediately after World War II, and attempted to organize their operations on the basis of a pooling formula which will be reviewed in this chapter. This bilateral pooling agreement is still operating at the present time, but its effectiveness is threatened by the efforts of other regional airlines which lately have been attracted by the German vacuum (Air France, BEA, Swissair), and by the activities of non-European airlines (from the United States and South America) which have also entered this field in search of traffic to feed their long-range services. The German problem, because of its importance and of the special situation existing in Germany, deserves to be treated separately.

In order to present a clear picture, a series of charts and tables have been prepared covering the 1951 summer season. These are as follows:

- 1) A series of individual charts of pooled services and systems operating in German territory, whether covered by pooling arrangements or not, with data on the capacity and frequency of regional services and of long-haul extensions of such services (Maps XI to XXIII inclusive); a chart illustrating the general network of European pooling arrangements (Map XXV) for comparison with the 1935 map (Map XXIV).

- 2) A general table (Table X) showing aircraft used, the number of seats and seat-kilometres offered per week, and the weekly frequencies for all routes operated under pooling arrangements.

3) Four tables (Tables X(a), X(b), X(c), X(d)) giving the same information as under 2) for the various systems of operations in German territory.

4) A table (Table XI) giving figures of weekly traffic offered under each pooling arrangement by each airline.

T A B L E X

EUROPEAN-MEDITERRANEAN REGION

Services operated under pooling arrangements (Summer 1951)

Aircraft used, number of seats and seat-kilometres offered per week, weekly frequencies

ROUTES	Participating Company	Aircraft	Length of routes (km)	Seats offered per week	Seat-kms offered per week	Weekly frequencies and days of operation(*)
				round trips		
<u>POOL I</u>						
<u>KLM-SAS-SABENA</u>						
Amsterdam-Copenhagen-Stockholm	(Sabena (KLM	Convair 240 "	995 -	160 400	159 200 398 000	2/7 3.7 - 4.1 5/7 1.2.4.5.6 - 2.3.5.6.7
Amsterdam-Paris	KLM	"	440	560	246 400	7/7
Amsterdam-Oslo	KLM	DC-3	983	126	123 860	3/7 1.3.6. - 1.3.6
Amsterdam-Kristiansand-Oslo	KLM	DC-3	983	294	289 000	7/7
Amsterdam-Brussels	(Sabena (Sabena (KLM	DC-3 Convair 240 DC-3	 158	147 160 126	23 225 25 280 19 910	3. -1.2.5 - 2.5.6 2/7 3.7 - 4.1 3/7
Stockholm-Copenhagen-Paris	(SAS (SAS	DC-6 DC-4	535	832 616	278 120 945 560	8/7 7/7
Stockholm-Copenhagen-Amsterdam	SAS	DC-6	995	156	155 220	1. 6.3 - 4.7
Copenhagen-Amsterdam-Brussels	SAS	SAAB Scandia	631	420	265 000	7.
Oslo-Kristiansand-Amsterdam	SAS	DC-3	983	294	289 000	7/7
Copenhagen-Amsterdam	SAS	DC-3	473	210	99 330	5/7 1.2.3.4.5.- 2.3.4.5.6

Table X (Cont'd)

<u>POOL II</u> (Night pool)						
<u>KLM-SABENA</u>						
Amsterdam-Paris	KLM	Convair 240	440	880	387 200	11/7
Amsterdam-Stockholm	KLM	Convair 240	1 100	160	176 000	2/7 5.6 - 6.7
Brussels-Paris	(Sabena	DC-3	318	252	80 135	6/7 2.3.4.5.6.7
		Convair 240		480	152 640	6/7 1.2.3.4.5.6
Brussels-Amsterdam	(Sabena	DC-3	158	252	39 815	6/7 2.3.4.5.6.7
		Convair 240		80	12 640	1/7 1 - 2
Stockholm-Amsterdam	Sabena	Convair 240	1 100	160	176 000	2/7 1.3 - 1.4
<u>POOL III</u>						
<u>KLM-SWISSAIR</u>						
Amsterdam-Zurich	(KLM (Swissair	Convair 240 DC-3	605	1100 210	677 600 127 050	14/7 5/7 1.2.3.4.5 - 2.3.4.5.6
<u>POOL IV</u>						
<u>SWISSAIR-SABENA</u>						
Geneva-Brussels	Swissair	DC-3	555	126	69 930	3/7 1.3.5 - 2.4.6
Zurich-Brussels	(Swissair	DC-3	497	168	83 475	4/7 1.3.5.7- 2.4.6.1
Brussels-Geneva	Sabena	Convair 240	555	240	133 200	3/7 4.6.7 - 5.7.1
Brussels-Geneva	KLM (a)	Convair 240	555	80	44 400	1/7 2 - 3
Brussels-Zurich	Sabena	Convair 240	497	240	119 280	3/7 2.4.6 - 3.5.7
(a) Service performed for SABENA						
<u>POOL V</u>						
<u>KLM-SABENA-ALI FLOTTE RIUNITE</u>						
Amsterdam-Frankfurt-Milan	KLM (a)	Convair 240	900	240	216 000	3/7 2.4.6 - 2.4.6
Amsterdam-Brussels	Sabena (b)	DC-3	158	126	19 910	3/7 1.3.5 - 1.3.5

Table X (Cont'd)

Brussels- Milan	Sabena (c)	Convair 240	700	240	168 000	3/7 1.3.5 - 1.3.5
	(a)	Service performed for Ali Flotte Riunite				
	(b)	Service performed for KLM				
	(c)	Service performed for Ali Flotte Riunite				
<u>POOL VI</u>						
<u>CSA-KLM</u> Prague- Amsterdam	(CSA	Ilyushin		108	76 140	2/7 2.4
	(KLM	Il-12	705	42	29 610	1/7 6
		DC-3				
<u>POOL VII</u>						
<u>CSA-SABENA</u> Prague- Brussels	(CSA	Ilyushin		108	73 440	2/7 3.6 - 4.7
	(Sabena	Il-12	680	84	57 120	2/7 1.5 - 2.6
		DC-3				
<u>POOL VIII</u>						
<u>CSA-AIR</u> <u>FRANCE</u> Prague- Paris	(CSA	DC-3		126	112 770	3/7 1.6.7 - 5.6.7
	(Air	SO-161	895	198	77 210	3/7 2.3.4 - 2.3.4
	(France	Languedoc				
<u>POOL IX</u>						
<u>CSA-SWISSAIR</u> Prague- Zurich	Swissair(a)	DC-3	525	126	66 150	3/7 1.3.5
(a) Pool operated by Swissair only						
<u>POOL X</u>						
<u>SWISSAIR-</u> <u>ALI FLOTTE</u> <u>RIUNITE</u> Geneva- Nice- Rome	(Swissair	DC-3		168	156 240	4/7 1.3.5.7 - 2.4.6.7
	(A.F. Riun	DC-3	930	126	117 180	3/7 2.4.6 - 3.5.6
<u>POOL XI</u>						
<u>KLM-AER</u> <u>LINGUS</u> Dublin- Manchester- Amsterdam	(KLM	Convair 240		240	180 000	3/7 2.5.6
	(Aer Lingus	DC-3	750	126	94 500	3/7 1.3.7

Table X (Cont'd)

<u>POOL XII</u>						
<u>SAS-AERO</u>						
<u>O/Y</u>						
Stockholm- Helsinki	(SAS (AERO O/Y	SAAB Scandia DC-3	465	448 1 134	208 320 527 310	8/7 27/7
<u>POOL XIII</u>						
<u>SWISSAIR-</u>						
<u>SAS</u>						
Copenhagen- Zurich	Swissair	Convair 240	950	560	532 000	7/7
Stockholm- Copenhagen	{	SAS	DC-6	1 730	104	179 900
Amsterdam- Geneva							1/7 6 - 2
Stockholm- Copenhagen	{	SAS	DC-6	1 700	52	88 400
Amsterdam- Zurich							14 - 7
Stockholm- Copenhagen	{	SAS	DC-6	1 700	104	176 800
Frankfurt- Geneva							1/7 6 - 4
Stockholm- Copenhagen	{	SAS	DC-6	1 650	104	171 600
Frankfurt- Zurich							1/7 2 - 1
Stockholm- Copenhagen	{	SAS	DC-6	1 650	104	171 600
Frankfurt- Zurich							1/7 3 - 6
Hamburg- Frankfurt	{	SAS	DC-6	750	104	78 000
Geneva							1/7 1 - 7

Table X (Cont'd)

<u>POOL XIV</u>						
<u>SWISSAIR -</u>						
<u>AIR FRANCE</u>						
Paris-Zurich	(Swissair	DC-3	535	462	247 170	11/7 q + 2.4.6.7
	(Air France	DC-4		264	141 250	3/7 1.3.5
Paris-Geneva	(Swissair	DC-3	400	420	168 000	10/7 q + 2.4.6
	(Air France	DC-4		616	246 400	7/7

(*) The series of figures (1, Monday; 7, Sunday) indicate the days of the week during which these services are performed, the days of outbound flights being separated from the days of return flights by a hyphen (Ex: 3.7 - 4.1 = outbound on Wednesdays and Sundays, return on Thursdays and Mondays).

N.B. - The most commonly used seating capacity for each type of aircraft in European services has been taken as a basis on which to calculate the seats offered. This capacity is as follows: Convair 240 = 40, DC-3 = 21, DC-4 = 44, DC-6 = 52, Ilyushin Il-12 = 27, Lockheed Constellation = 42, SO-161 Languedoc = 33, SAAB Scandia = 28, Vickers Viking = 27.

TABLE X (a)

CO-OPERATIVE OPERATIONS IN GERMAN TERRITORY

ROUTES	Participating company	Aircraft	Length of the route (km)	Seats offered per week	Seat-km offered per week	Weekly frequencies and days of operation
				round trips		
<u>KLM - SABENA POOL</u>						
Amsterdam-Frankfurt-Stuttgart	KLM	Convair 240	500	80	40 000	1/7 1-2
Amsterdam-Düsseldorf-Stuttgart	KLM	Convair 240	510	80	40 800	1/7 1-2
Amsterdam-Düsseldorf-Nuremberg-Munich	KLM	Convair 240	710	80	56 800	1/7 2-3
Amsterdam-Düsseldorf-Frankfurt-Stuttgart-Munich	KLM	Convair 240	710	160	113 600	2/7 3.5-4.6
Amsterdam-Düsseldorf-Frankfurt-Munich	KLM	Convair 240	675	160	108 000	2/7 4.5-5.6
Amsterdam-Düsseldorf-Stuttgart-Munich	KLM	Convair 240	690	160	110 400	2/7 3.4-4.5
Amsterdam-Düsseldorf-Nuremberg	KLM	Convair 240	530	80	42 400	1/7 6-7
Amsterdam-Frankfurt-Munich	KLM	"Constell."	655	84	55 020	1/7 6-7
Amsterdam-Innsbruck	KLM	DC-3	770	84	64 680	2/7 6.7-7.1
Amsterdam-Frankfurt-Munich-Vienna	KLM	Convair 240	1 005	80	80 400	1/7 2-3
Amsterdam-Frankfurt-Vienna	KLM	Convair 240	955	80	76 400	1/7 2-3
Amsterdam-Frankfurt	KLM	Convair 240	355	160	56 800	2/7 3.7-4.1
Amsterdam-Brussels	KLM	Convair 240	158	160	25 280	2/7
				DC-3	294	46 450	7/7
Amsterdam-Munich (--Tehran)	KLM	DC-6	670	104	69 680	1/7 5-7
Amsterdam-Munich (--Djakarta)	KLM	"Constell."	670	84	56 280	1/7 5-2
Amsterdam-Munich (--Lydda)	KLM	"Constell."	670	84	56 280	1/7 3-5
Amsterdam-Munich (--Tehran)	KLM	DC-6	670	104	69 680	1/7 2-4
Amsterdam-Frankfurt (--Buenos Aires)	KLM	DC-6	355	104	36 920	1/7 4-3
Amsterdam-Frankfurt (--Buenos Aires)	KLM	DC-6	355	104	36 920	1/7 2-6
Total: KLM				2 326	1 242 790	
Brussels-Cologne-Nuremberg-Munich	Sabena	Convair 240	660	80	52 800	1/7 3-4
Brussels-Frankfurt-Nuremberg-Salzburg	Sabena	Convair 240	770	80	61 600	1/7 2-3
Brussels-Frankfurt-Munich-Salzburg	Sabena	Convair 240	800	80	64 000	1/7 6-7

Table X (a) (Cont'd)

Brussels-Düsseldorf- Nuremberg-Munich	Sabena	Convair 240	700	80	56 000	1/7 5-6
Brussels-Frankfurt-Munich	Sabena	DC-4	650	88	57 200	1/7 1-2
Brussels-Düsseldorf- Frankfurt-Munich	Sabena	DC-4	660	88	58 080	1/7 1-2
Brussels-Frankfurt-Salzburg	Sabena	DC-3	810	42	34 020	1/7 4-5
Brussels-Frankfurt	Sabena	Convair 240	350	160	56 000	2/7 3.5-4.6
Brussels-Amsterdam	Sabena	DC-3	158	126	8 560	3/7 2.1
			<u>Total Sabena:</u>		824	448 260
			<u>Grand Total:</u>		3 150	1 691 050

TABLE X (b)

SERVICES OPERATED BY FOREIGN AIRLINES INTO GERMANY
EXCLUDING KLM AND SABENA

International regional services with cabotage in Germany

ROUTES	Operating company	Aircraft	Length of the routes (km)	Seats offered per week	Seat-kms offered per week	Weekly frequencies and days of operation
				round	trips	
London-Cologne-Berlin	BEA	DC-3	980	294	288 120	7/7
London-Düsseldorf-Munich		Vickers "Viking"	865	378	326 970	7/7
London-Düsseldorf-Berlin		id.	980	378	370 440	7/7
Berlin-Hamburg		DC-3	240	1 176	282 240	28/7
Berlin-Hanover		DC-3	250	882	220 400	21/7
Berlin-Düsseldorf		DC-3	480	588	282 240	14/7
Paris Düsseldorf-Hamburg	Air France	DC-3	760	126	95 760	3/7 1.3.5
Paris-Frankfurt		DC-4	900	264	237 600	3/7 2.3.5
Munich-Berlin		DC-4	500	528	264 000	6/7 1.2.3.4.5.6 (a)
Nuremberg-Berlin		DC-4	375	176	66 000	2/7 3.5
Frankfurt-Berlin		DC-4	420	264	110 880	3/7 1.4.6
Copenhagen-Hamburg-Bremen-Düsseldorf-Frankfurt-Stuttgart	SAS	DC-3	1 148	126	144 550	3/7 1.3.7
Oslo-Copenhagen-Hamburg-Frankfurt		DC-3	1 180	294	346 920	7/7
Hamburg-Bremen-Düsseldorf-Frankfurt-Munich		DC-3	1 031	42	42 800	1/4 4
Hamburg-Bremen-Düsseldorf-Frankfurt-Stuttgart		DC-3	690	84	57 960	2/7 2.6
Frankfurt-Munich-Vienna		DC-4	674	176	118 620	2/7 3.5
Helsinki-Stockholm-Copenhagen-Hamburg-Düsseldorf	Aero O/Y	DC-3	1 552	294	456 290	7/7
Belgrade-Zagreb-Munich-Frankfurt	JAT	DC-3	1 100	42	46 200	1/7 5
Zurich-Stuttgart-Frankfurt-Düsseldorf	Swissair	DC-3	476	182	86 630	6/7 1.2.3.4.5.6
Zurich-Stuttgart-Frankfurt-Hamburg		DC-3	703	294	206 680	7/7
Zurich-Munich-Nuremberg-Hamburg		DC-3	884	294	259 800	7/7

Table X (b) (Cont'd)

Hamburg-Berlin	PAA	DC-4	210	614	128 940	7/7
Frankfurt-Berlin		DC-4	460	1 228	564 880	14/7
London-Cologne-Frankfurt- Berlin		DC-4	1 065	614	653 910	7/7
Frankfurt-Munich-Vienna		DC-4	670	528	353 760	6/7(b) 1.2.3 4.5.6
Total:			9 866	6 012	690	

- (a) with a stop at Nuremberg on one outbound service and on two return services
 (b) 3 of which stop at Stuttgart

TABLE X (c)

SERVICES OPERATED BY FOREIGN AIRLINES INTO GERMANY
EXCLUDING KLM AND SABENA

International regional services without cabotage in Germany

ROUTES	Operat- ing company	Aircraft	Length of the routes (km)	Seats offered	Seat-kms offered	Weekly frequen- cies and days of operation
				per week	per week	
London-Amsterdam-Hamburg	BEA	Vickers "Viking"	745	1 134	844 830	21/7
London-Frankfurt		id.	655	378	247 590	7/7
London-Brussels-Düsseldorf		id.	495	378	187 110	7/7
Amsterdam-Hamburg		id.	360	1 134	408 240	21/7
Paris-Frankfurt	Air France	"Constel- lation"	480	84	40 320	1/7 4.
Frankfurt-Madrid	SAS	DC-4	1 425	88	125 400	1/7 4.
Paris-Brussels-Berlin- Warsaw	LOT	Ilyushin Il. 12	1 450	108	156 600	2/7 2.6-1.5
Paris-Berlin-Warsaw		DC-3	1 400	42	56 800	1/7 3.4
Brussels-Berlin-Warsaw		Ilyushin Il-12	1 170	108	126 360	2/7 2.6-1.5
Belgrade-Zagreb-Linz- Frankfurt	JAT	DC-3	1 120	42	47 040	1/7 3.
Belgrade-Zagreb-Frankfurt		DC-3	1 100	42	46 200	1/7 1.
Total:				3 538	2 888 490	

TABLE X (d)

SERVICES OPERATED BY FOREIGN AIRLINES INTO GERMANY
EXCLUDING KLM AND SABENA

International long-haul services

ROUTES	Operat- ing company	Aircraft	Length of the routes (km)	Seats offered per week	Seat-kms offered per week	Weekly frequen- cies and days of operation
				round trips		
<u>Hamburg-Frankfurt-Geneva-</u> <u>Tehran</u>	SAS	DC-6	400	104	41 600	1/7 1.1
<u>Stockholm-Frankfurt-Zurich-</u> <u>Tokyo</u>		DC-6	1 190	104	123 760	1/7 3-1
<u>Stockholm-Frankfurt-Geneva-</u> <u>Zurich-Buenos Aires</u>		DC-6	1 190	208	247 520	2/7 6.2-6.3
<u>Stockholm-Copenhagen-Munich-</u> <u>Istanbul-Tel Aviv</u>		DC-6	1 357	104	141 130	1/7 4.5
<u>Oslo-Copenhagen-Hamburg-</u> <u>Frankfurt-Munich-Milan</u> Cairo		DC-4	1 490	88	131 120	1/7 6.3
<u>Frankfurt-Munich-Rome-</u> <u>Athens-Istanbul</u>		DC-4	310	88	27 280	1/7 1.2
<u>Paris-Munich-Damascus-Tehran</u>	Air France	"Constell".	685	84	57 540	1/7 2-4
<u>New York-London-Frankfurt</u>	PAA	Boeing "Stratocr".	630	104	65 520	1/7 6-7
<u>New York-Brussels-Frankfurt</u>		id.	320	312	99 840	3/7 1.2.4- 2.3.5
<u>New York-Glasgow-Amsterdam-</u> <u>Frankfurt</u>		id.	360	312	112 320	3/7 3.5.7 4.6.1
<u>London-Frankfurt-Istanbul-</u> <u>Beyrouth</u>		"Constel- lation"	630	168	105 840	2/7 7.3-1.4
<u>New York-London-Hamburg-</u> <u>Helsinki</u>		"Constel- lation"	720	168	120 960	2/7 1.5-3.6
<u>London-Brussels-Munich-</u> <u>San Francisco (via Tokyo)</u>		"Constel- lation"	600	168	100 800	2/7 2.6-5.7
<u>Chicago-Philadelphia-New</u> <u>York-London-Frankfurt</u>	TWA	"Constel- lation"	630	588	370 440	7/7
<u>Buenos-Aires-Dakar-London-</u> <u>Frankfurt</u>	Panair do Brasil	"Constel- lation"	630	84	52 920	1/7 2-5
<u>Buenos Aires-Frankfurt-</u> <u>Amsterdam</u>	Aerolíneas Argentinas	DC-6	360	104	37 440	1/7 4-6
			Total:	2 780	1 836 030	

N.B. In the case of long-haul services, the lengths of the routes shown in column 4 refer to the route segments which are underlined in column 1.

TABLE XI

WEEKLY TRAFFIC OFFERED BY EACH COMPANY UNDER EACH
POOLING ARRANGEMENT (Summer 1951)

including the SABENA - KLM Co-operative Arrangement in Germany

POOLS	Total weekly traffic (in seat-kms offered)	Weekly traffic per company (in seat-kms offered)
I. - KLM - Sabena - SAS	4 309 105	(KLM - 1 077 170 (Sabena - 207 705 (SAS - 3 024 230
II. - KLM - Sabena (night pool)	1 024 630	(KLM - 563 200 (Sabena - 461 430
III. - KLM - Swissair	804 650	(KLM - 677 600 (Swissair - 127 050
IV. - Swissair - Sabena	450 285	(Swissair - 153 405 (Sabena - 296 880(a)
V. - KLM - Sabena - Ali Flotte Riunite	403 910	(KLM - 19 910(b) (Ali F.R. - 384 000(c)
VI. - CSA - KLM	105 750	(CSA - 76 140 (KLM - 29 610
VII. - CSA - Sabena	130 560	(CSA - 73 440 (Sabena - 57 120
VIII. - CSA - Air France	289 980	(CSA - 112 770 (Air France - 177 210
IX. - CSA - Swissair	66 150	(Swissair (d) - 66 150
X. - Swissair - Ali Flotte Riunite	273 420	(Swissair - 156 240 (Ali F.R. - 117 180
XI. - KLM - Aer Lingus	274 500	(KLM - 180 000 (Aer Lingus - 94 500
XII. - SAS - Aero O/Y	735 630	(SAS - 208 320 (Aero O/Y - 527 310
XIII. - Swissair - SAS	1 398 300	(Swissair - 532 000 (SAS - 866 300
XIV. - Swissair - Air France	802 820	(Swissair - 415 170 (Air France - 387 650
XV. - Co-operative Arrangement in Germany (Sabena - KLM)	1 691 050	(Sabena - 448 260 (KLM - 1 242 790
Total	12 760 740	12 760 740

(a) of which 44,440 by KLM for Sabena

(b) of which 19,900 by Sabena for KLM

(c) of which 216,000 by KLM for Ali Flotte Riunite
and 168,000 by Sabena for Ali Flotte Riunite

(d) Pool operated by Swissair only

POOL IKLM - SABENA - SAS1. - DESCRIPTION OF THE SERVICES OFFERED (Table X; Map XI)SASRoute Stockholm-Copenhagen-Paris

- 1 service daily Stockholm-Copenhagen-Paris, operated by day. (DC-4 or DC-6 - depart Stockholm 0800 hours, arrive Paris 1420 hours; depart Paris the same day at 1600 hours, arrive Stockholm 2135 hours.)

Route Stockholm-Copenhagen-Amsterdam

- 1 service weekly Stockholm-Copenhagen-Amsterdam, segment of the long-haul service stopping at Geneva - Rome - Beirut and Tehran. (DC-6 - depart Stockholm 1420 hours, arrive Amsterdam 1840 hours.)

Route Copenhagen-Amsterdam-Brussels

- 1 service daily Copenhagen-Amsterdam-Brussels. (Scandia - depart Copenhagen 1610 hours, arrive Brussels 1945 hours; depart Brussels next day 0945 hours, arrive Copenhagen 1310 hours.)

Route Oslo-Kristiansand-Copenhagen-Amsterdam

- 1 service daily.
(DC-3 - depart Oslo 0930 hours, arrive Amsterdam 1405 hours; depart Amsterdam 1505 hours, arrive Oslo 1930 hours.)

The route is operated in turn by each of the airlines for a specified period. During the summer of 1951 the operation was divided as follows:

- 16.4.51 to 28.6.51 : KLM
- 29.6.51 to 20.10.51: SAS

Route Copenhagen-Amsterdam

- 5 services weekly, operated by night.
(DC-3 - depart Copenhagen 2350 hours, arrive Amsterdam 0230 hours; depart Amsterdam 0340 hours, arrive Copenhagen 0610 hours.)

KLMRoute Amsterdam-Copenhagen-Stockholm

- 1 service daily Amsterdam-Copenhagen-Stockholm.
(Convair - depart Amsterdam 1450 hours, arrive Stockholm 1910 hours; depart Stockholm next day 0910 hours, arrive Amsterdam 1340 hours.)

Combined service with Sabena:

KLM: 5 services per week (days 1, 2, 4, 5, 6)
Sabena: 2 services per week (days 3 and 7). Both with Convairs.

Route Amsterdam-Paris

- 1 service daily.
(Convair - depart Amsterdam 1435 hours, arrive Paris 1605 hours; return service: depart Paris 1230 hours, arrive Amsterdam 1355 hours.)

Route Amsterdam-Oslo

- 1 service three times per week.
(DC-3 - depart Amsterdam 1105 hours, arrive Oslo 1430 hours; depart Oslo 1600 hours, arrive Amsterdam 1940 hours.)

Route Amsterdam-Brussels

- 1 service three times per week combined with Sabena.
(Convair - depart Amsterdam 0900 hours, arrive Brussels 0955 hours; depart Brussels 1620 hours, arrive Amsterdam 1715 hours.)

SABENARoute Amsterdam-Copenhagen-Stockholm

- Combined service with KLM, as indicated above, twice a week for Sabena (Convair).

Route Amsterdam-Brussels

- 1 service three times per week combined with KLM
(DC-3 and Convair - days 1, 2, 5.)

2. - CHARACTERISTICS OF THE POOL

This tripartite pool consists of an allocation of the routes and services operated, on a dual basis, i. e., permanent and periodic. The participants operate on a permanent basis either different routes or different services on sectors of common routes. KLM operates by itself a direct Amsterdam-Oslo service while SAS operates the direct route Stockholm-Paris, etc. On the other hand, as will have been noted, one of the routes of the pool, Amsterdam-Kristiansand-Oslo (with the possible inclusion of Copenhagen later on) is periodically assigned to each of the three airlines.

The revenue from the entire network is allocated probably on the basis of a pre-determined ratio according to ton-kilometres offered. According to our calculations, total seat-kilometres offered, 4, 309, 105, are allocated as follows:

SAS	:	3, 024, 230	or	70 per cent
KLM	:	1, 077, 170	or	25 per cent
Sabena	:	207, 705	or	5 per cent

Thus, it may be assumed that the revenue from the pool is allocated in the same ratio.

This pool appears to constitute a novel formula. Certain tripartite pools in existence before the war provided for an allocation of services among the participants, but did not allocate overall income, as in this case.

3. - POLICY OF THE AIRLINES IN THE NETWORK

The network covered by this pooling arrangement is organized about the Paris-Brussels-Amsterdam-Copenhagen-Stockholm traffic axis. Before the war Air France and Sabena operated along this axis under a pooling arrangement (Paris-Brussels-Amsterdam-Hamburg-Copenhagen-Malmö). After the war (1946-1949) Air France and KLM had a pooling arrangement on the segment Paris-Amsterdam. The aircraft used by the French (Bloch 161, "Languedoc"), owing to various minor technical incidents, did not prove to be as efficient on the route as was expected and the public preferred to travel on the DC-3's of KLM. After an endeavour to correct this situation within the framework of the pooling arrangement had failed, the partners denounced it (March 1949). KLM continued to operate the route by itself.

Air France has not resumed operations on the other traffic points along the indicated axis (Brussels, Copenhagen, Stockholm), in all probability owing to lack of equipment. It is under these circumstances that the system in this sector of Europe has been left to Sabena, KLM and SAS.

In 1946, bilateral pooling agreements were concluded between Sabena and DDL and between Sabena and ABA. However the Scandinavian airlines subsequently arranged to operate jointly under SAS. The pooling arrangements made with Sabena only lasted for a few months.

Negotiations between Sabena and SAS on the one hand, and KLM and SAS on the other, were resumed in 1947. Difficulties were encountered in that the traffic rights requested by SAS abroad were equal to the aggregate capacities of ABA, DDL and DNL, whereas these airlines were now operating as a single entity. Furthermore, the eccentric position of the Scandinavian countries, which are less vulnerable in respect of Fifth Freedom traffic, gave them a certain advantage over Belgium and the Netherlands. However, SAS could not forego Belgian and Dutch traffic, which included direct exchange traffic with the Scandinavian countries and traffic required to feed the OSAS long-haul routes. The pooling agreement concluded appears to have provided SAS with the necessary direct exchange traffic required by the regional services between Scandinavia and the Low Countries. Since both Sabena and KLM are long-haul operators, the Fifth (or Sixth) Freedom traffic drawn upon by the Scandinavians for the SAS long-haul routes most likely was not very substantial. This, no doubt, is the reason why the Netherlands were able to grant Fifth Freedom rights to SAS at Amsterdam for the route to Beirut and Tehran.

The route which has enabled SAS to claim the greatest share of the revenue arising from this pooling arrangement is the Stockholm-Copenhagen-Paris route, operated with DC-4's and DC-6's. The use of large aircraft has had the dual result of attracting the public and increasing the income potentialities of the route. That is why SAS felt that it could now offer night services at reduced rates between these points (30 per cent reduction on a return ticket, valid for 30 days). These services, which are operated outside the pooling arrangement, are as follows:

- 1 service, operated by night, three times per week Stockholm-Paris direct.

(DC-6 - depart Stockholm 2220 hours, arrive Paris 0220 hours;
depart Paris 0320 hours, arrive Stockholm 0705 hours.)

- 1 service daily, operated by night, Copenhagen-Paris direct.
(DC-4 - depart Copenhagen 2310 hours, arrive Paris 0245 hours.)

Very likely it was this action that led Sabena and KLM to organize together, on this route, the night-time services which they are operating under a bilateral pooling arrangement, which, by its very existence, appears to reveal certain weaknesses in the co-operation undertaken in the form of the tripartite pool. This bilateral agreement is examined on the next page.

POOL IIKLM - SABENA (Night pool)1. - DESCRIPTION OF THE SERVICES (Table X; Map XII)

The pooling arrangement came into force on 15 April 1951.

KLMSegment Amsterdam-Paris:

- direction Paris-Amsterdam: 1 service daily (Convair)
- direction Amsterdam-Paris: 4 services per week (Convair).

Segment Stockholm-Amsterdam:

- 2 services per week (Convair; days 6 and 7).
- Combined services with Sabena.

SABENASegment Paris-Brussels-Amsterdam:

- 1 service per week (Convair and DC-3).

Segment Stockholm-Amsterdam:

- 2 services per week (Convair; days 7 and 3; combined services with KLM).

Time-table of the night service:direction Paris-Stockholm:

depart Paris 0110 hours, arrive Amsterdam 0235 hours;
depart Amsterdam 0320 hours, arrive Stockholm 0620 hours.

direction Stockholm-Paris:

depart Stockholm 2255 hours, arrive Amsterdam 0225 hours;
depart Amsterdam 0315 hours, arrive Paris 0445 hours.

This service operates four times per week. On the other days, the service involves a transfer either at Brussels or at Amsterdam (change DC-3 - Convair).

There is a 25 per cent reduction in the round-trip rates on these night services as compared with the day-time rates.

2. - COMMENTS

The organization of this pooling arrangement for night operations, apparently to counteract the service organized by SAS has not produced the expected results. However, this is also true of the SAS night service.

The main reason is that all these night services have schedules which are most inconvenient to passengers.

A passenger making use of the SAS (DC-6) tri-weekly service arrives at Paris from Stockholm or leaves Paris for Stockholm at 3 a.m. The passenger wishing to take the daily SAS flight from Copenhagen to Paris (DC-4 or DC-6) arrives at Paris around the same time. On the Sabena or KLM aircraft, he leaves Paris at 0120 hours for Stockholm, or coming from Stockholm arrives at Paris at 5 a.m. The KLM-Sabena service, in relation to that of SAS, has the additional disadvantage of one or two stops in the middle of the night (Brussels, Amsterdam), to which must be added, on certain days, the even more serious disadvantage of a change of aircraft.

Under these conditions, it is noted that the substantial advantage of the reduced rate - the reduction being either 25 per cent or 30 per cent is partly offset by the inconveniences of the service offered. It may be seen from the above-indicated schedule that the SAS day-time service, on the contrary, offers on this route a practical schedule in both directions.

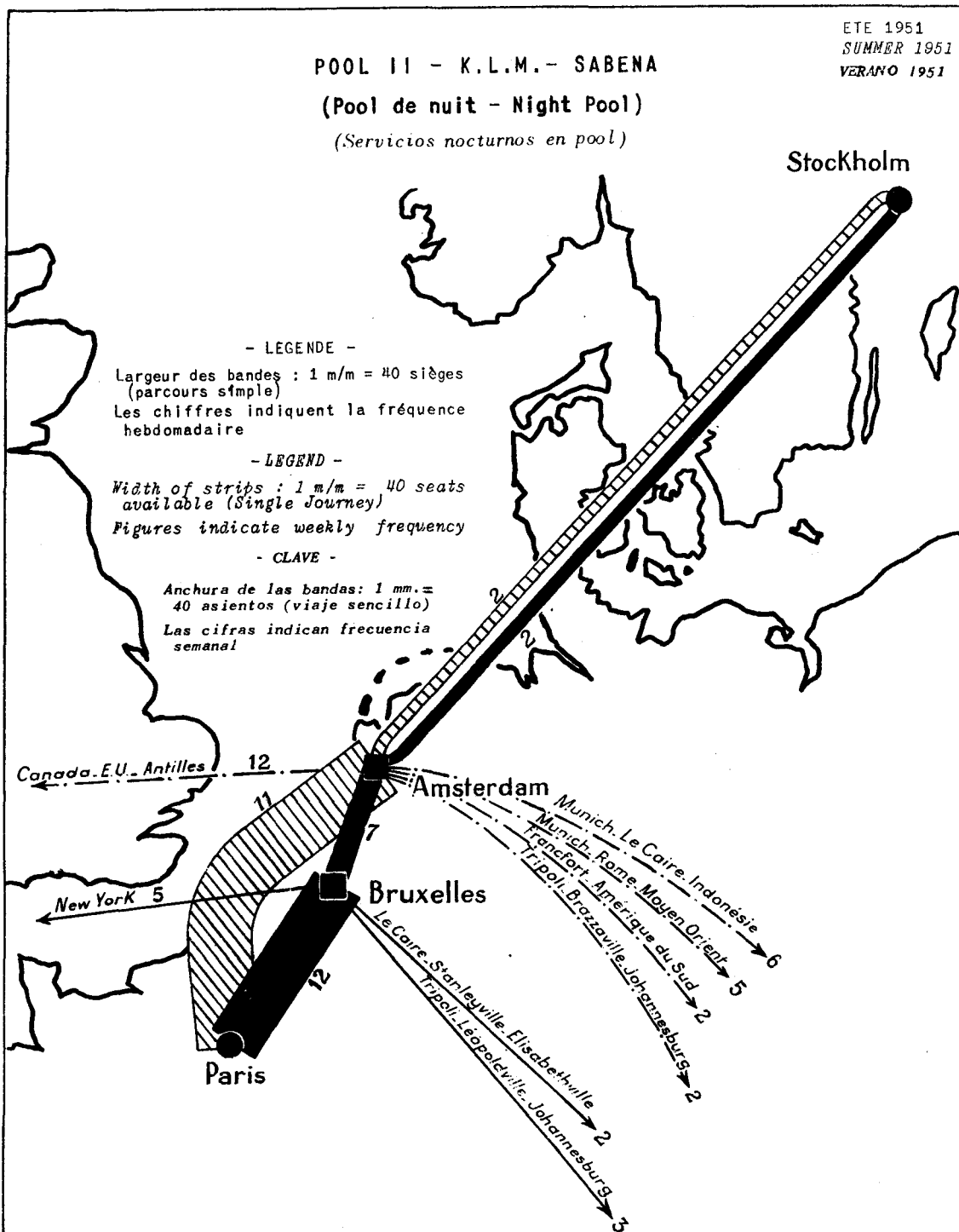
CARTE XII

MAP XII

CARTA XII

POOL II - K.L.M. - SABENA
(Pool de nuit - Night Pool)
(Servicios nocturnos en pool)

ETE 1951
 SUMMER 1951
 VERANO 1951



- LEGENDE -
 Largeur des bandes : 1 m/m = 40 sièges
 (parcours simple)
 Les chiffres indiquent la fréquence
 hebdomadaire

- LEGEND -
 Width of strips : 1 m/m = 40 seats
 available (Single Journey)
 Figures indicate weekly frequency

- CLAVE -
 Anchura de las bandas: 1 mm. =
 40 asientos (viaje sencillo)
 Las cifras indican frecuencia
 semanal

■ Escale d'articulation entre les services régionaux en pool et les long-courriers
 Dividing point between pooled regional service and long-haul service
 Punto divisorio entre los servicios regionales en pool y los de transporte a larga distancia

LONG-COURRIERS
 LONG-HAUL SERVICE
 SERVICIOS DE TRANSPORTE A LARGA DISTANCIA

▬ SABENA
 ▬ K.L.M.

POOLS III and IV

SWISSAIR - KLM
SWISSAIR - SABENA

POOL SWISSAIR - KLM1. - DESCRIPTION OF THE SERVICES (Table X; Map XIII)SWISSAIRRoute Zurich-Basle-Amsterdam:

- night service operated five times per week.
(DC-3 - depart Zurich 2320 hours, arrive Amsterdam 0240 hours;
depart Amsterdam 0330 hours, arrive Zurich 0645 hours; days 2,
3, 4, 5, 6.)

KLMRoute Amsterdam-Zurich direct:

- 2 services daily:

- 1) depart Amsterdam 1010 hours, arrive Zurich 1210 hours;
depart Zurich 1310 hours, arrive Amsterdam 1510 hours (Convair)
- 2) depart Amsterdam 1610 hours, arrive Zurich 1810 hours;
depart Zurich 1910 hours, arrive Amsterdam 2110 hours (Convair).

2. - CHARACTERISTICS OF THE POOL

The services are divided between the members with one operating the direct route and the other an indirect route, a segment of which, Zurich-Basle, comprises cabotage traffic. The Zurich-Basle-Amsterdam service is a night postal service, including passenger traffic at reduced fares (a reduction of 28 per cent on the normal Basle-Amsterdam rate). The conditions of the pooling agreement are not known. The direct service between Zurich and Amsterdam was the subject of an earlier pooling arrangement between KLM and Swissair, with a seasonal distribution of services. This arrangement related only to the Convair 240 and extended over a year. For six months (summer) KLM operated at the frequency of four services weekly, and Swissair at the frequency of three weekly, these proportions being reversed during the winter period (six months). This formula enabled a daily service to be maintained, providing each of the participants in turn with a free aircraft.

POOL SWISSAIR - SABENA1. - DESCRIPTION OF THE SERVICES (Table X; Map XIII)SWISSAIRRoute Geneva-Brussels:

- 1 service three times per week.
(DC-3 - depart Geneva 1530 hours, arrive Brussels 1750 hours;
depart Brussels 1820 hours, arrive Geneva 2040 hours; days 1,
3, 5.)

Route Zurich-Brussels:

- 1 service weekly.
(DC-3 - depart Zurich 1410 hours, arrive Brussels 1615 hours;
depart Brussels 1655 hours, arrive Zurich 1855 hours; day 5.)

Route Zurich-Brussels:

- 3 services weekly.
(DC-3 - depart Zurich 1000 hours, arrive Brussels 1205 hours;
depart Brussels 1240 hours, arrive Zurich 1440 hours; days 1,
3, 7.)

SABENARoute Brussels-Geneva:

- 3 services weekly.
(Convair - 1 service at midday;
2 in the afternoon; days 4, 6, 7.)

Route Brussels-Geneva:

- 1 service weekly performed by KLM for Sabena.
(Convair - depart Brussels 1115 hours, arrive Geneva 1255 hours;
depart Geneva 1730 hours, arrive Brussels 1915 hours; day 2.)

Route Brussels-Zurich:

- 3 services weekly.
(Convair - 2 services at midday; days 2 and 4;
1 service in the afternoon; day 6.)

CARTE XIII

MAP XIII

CARTA XIII

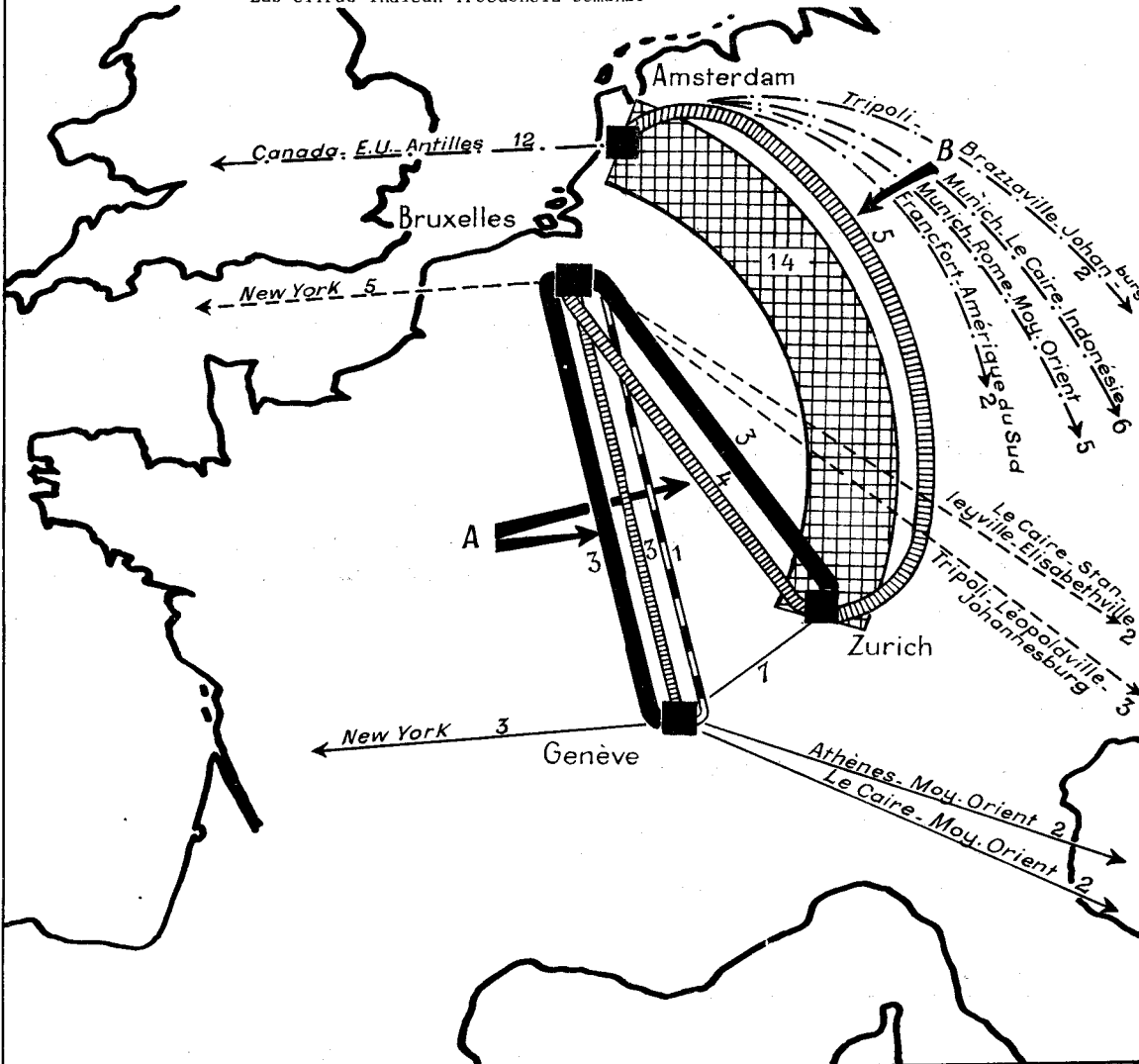
POOL III - SWISSAIR - K.L.M.
 POOL IV - SWISSAIR - SABENA

ETE 1951
 SUMMER 1951
 VERANO 1951

- LEGENDE -
 Largeur des bandes : 1 m/m = 40 sièges (parcours simple)
 Les chiffres indiquent la fréquence hebdomadaire - CLAVE -

- LEGEND -
 Width of strips : 1 m/m = 40 seats available
 (Single Journey)
 Figures indicate weekly frequency

Anchura de las bandas: 1 mm. = 40 asientos (viaje sencillo)
 Las cifras indican frecuencia semanal



	SWISSAIR		SWISSAIR
	SABENA		SABENA
	K.L.M.		K.L.M.
	Effectué par la K.L.M. pour la SABENA (Operated by K.L.M. for SABENA) (Servicio de K.L.M. para SABENA)		

A. Pool SWISSAIR-SABENA
 B. Pool SWISSAIR-K.L.M.

2. - CHARACTERISTICS OF THE POOL

Initially both companies operated DC-3's in this pool. Therefore it was a case of the most simple form of pooling arrangement: operation along parallel routes with similar equipment, revenue being divided on a pro-rata basis according to the mileage performed by each airline.

After Sabena started operating Convairs 240, the ceiling system appears to have been adopted; it will be recalled, that this ceiling is established on the basis of the capacity of the smaller aircraft, in this case the DC-3 (unit capacity: 19 passengers, or, if expressed in terms of weight: 1,900 kilogrammes).

The services provided are organized in such a way that they are spread out over the week, and are allocated to the participating companies in the most equitable manner possible. It will be seen, for example, that the Brussels-Geneva services are operated alternatively by Sabena and Swissair on six days of the week, the seventh day, (Tuesday) being taken up by the service performed by KLM for Sabena. The schedules have also been organized so as to offer a service spread out through the day (morning, midday and afternoon services). However, the "midday aircraft" is the one most favoured by the public on the short flights which are characteristic of European operations. It is noted that out of eight services weekly carried out on the most important of the two routes involved in this pool -- Brussels-Zurich -- six are "mid-day" services.

POOL VKLM - SABENA - ALI FLOTTE RIUNITE1. - DESCRIPTION OF THE SERVICES (Table X; Map XIV)Route Amsterdam-Frankfurt-Milan:

- 1 service three times per week performed by KLM for Ali Flotte Riunite.
(Convair - depart Amsterdam 1005 hours, arrive Milan 1420 hours; depart Milan 1550 hours, arrive Amsterdam 1950 hours; days 2, 4, 6.)

Route Brussels-Milan:

- 1 service three times per week performed by Sabena for Ali Flotte Riunite.
(Convair - depart Brussels 1030 hours, arrive Milan 1240 hours; depart Milan 1340 hours, arrive Brussels 1550 hours; days 1, 3, 5.)

Segment linking Brussels-Amsterdam:

- 1 service performed by Sabena for KLM.
(Convair; days 1, 3, 5.)

2. - CHARACTERISTICS OF THE POOL

This pooling arrangement has passed through three phases in its organization. During the first, the three airlines operated with their own aircraft: KLM and Sabena with DC-3's, Ali Flotte Riunite with SIAI's and SM-95's.

The Italian airline, after encountering many difficulties with the aircraft it was operating, finally withdrew from the service while maintaining its participation in the pool. It requested its co-members to operate its share in the pooling arrangement using their equipment hired at a contractual price per round-trip. This was the second phase of the organization.

The third corresponds to the present system in which the Amsterdam-Brussels link-up segment is operated by Sabena for KLM.

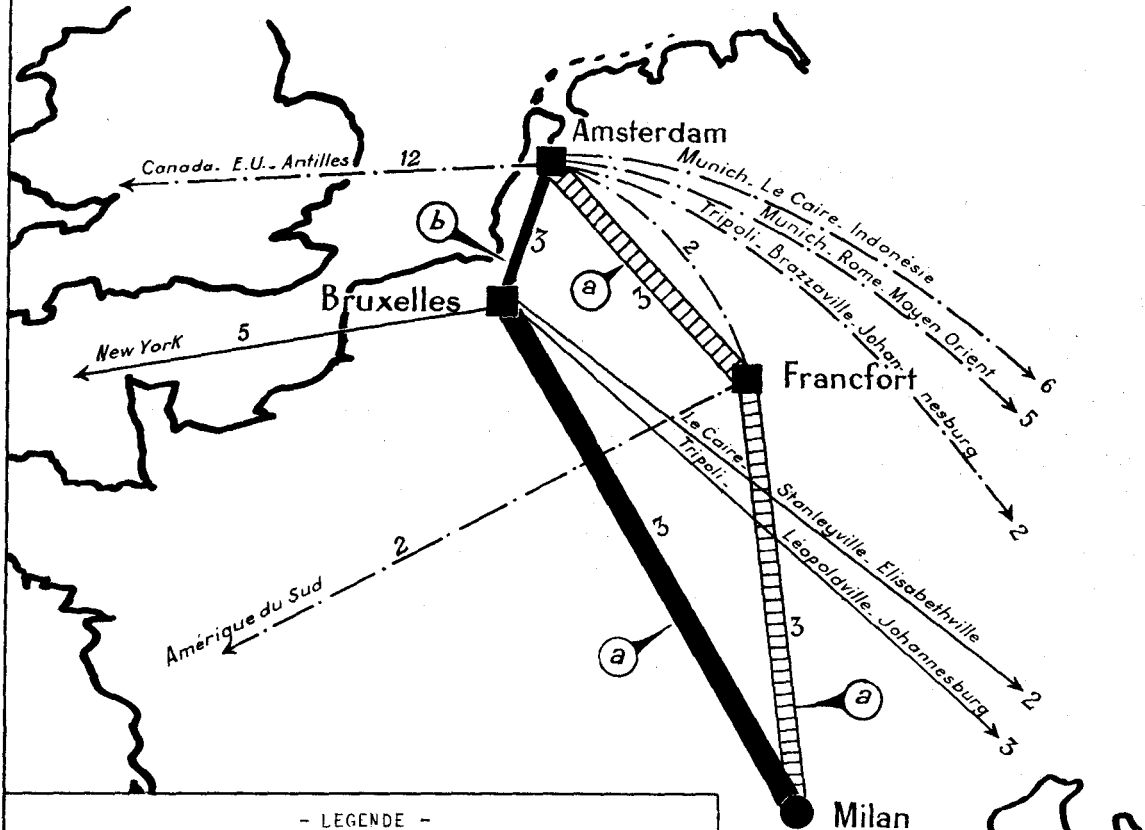
CARTE XIV

MAP XIV

CARTA XIV

ETE 1951
SUMMER 1951
VERANO 1951

POOL V - K.L.M. - SABENA - ALI FLOTTE RIUNITE



- LEGENDE -
 Largeur des bandes : 1 m/m = 40 sièges (parcours simple)
 Les chiffres indiquent la fréquence hebdomadaire

- LEGEND -
 Width of strips : 1 m/m = 40 seats available (Single Journey)
 Figures indicate weekly frequency

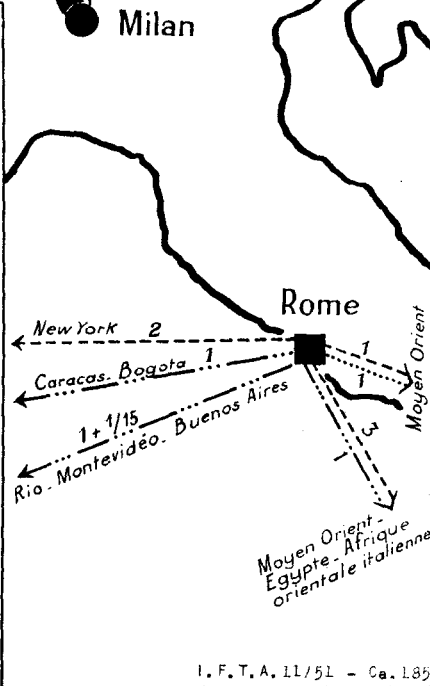
- CLAVE -
 Anchura de las bandas: 1 mm. = 40 asientos (viaje sencillo)
 Las cifras indican frecuencia semanal

■ Escale d'articulation entre les services régionaux en pool et les long-courriers
 Dividing point between pooled regional service and long-haul service
 Punto divisorio entre los servicios regionales en pool y los de transporte a larga distancia

■ SABENA
 ▨ K.L.M.
 ○ a Effectué pour l'ALI FLOTTE (Operated on behalf of ALI FLOTTE) (Servicio efectuado para ALI FLOTTE)
 ○ b Effectué pour la K.L.M. (Operated on behalf of K.L.M.) (Servicio efectuado para K.L.M.)

LONG-COURRIERS
 LONG-HAUL SERVICES
 SERVICIOS DE TRANSPORTE A LARGA DISTANCIA

— SABENA
 - - - K.L.M.
 ▨ L.A.I.
 ▨ ALI FLOTTE RIUNITE
 - - - ALITALIA



3. - COMMENTS

This pool is one which illustrates best the precariousness of the system when the members use aircraft of very unequal quality on a route. The Italian SIAI and SM-95 aircraft were incapable of providing the customer with a service comparable to that of the DC-3, and all the more in the case of the Convair 240. This was the same basic factor which, towards the end of 1950, led to the denunciation of the Air France - Alitalia pooling arrangement which had been operated since 1949 as well as the case of the Swissair-Iberia pooling arrangement in 1949.

The lease arrangement adopted by the Italian airline in the pool in question possibly gives it no other advantage than that of maintaining a foothold on the route.

In return, the precarious situation of the Italian airline industry has enabled the other countries to draw on part of the Italian traffic, particularly long-haul, to their benefit. The few long-haul services operated by Italy with reduced frequencies often do not meet the needs of the users, and Sabena and KLM are endeavouring to drain this Italian traffic towards their own respective capitals, each of which is the point of origin of long-haul services. It is possible that one of the aims of the KLM-Sabena pooling arrangement is to neutralize the preponderant position which one of these airlines may have acquired over the other in the Italian market.

GROUP OF POOLS VI, VII, VIII, and IX

CSA - KLM
CSA - SABENA
CSA - AIR FRANCE
CSA - SWISSAIR

These bilateral pooling arrangements have certain common features and have therefore been grouped together. When drawn on a map they give the appearance of four routes belonging to a same route pattern radiating from the same point: Prague. Another common feature is that these pooling arrangements are the only ones in existence between western airlines and an airline of a State situated within the Soviet sphere of influence.

1. - DESCRIPTION OF THE SERVICES (Table X; Map XV)POOL CSA - KLMRoute Prague-Amsterdam:

- 1 KLM service weekly.
(DC-3 - depart Amsterdam 1030 hours, arrive Prague 1340 hours;
depart Prague 1445 hours, arrive Amsterdam 1800 hours; day 6.)
- 2 services weekly CSA.
(Ilyushin 12 - depart Prague 0930 hours, arrive Amsterdam
1210 hours; depart Amsterdam 1315 hours, arrive Prague 1555
hours; days 2 and 4.)

POOL CSA - SABENARoute Prague-Brussels:

- 2 Sabena services weekly.
(DC-3 - depart Brussels 1330 hours, arrive Prague 1630 hours;
depart Prague 1720 hours, arrive Brussels 2020 hours; days 1 and
5.)
- 2 services weekly CSA.
(Ilyushin 12 - depart Prague 1015 hours, arrive Brussels 1245 hours;
depart Brussels 1340 hours, arrive Prague 1610 hours; days 3 and 6.)

POOL CSA - AIR FRANCERoute Prague-Paris:

- 1 Air France service three times per week.
(Languedoc - depart Paris 0810 hours, arrive Prague 1140 hours;
depart Prague 1340 hours, arrive Paris 1725 hours; days 2, 3, 4.)

- 1 CSA service three times a week.
(DC-3 - depart Prague 1340 hours, arrive Paris 1725 hours;
depart Paris next day 0810 hours, arrive Prague 1140 hours;
days 5, 6, 7 and 1, 6, 7.)

POOL CSA - SWISSAIRRoute Prague-Zurich:

- 1 Swissair service three times per week.
(DC-3 - depart Zurich 1540 hours, arrive Prague 1750 hours;
days 1, 3, 5.)

The CSA service was not operated during the summer of 1951 as a result of the action taken to prohibit flights by that company over the American Occupation Zone of Germany.

2. - CHARACTERISTICS OF THE POOLS

This group of similar pools raises two interesting problems: that of the organization of the regional schedule for direct services operated by the members between two points on parallel routes and that of the effects on the organization of a group of regional pools, of the competitive search for long-haul traffic.

a. - Organization of regional schedules

This problem is illustrated by the CAS-Air France pool. The schedule is indicative of the effort made by the members to organize their flight departures at the same time, at each of the two cities served. In the resulting schedule, all departures from Paris are at 0810 hours and from Prague at 1340 hours. It appears impossible for the advantages to be divided equitably between the two airlines, since one airline (CSA in this case) is obliged to leave its crews over-night several times in the week in the city where its partner has its Head Office. The pool may therefore appear, in the view of the partner who is at a disadvantage, as a means of allaying this inequality. This result may be achieved in certain cases. In others, the calculation may be upset, so that, in so far as the organization of the service for the public is concerned, the same results would be achieved by prior regulations, without pooling of revenue.

b. - Incidence of regional pools on long-haul competition

In the case in question, an airline that operates regional services only (CSA) is associated bilaterally with four partners, all of which are long-haul as well as regional operators (KLM, Sabena, Air France and Swissair). The policy of the long-haul operators is to channel a maximum of Czech traffic in order to feed their long-haul services.

If, in one of the pools, the Czech airline uses the same equipment as the other member (e. g., CSA and Swissair in 1950, DC-3), the pool so organized would include the allocation of revenue in proportion to the mileage performed. If, in another pool, the Czech airline does not use equipment uniform with that of its associate, the latter may then derive more profit from the pool, as a result of the corrective factor introduced in the system agreed on, e. g., the aircraft co-efficient. Under these circumstances, the Czech airline would naturally tend to feed long-haul traffic -- pooled along the regional sectors -- to the airline from whose co-operation it derives most benefit. CSA's associate in the other pool would then find its advantages in the regional pool wiped out by the reduction in its long-haul traffic; even though it maintains its own traffic office in Prague, it will probably be unable to counteract the effect of the policy followed by the local airline, since the four starting points for long-haul routes, namely Zurich, Paris, Brussels and Amsterdam, in view of their proximity, offer the long-haul passenger almost equivalent service. In order to retain its long-haul customers -- a primary objective of all European airlines -- the airline which had provided CSA with the least benefits in the pool would therefore have to sacrifice its position on the regional network, which would involve modifying the formula of the pool to the advantage of its associate. This example shows how European competition for long-haul traffic directly affects the functioning of regional co-operation.

Three of the pools examined above are not operating at present, since Air France, Sabena and KLM services were suspended towards the end of the summer in 1951. The only pool still in operation is that with Swissair, the services of which are operated by Swissair only three times a week during the winter season.

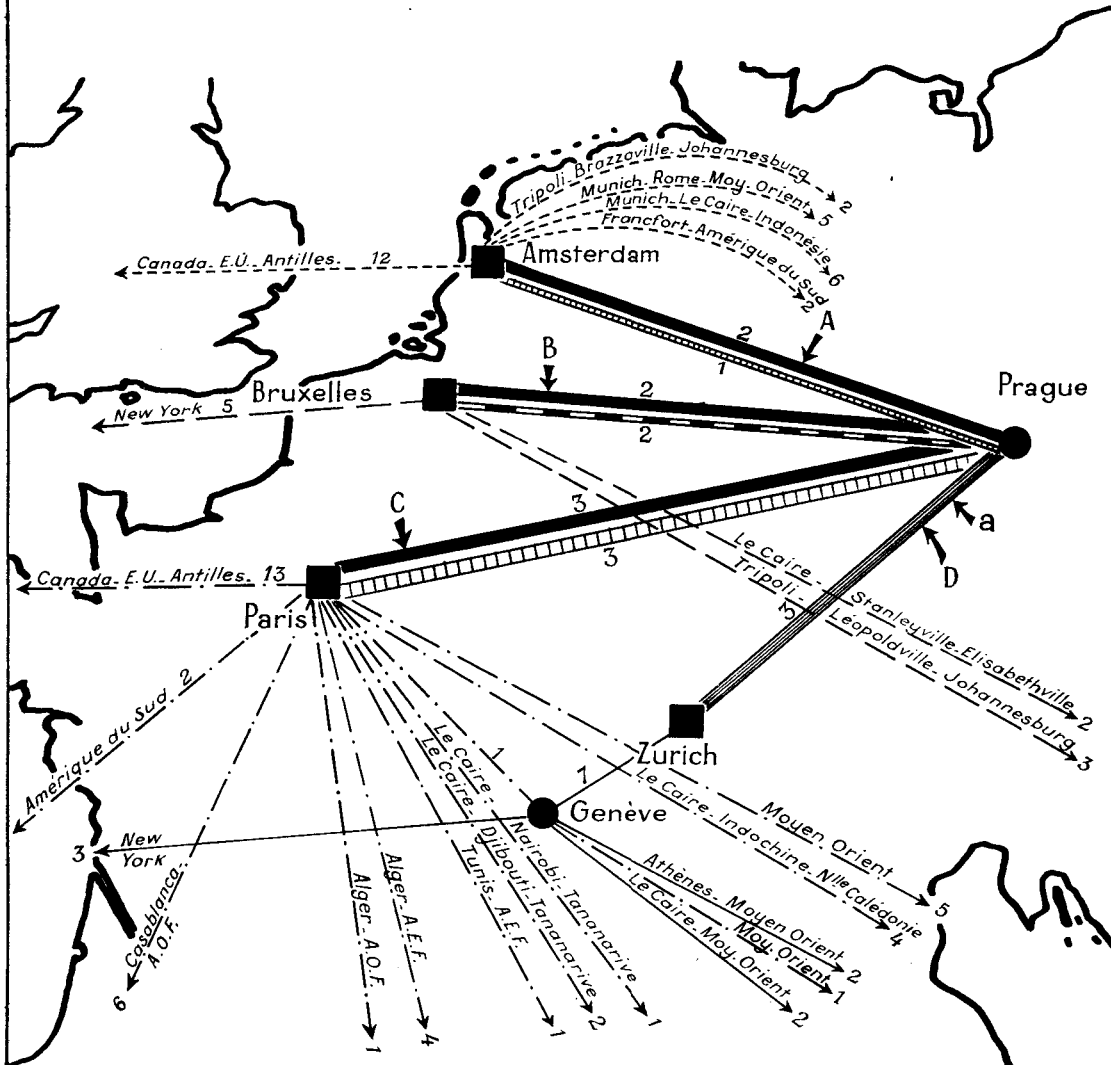
CARTE XV

MAP XV

CARTA XV

POOL VI - C.S.A. - K.L.M.
 POOL VII - C.S.A. - SABENA
 POOL VIII - C.S.A. - AIR FRANCE
 POOL IX - C.S.A. - SWISSAIR

ETE 1951
 SUMMER 1951
 VERANO 1951



Escale d'articulation entre les services régionaux en pool et les long-courriers
 Dividing point between pooled regional service and long-haul service
 Punto divisorio entre los servicios regionales en pool y los de transporte a larga distancia

- C.S.A.
- K.L.M.
- SABENA
- AIR FRANCE
- SWISSAIR

- A. Pool C.S.A.-K.L.M.
- B. Pool C.S.A.-SABENA
- C. Pool C.S.A.-AIR FRANCE
- D. Pool C.S.A.-SWISSAIR
- a. Exploité par la SWISSAIR seule
 (Operated by SWISSAIR only)
 Explotado únicamente por la SWISSAIR

- K.L.M.
- SABENA
- AIR FRANCE
- SWISSAIR

LONG-COURRIERS
 LONG-HAUL SERVICES
 SERVICIOS DE TRANSPORTE A LARGA DISTANCIA

- LEGENDE -
 Largeur des bandes: 1 m/m = 40 sièges (parcours simple)
 Les chiffres indiquent la fréquence hebdomadaire
 - LEGEND -
 Width of strips: 1 m/m = 40 seats available (Single Journey) - Figures indicate weekly frequency
 - CLAVE -
 Anchura de las bandas: 1 mm. = 40 asientos (viaje sencillo) - Las cifras indican la frecuencia semanal

POOL XSWISSAIR - ALI FLOTTE RIUNITE1. - DESCRIPTION OF THE SERVICES (Table X, Map XVI)SWISSAIRRoute Geneva-Nice-Rome:

- 1 service four times per week.
(DC-3 - depart Geneva 1620 hours, arrive Rome 2040 hours;
depart Rome next day 0830 hours, arrive Geneva 1250 hours;
days 2, 4, 6, 7 and 3, 5, 7, 1.)

ALI FLOTTE RIUNITERoute Rome-Nice-Geneva:

- 1 service three times per week.
(DC-3 - depart Rome 0830 hours, arrive Geneva 1250 hours;
days 2, 4, 6;
depart Geneva 1650 hours, arrive Rome 2100 hours; days 3, 5, 6.)

2. - CHARACTERISTICS OF THE POOL

Parallel route operated by the members using the same type of aircraft. Probably, allocation of revenue in proportion to the mileage performed.

Connection between Geneva and Zurich is provided for all the services, since Geneva alone does not provide sufficient traffic to Italy. The segment of Swiss cabotage is therefore considered as a feeder segment for the international route.

CARTE XVI

MAP XVI

CARTA XVI

POOL X - SWISSAIR - ALI FLOTTE RIUNITE

ETE 1951
SUMMER 1951
VERANO 1951

- LEGENDE -

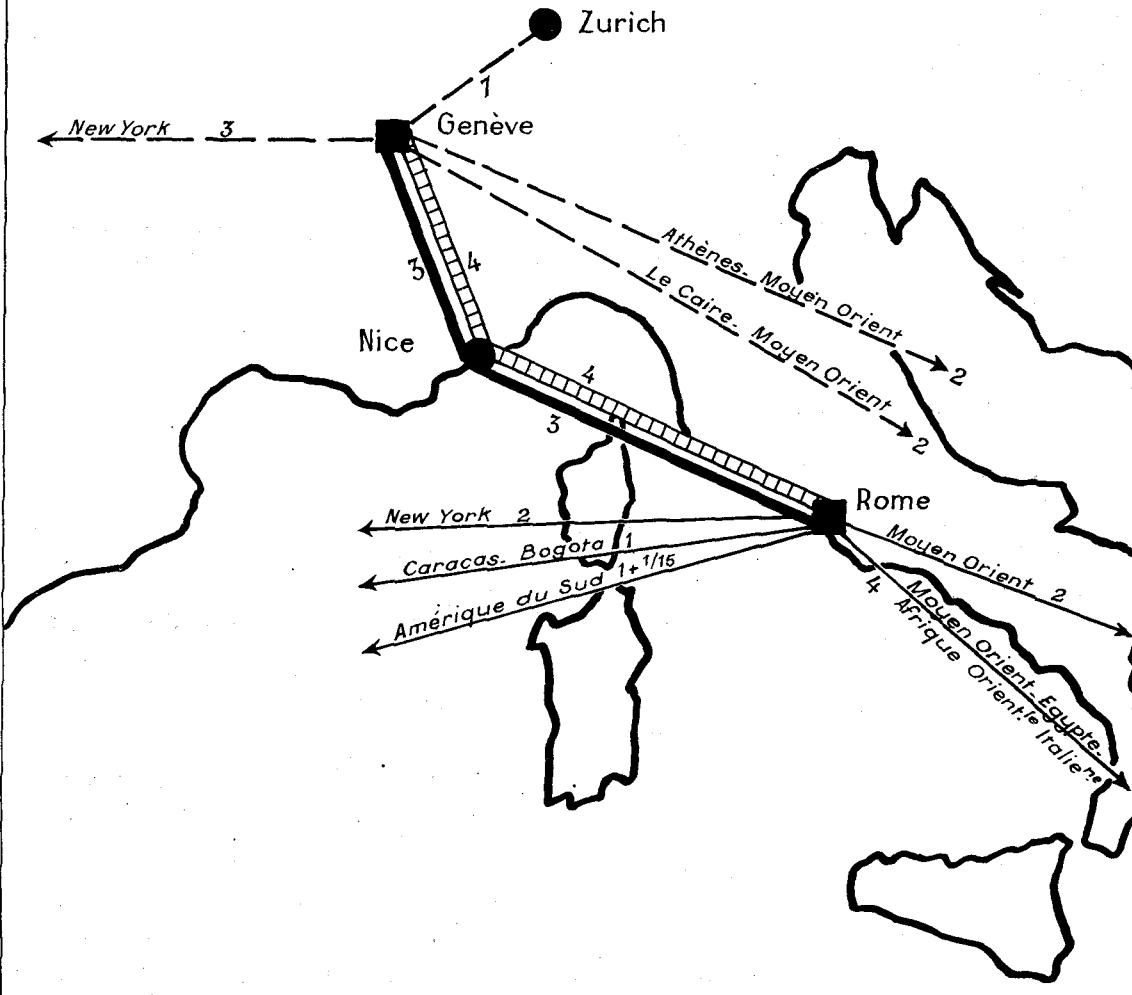
Largeur des bandes : 1 m/m = 40 sièges (parcours simple)
Les chiffres indiquent la fréquence hebdomadaire.

- LEGEND -

Width of strips: 1 m/m = 40 seats available (Single Journey)
Figures indicate weekly frequency.

- CLAVE -

Anchura de las bandas: 1 mm. = 40 asientos (viaje sencillo)
Las cifras indican la frecuencia semanal.



Escale d'articulation entre les services régionaux en pool et les long-courriers
 Dividing point between pooled regional service and long-haul service.
 Punto divisorio entre los servicios regionales en pool y los de transporte a larga distancia

SWISSAIR

ALI FLOTTE RIUNITE

LONG-COURRIERS
 LONG-HAUL SERVICES
 SERVICIOS DE TRANSPORTE A LARGA DISTANCIA

SWISSAIR
 c'ies ITALIENNES

POOL XIKLM - AER LINGUS1. - DESCRIPTION OF THE SERVICES (Table X; Map XVII)AER LINGUSRoute Dublin-Manchester-Amsterdam:

- 1 service three times per week.
(DC-3 - depart Dublin 1005 hours; arrive Amsterdam 1355 hours; depart Amsterdam 1530 hours, arrive Dublin 1945 hours; days 1, 3, 7.)

KLMRoute Amsterdam-Manchester-Dublin:

- 1 service three times per week.
(DC-3 or Convair - depart Amsterdam 0810 hours; arrive Dublin 1155 hours; depart Dublin 1255 hours, arrive Amsterdam 1615 hours, days 2, 5, 6.)

2. - CHARACTERISTICS OF THE POOL

This pooling arrangement was signed in April 1950. According to current practice, the capacity allocated for each type of aircraft is fixed for the IATA season to which the pool relates. Since the route involves an intermediate stop in a third country (Manchester), it is possible that the procedures with regard to transit traffic require the establishment of aircraft capacities for each of the two sectors constituting the route.

In 1950, during part of the summer period, KLM operated Convair 240's on this route. With the closing of Manchester airport to this type of aircraft it became necessary, as of 1 August, to use DC-3's. The supplementary services required by summer traffic are to be pooled, unless by common agreement it is decided otherwise.

POOL XI - K.L.M. - AER LINGUS
POOL XII - S.A.S. - AERO O.Y.

ETE 1951
SUMMER 1951
VERANO 1951

Escale d'articulation entre les services régionaux en pool et les long-courriers
Dividing point between pooled regional service and long-haul service



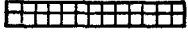
Punto divisorio entre los servicios regionales en pool y los de transporte a larga distancia



K.L.M.



AER LINGUS



AERO O.Y.



S.A.S.

LONG-COURRIERS
LONG-HAUL SERVICES

Servicios de transporte a larga distancia

--- K.L.M.

— S.A.S.

A. Pool K.L.M. - AER LINGUS

B. Pool S.A.S. - AERO O.Y.

- LEGENDE -

Largeur des bandes : 1 m/m = 40 sièges (parcours simple)

Les chiffres indiquent la fréquence hebdomadaire

- LEGEND -

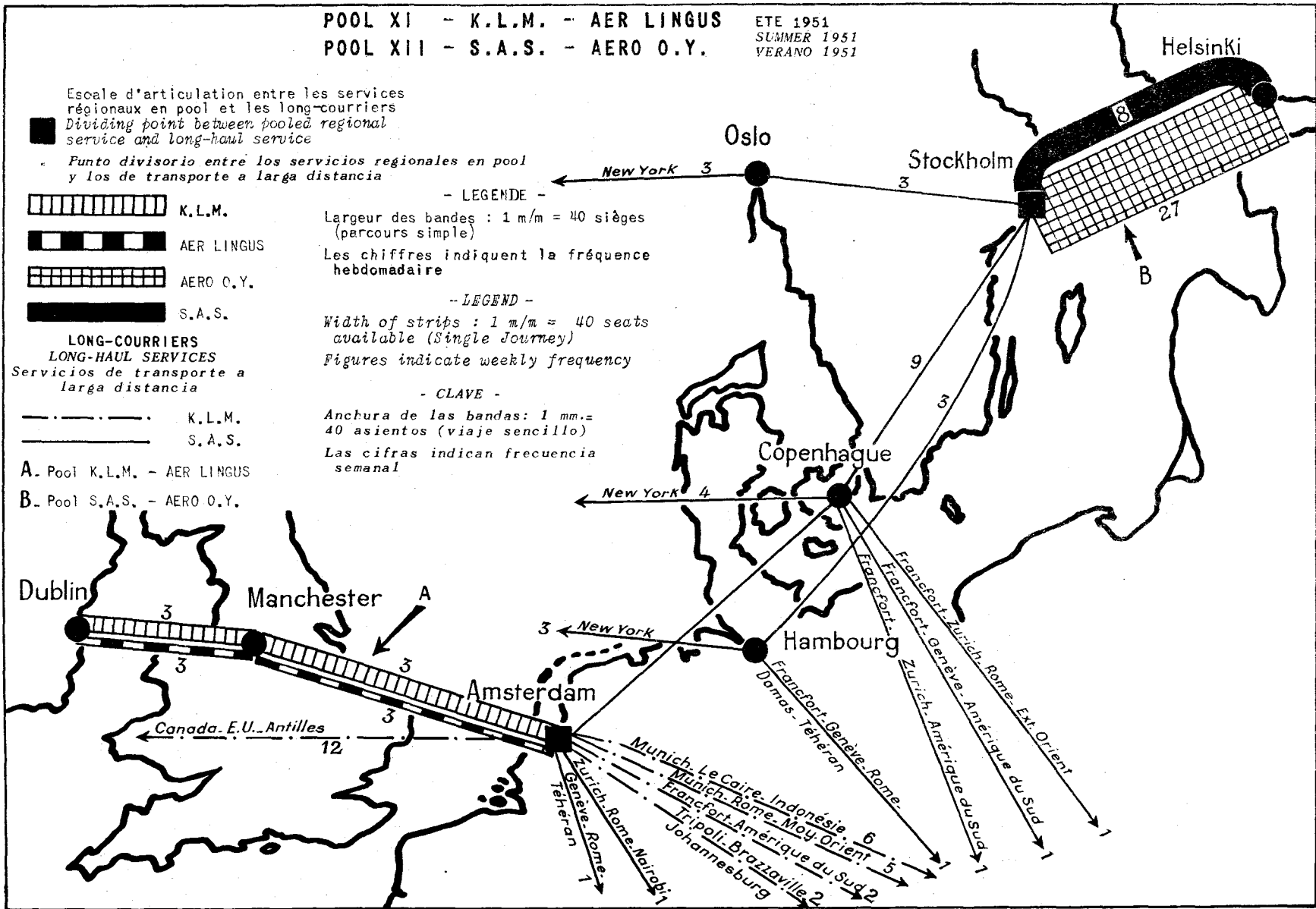
Width of strips : 1 m/m = 40 seats available (Single Journey)

Figures indicate weekly frequency

- CLAVE -

Anchura de las bandas: 1 mm = 40 asientos (viaje sencillo)

Las cifras indican frecuencia semanal



POOL XIISAS - AERO O/Y1. - DESCRIPTION OF THE SERVICES (Table X; Map XVII)SASRoute Stockholm-Helsinki:

- 2 services per week.
(Scandia - depart Stockholm 0940 hours, arrive Helsinki 1215 hours;
depart Helsinki 1315 hours, arrive Stockholm 1400 hours; days 2
and 5.)

AERO O/YRoute Stockholm-Helsinki:

- 1 service daily.
(DC-3 - direction Helsinki-Stockholm: depart Helsinki 1515 hours,
arrive Stockholm 1655 hours;
direction Stockholm-Helsinki: depart Stockholm 1040 hours,
arrive Helsinki 1335 hours.)

- 1 service daily.
(DC-3 - depart Helsinki 1115 hours, arrive Stockholm 1215 hours;
depart Stockholm 1705 hours, arrive Helsinki 2000 hours.)

Services operated jointly by the two airlines:
- direction Stockholm-Helsinki: 5 services weekly.
- direction Helsinki-Stockholm: 7 services weekly.
(SAS operating Scandia's, Aero O/Y operating DC-3's;
depart Stockholm 0940 hours, arrive Helsinki 1215 hours;
depart Helsinki 1915 hours, arrive Stockholm 2000 hours, days 1,
3, 4, 6, 7);
- direction Stockholm-Helsinki: 7 services weekly.
- direction Helsinki-Stockholm: 5 services weekly.
(Scandia - depart Stockholm 1440 hours, arrive Helsinki 1715 hours;
depart Helsinki 1315 hours, arrive Stockholm 1400 hours.)

2. - COMMENTS

The methods used for allocating revenue are not known. The difference in capacity of the aircraft used by the participants (Scandia's by SAS, DC-3's

by Aero O/Y, is not considerable (7 seats); it could, however, justify a coefficient or ceiling system).

The indirect route Helsinki-Åbo-Stockholm is operated by the Finnish airline alone and does not come under the pooling arrangement.

POOL XIIISWISSAIR - SAS1. - DESCRIPTION OF THE SERVICES (Table X, Map XVIII)SWISSAIRRoute Zurich-Copenhagen:

- 1 direct service daily.
(Convair - depart Zurich 1600 hrs, arrive Copenhagen 1859 hrs;
depart Copenhagen 1050 hrs, arrive Zurich 1355 hrs.)

SASRoute Stockholm-Copenhagen-Amsterdam-Geneva:

Regional segment of the long-haul route to Tehran via Rome and Beirut;

- 1 service weekly.
(DC-6 - depart Stockholm 1420 hrs.)

Route Hamburg-Frankfurt-Geneva:

Regional segment of the long-haul route to Tehran via Rome and Damascus;

- 1 service weekly.
(DC-6 - depart Hamburg 1755 hrs; day 1.)

Route Stockholm-Copenhagen-Amsterdam-Zurich:

Regional segment of the long-haul route to Nairobi, via Rome, Athens, Khartoum;

- 1 service weekly.
(DC-6 - depart Stockholm 0710 hrs; day 4.)

Route Stockholm-Copenhagen-Frankfurt-Geneva:

Regional segment of the long-haul route to South America via Lisbon and Dakar;

- 1 service weekly plus one service per fortnight.
(DC-6 - depart Stockholm 0840 hrs; day 6.)

Route Stockholm-Copenhagen-Frankfurt-Zurich:

Regional segment of the long-haul route to South America via Lisbon and Dakar;

- 1 service weekly.
(DC-6 - depart Stockholm 0840 hrs; day 2.)

Route Stockholm-Copenhagen-Frankfurt-Zurich:

Regional segment of the long-haul route to Tokyo, via Rome, Lydda, Karachi, Calcutta, Bangkok and Hong Kong;

- 1 service weekly.
(DC-6 - depart Stockholm 0840 hrs; day 3.)

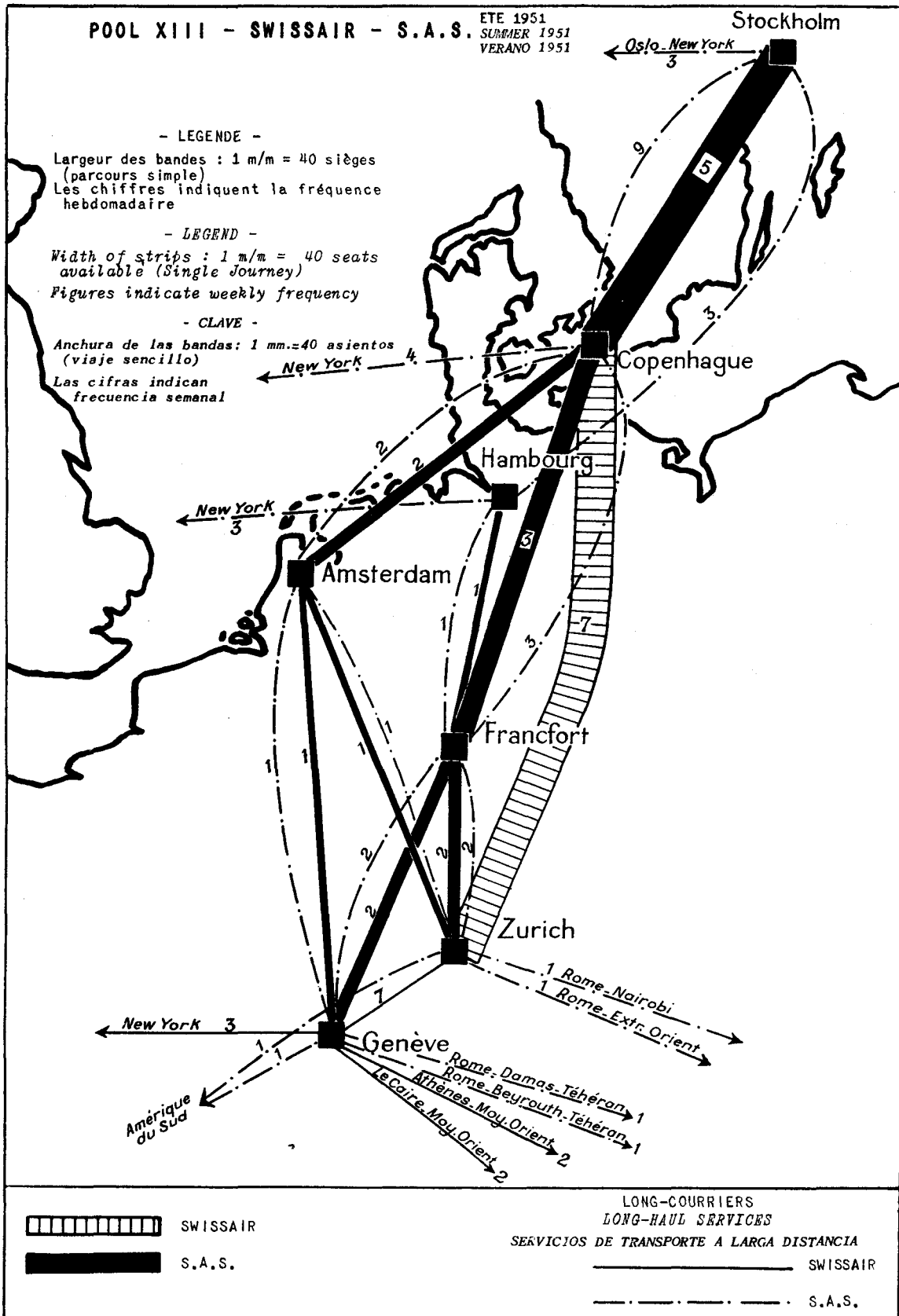
2. - CHARACTERISTICS OF THE POOL

This is a particularly interesting example of a pooling network. The pooling agreement is between two members one of which, Swissair, operates a single direct regional service (Zurich-Copenhagen) and the other, six regional services converging towards Switzerland and then extending outwards as long-haul services. From Table I it may be seen that, while each of the airlines offers practically the same number of seats per week (Swissair 560; SAS 572), the mileage covered by SAS is, by reason of its indirect services, greater by more than one-third (9,180 kms) than that of Swissair (6,650 kms). In order to establish a formula for allocating revenue, it is not to Swissair's interest to have this last factor taken into account, since it only operates a direct regional service, whereas SAS will endeavour to obtain the best possible compensation for the greater distance covered because of its system of regional operations. There is little likelihood that Swissair would accept the system of aircraft coefficients which would favour the DC-6 over the Convair. On the other hand, a ceiling system would hardly satisfy SAS since the additional mileage performed would not enable it to obtain the benefit of the local traffic taken on at Amsterdam, Hamburg or Frankfurt, the revenue of which would be pooled. SAS, however, will be obliged to sacrifice part of its interests in the European pool, since its network of long-haul operations makes it necessary to feed its services at the most favourable traffic points. The effectiveness of this policy therefore depends on the facilities which it may possess at these points, in other words on the extent to which it is empowered to make use of the Fifth Freedom.

CARTE XVIII

MAP XVIII

CARTA XVIII



Germany, a territory without sovereignty, where traffic is expanding, provides it with one important transit point (Frankfurt) and one terminal (Hamburg). Fifth Freedom rights have been granted at Amsterdam, except for the African route (Nairobi). In Switzerland, Fifth Freedom rights have been granted at Geneva for South America and the Middle East, but not at Zurich for these two destinations. Therefore, SAS may benefit to some extent in Switzerland from the fact that some of its long-haul routes do not compete directly with Swissair, which only has a few long- or medium-range services. On the other hand, Switzerland, because of its central position in Europe, is located on the majority of SAS's long-haul routes except those to South America. Nevertheless, SAS has been obliged to search in Switzerland for the Fifth Freedom traffic which it has been refused at Paris, just as it has been denied to KLM at Nice, which is a transit point to the Antilles but where KLM is only authorized to make technical stops.

All these considerations when taken together explain Switzerland's importance in the SAS long-haul system as well as the methods whereby Switzerland - the transit country - endeavours to protect its interests. Therefore, for the latter the pooling arrangement may seem an efficient method of defence which can always be combined - as in the present case - with a more or less extensive limitation of Fifth Freedom rights.

Finally, this is a very characteristic indication that the pool constitutes a doubtful form of co-operation between partners whose operating policy is based, in the one case on a regional system and in the other on long-haul services.

POOL XIVAIR FRANCE - SWISSAIR1. - DESCRIPTION OF THE SERVICES (Table X, Map XIX).AIR FRANCERoute Paris-Geneva:

- 1 service daily.
(DC-4 - depart Paris 1440 hrs, arrive Geneva 1620 hrs;
depart Geneva 1720 hrs, arrive Paris 1900 hrs.)

Route Paris-Geneva-Beirut-Tehran:

- 1 service weekly.
(Constellation - depart Paris 1830 hrs, arrive Geneva 2100 hrs;
depart Tehran 1630 hrs, arrive Geneva 0600 hrs, Paris 0730 hrs;
day 2.)

Route Paris-Zurich-Vienna:

- 3 services weekly.
(DC-4 depart Paris 0900 hrs, arrive Vienna 1330 hrs;
depart Vienna 1435 hrs, arrive Paris 1930 hrs; days 1, 3, 5.)

SWISSAIRRoute Paris-Geneva:

- 1 service daily.
(DC-3 depart Geneva 0940 hrs, arrive Paris 1140 hrs;
depart Paris 1130 hrs, arrive Geneva 1320 hrs.)

- 3 services weekly.
(DC-3 depart Geneva 1530 hrs, arrive Paris 1730 hrs;
depart Paris 1825 hrs, arrive Geneva 2015 hrs; days 2, 4, 6.)

Route Paris-Zurich:

- 1 service daily.
(DC-3 - depart Zurich 0855 hrs, arrive Paris 1100 hrs;
depart Paris 1220 hrs, arrive Zurich 1420 hrs.)

- 4 services weekly.
(DC-3 depart Zurich 1505 hrs, arrive Paris 1710 hrs;
depart Paris 1850 hrs, arrive Zurich 2050 hrs; days 2, 4, 6, 7.)

2. - CHARACTERISTICS OF THE POOL

This pooling agreement was signed after the war (August 1945). The pooling arrangement covers the three types of traffic: passengers, mail and cargo.

Air France route Paris-Geneva-Tehran:

The provisions of the pooling agreement relating to transit traffic are not known. In any case, the local Paris-Geneva and Geneva-Paris traffic carried on this weekly service is of minor importance since the two points are served by the day-time services. The schedule of the Tehran route offers on the return flight to Paris a service which is most inconvenient for the passenger (departure from Geneva for Paris at 6 a. m.).

Air France route Paris-Zurich-Vienna:

This route, as opposed to the previous one, offers a practical day-time service for the passenger over the entire route. No doubt it was found possible to grant Fifth Freedom rights to the French airline on the Zurich-Vienna segment without difficulty, since it is not in direct competition with Swissair. The Swissair service serving Austria in fact takes a most roundabout route, stopping at Innsbruck, Salzburg and Linz. On the other hand, as pointed out in previous comments, compensation for the granting of transit rights may be sought and obtained within the framework of a pool.

In 1950 the Paris-Geneva and Paris-Zurich services were operated by Air France with Languedoc's and Swissair with DC-3's. Assuming the service to be of equal quality, the use of the formula of aircraft coefficients could have been justified on the route, in view of the difference in capacity between the two types of aircraft. However, Air France's partner could no doubt argue on the basis that the Languedoc does not offer a service of equivalent quality to that of the DC-3, and consequently advocate a different corrective factor.

In 1951, the extension of routes to Central Europe (Vienna) and the Middle East (Tehran), and on the other hand, the increase in Air France traffic with Switzerland, have justified the operation by the French company of

aircraft with greater capacity (DC-4's, Constellation's). Swissair, on its part, had contemplated the use of Convair 240's over the 1951 summer period, but found itself unable to do so. With the operation of DC-4's and Constellation's, the services offered by the French airline became both qualitatively and quantitatively superior to those of Swissair (this, of course, being valid only while Swissair does not operate Convair 240's on that route) which should in the normal course of events enable Air France to correct, within the framework of the pool, the unfavourable position resulting from the use of the Languedoc during the previous period.

CARTE XIX

MAP XIX

CARTA XIX

POOL XIV - SWISSAIR - AIR FRANCE

ETE 1951
SUMMER 1951
VERANO 1951

- LEGENDE -

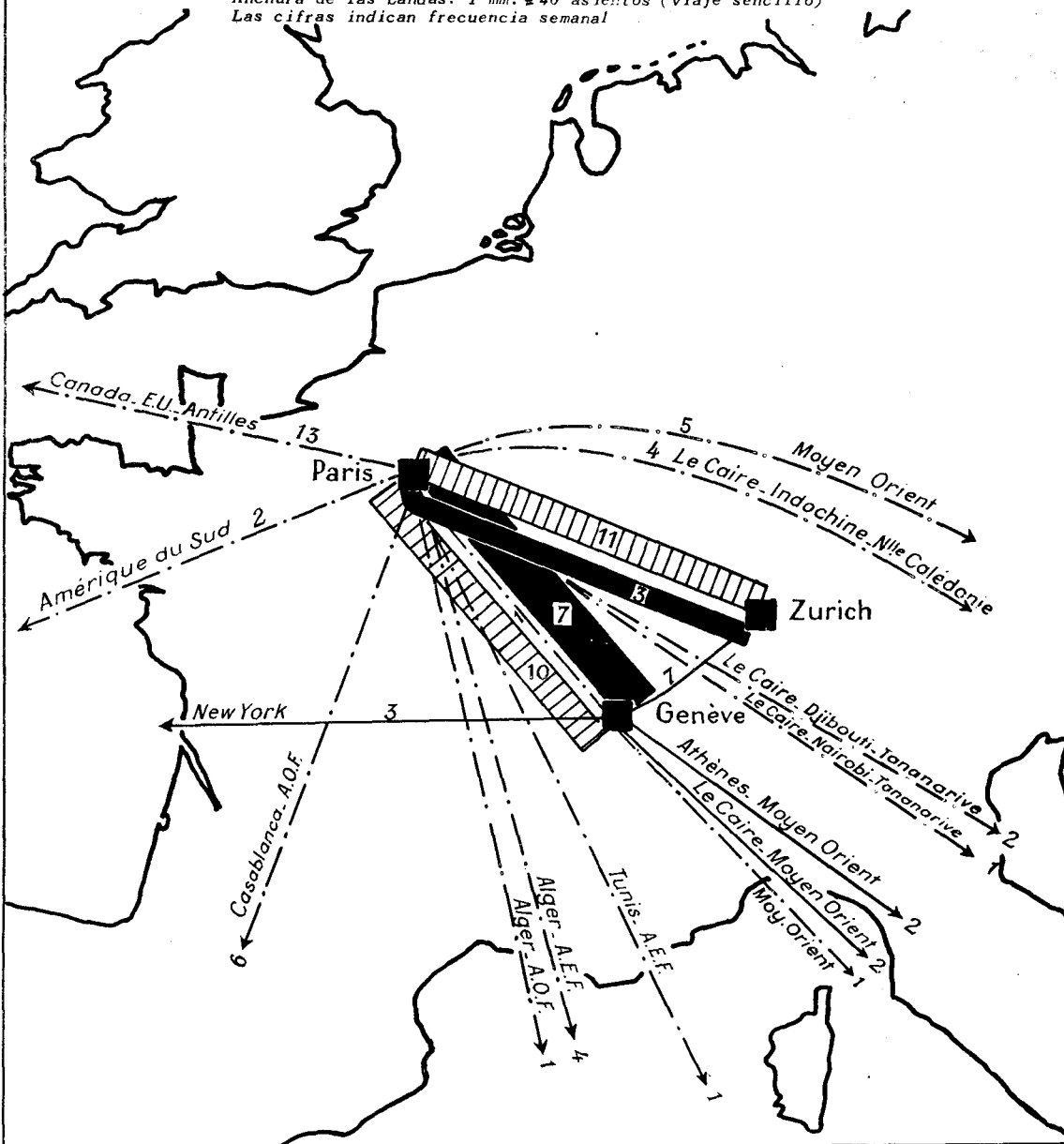
Largeur des bandes : 1 m/m = 40 sièges (parcours simple)

- LEGEND -
Width of strips : 1 m/m = 40 seats available (Single Journey)

Les chiffres indiquent la fréquence hebdomadaire.

Figures indicate weekly frequency

CLAVE
Anchura de las bandas: 1 mm. = 40 asientos (viaje sencillo)
Las cifras indican frecuencia semanal



 SWISSAIR
 AIR FRANCE

LONG-COURRIERS
 LONG-HAUL SERVICES
 SERVICIOS DE TRANSPORTE A LARGA DISTANCIA
 AIR FRANCE
 SWISSAIR

XV. - THE GERMAN SYSTEM

(Tables X(a), X(b), X(c), X(d); Maps XX, XXI, XXII, XXIII)

1. - CONDITIONS OF UTILIZATION OF GERMAN TERRITORY AFTER THE WAR

The importance of Lufthansa in pre-war Europe as a participant in the system of pools, and as an operator generally, is evident in Table XIII (see page 125) which shows that the traffic carried by that airline accounted for 32 per cent of all European traffic, and that 77 per cent of Lufthansa's total traffic was pooled. This single fact serves to gauge the vacuum created by its disappearance after the war, as a result of Germany's loss of national sovereignty.

As early as 1945, two European airlines, KLM and Sabena, became interested in the German market and made preparations to operate services in that country. Germany was easy to penetrate, owing to its international status, to its close proximity, and to the demographic and economic decentralization of the country, which generates heavy domestic traffic by facilitating the establishment of a balanced air service pattern. While these were decisive factors in attracting the Belgian and Dutch airlines, they were also moved, no doubt, by a natural desire to protect their interests, since they might have entertained fears that the Western Occupying Powers would attempt to take the fullest advantage of their position to promote their own interests in commercial air transport. Experience was to show that these fears were unfounded, since the main potential European competitors of Sabena and KLM in Germany -- BEA, Air France and Swissair -- took some time in organizing their systems. The Occupying Powers, as such, placed no obstacles in the way of Belgian and Dutch activities. Belgium had no difficulty in obtaining the renewal of pre-war agreements between Lufthansa and Sabena, which granted Sabena certain cabotage rights inside Germany (on the Brussels-Essen-Berlin and Brussels-Cologne-Berlin routes).

2. - JOINT USE BY KLM AND SABENA OF GERMAN TERRITORY

The policy of the Belgian and Dutch airlines in Germany appears to have had the dual objective of a systematic operation of German cabotage traffic and of German long-haul traffic.

This action resulted in the organization of a pool together with a commercial agency agreement and an agreement on ground services. The commercial agencies and ground services were allocated between the two participants as follows:

Sabena: Düsseldorf

KLM : Frankfurt, Nuremberg, Munich

The commercial agencies have been the subject of limited co-operation, each airline maintaining one or more agents at the points served, mainly to cater to the long-haul market and to sell long-haul transportation, whereas this work, in the case of pooled regional traffic, can be organized on a basis of mutual assistance.

On the other hand, ground services offered a better opportunity for sincere co-operation under the terms of the new agreement formula reviewed in Chapter III. In fact it was in Germany, on the initiative of Sabena and KLM, that the system was first established of joint costing of ground service charges, with the books open to inspection; this was eventually extended to other participating airlines in Germany (Air France, Swissair) and has now been attempted with regard to airports outside Germany and even outside Europe.

With respect to the organization of air services, the two airlines have taken advantage of the special configuration of the network in Germany to set up different combinations of services. The following combinations are noted:

- conventional two-way services in parallel both ways;
- services in which a stop is added on the return flight to the stops on the outward flight, or vice-versa, Ex.: Sabena -- Brussels-Frankfurt-Munich on the outbound flight, Munich-Frankfurt-Düsseldorf-Brussels on the return flight; KLM -- Amsterdam-Düsseldorf-Frankfurt-Stuttgart Munich on the outbound flight, Munich-Stuttgart-Düsseldorf-Amsterdam on the return flight;
- services comprising the same number of intermediate stops, one of which is different on the outbound and return flights (KLM: Amsterdam-Düsseldorf-Frankfurt-Munich on the outbound flight, Munich-Stuttgart-Düsseldorf-Amsterdam on the return flight).

Thus, irrespective of the system organized, all these services rely extensively on German cabotage traffic. Of the twenty-two routes operated by these two airlines, only three are direct flights from Belgium to Germany or from the Netherlands to Germany:

Sabena: Brussels-Frankfurt

KLM : Amsterdam-Frankfurt
: Amsterdam-Innsbruck

POOL XV - K.L.M. - SABENA

ETE 1951
SUMMER 1951
VERANO 1951

Utilisation coopérative du territoire allemand
Cooperative utilization of German territory
Utilización cooperativa del territorio alemán

- LEGENDE -

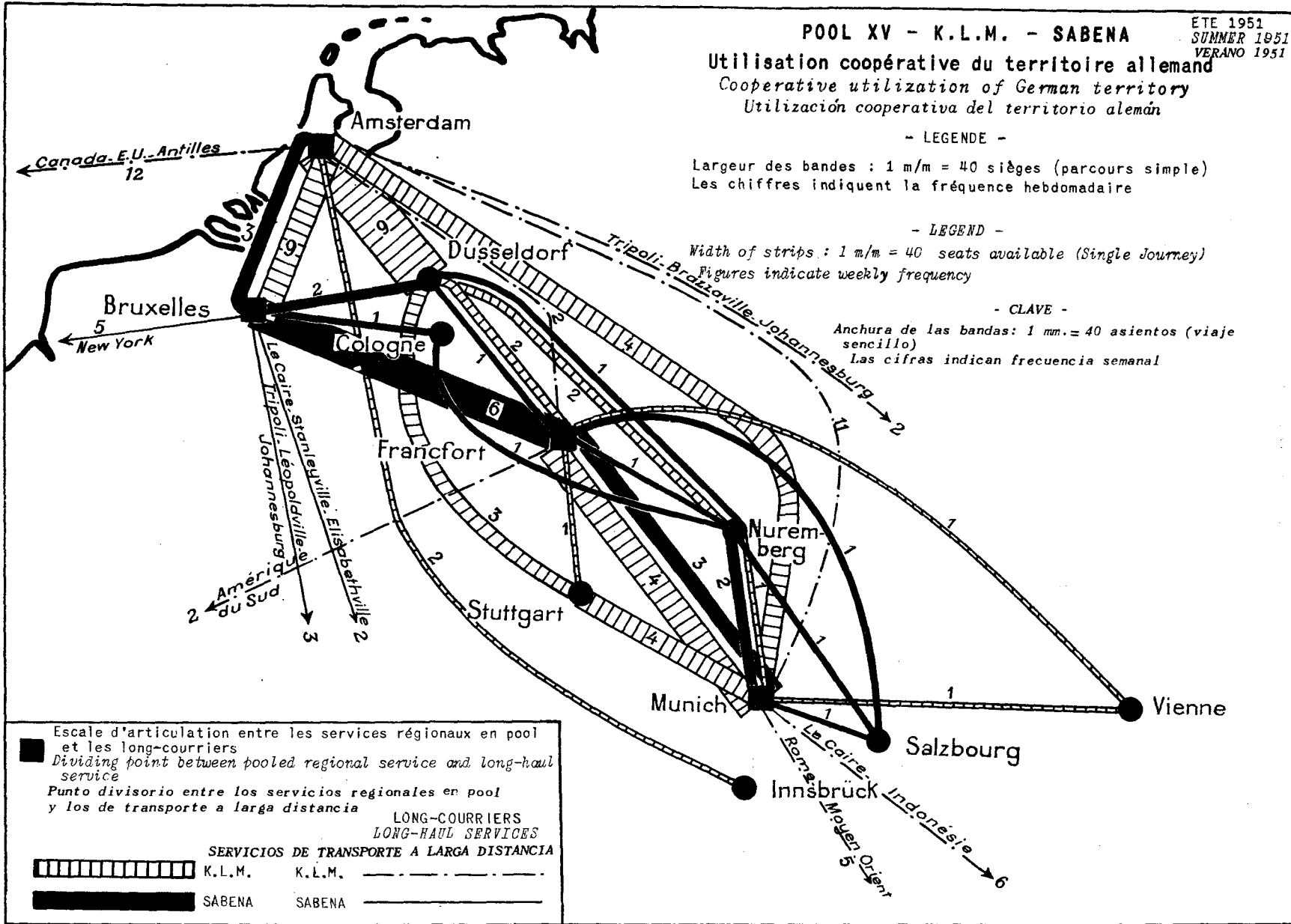
Largeur des bandes : 1 m/m = 40 sièges (parcours simple)
Les chiffres indiquent la fréquence hebdomadaire

- LEGEND -

Width of strips : 1 m/m = 40 seats available (Single Journey)
Figures indicate weekly frequency

- CLAVE -

Anchura de las bandas: 1 mm. = 40 asientos (viaje sencillo)
Las cifras indican frecuencia semanal



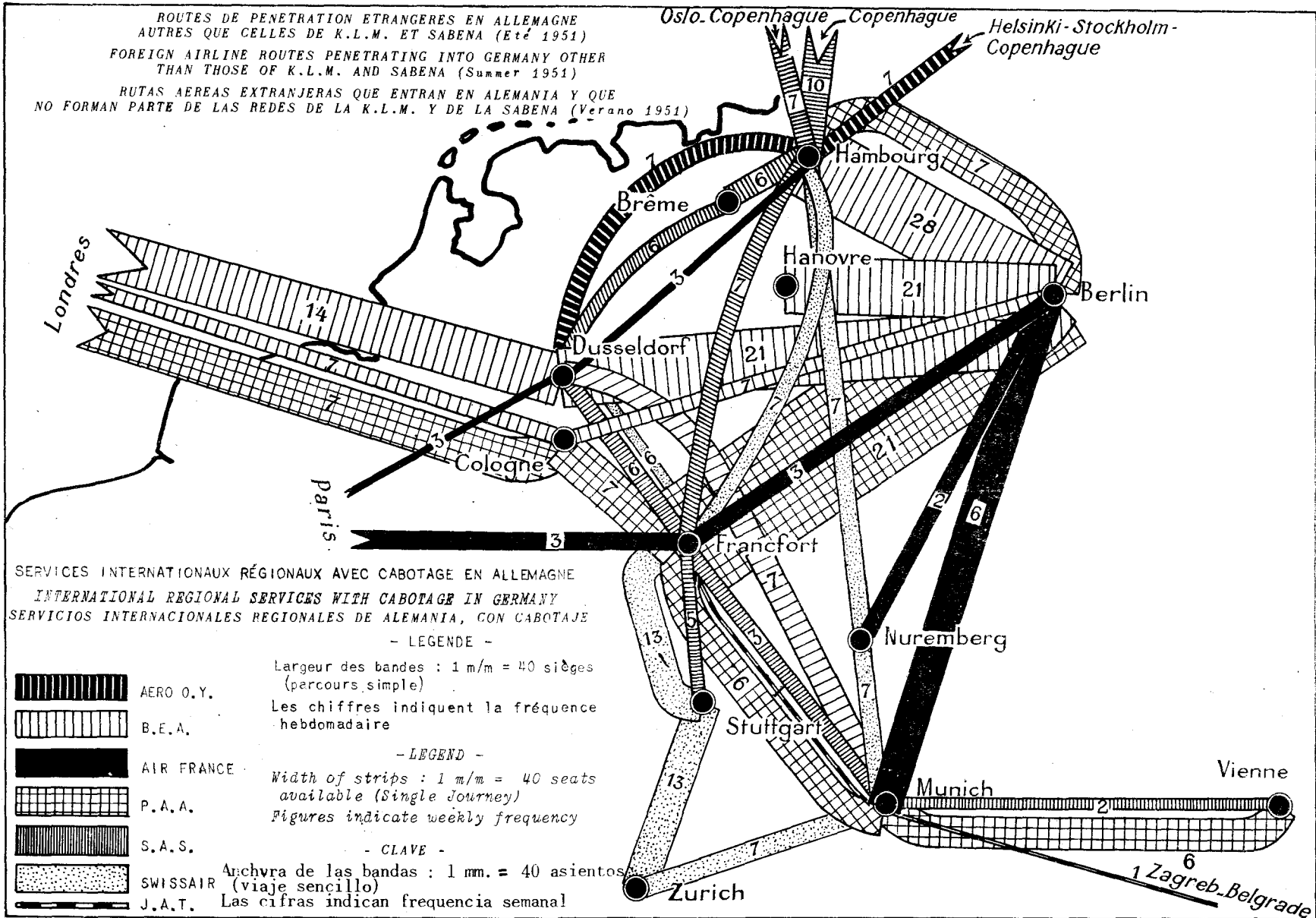
Escale d'articulation entre les services régionaux en pool et les long-courriers
Dividing point between pooled regional service and long-haul service
Punto divisorio entre los servicios regionales en pool y los de transporte a larga distancia

LONG-COURRIERS
LONG-HAUL SERVICES

SERVICIOS DE TRANSPORTE A LARGA DISTANCIA

	K.L.M.	K.L.M.	
	SABENA	SABENA	

ICAO Circular 28-AT/4

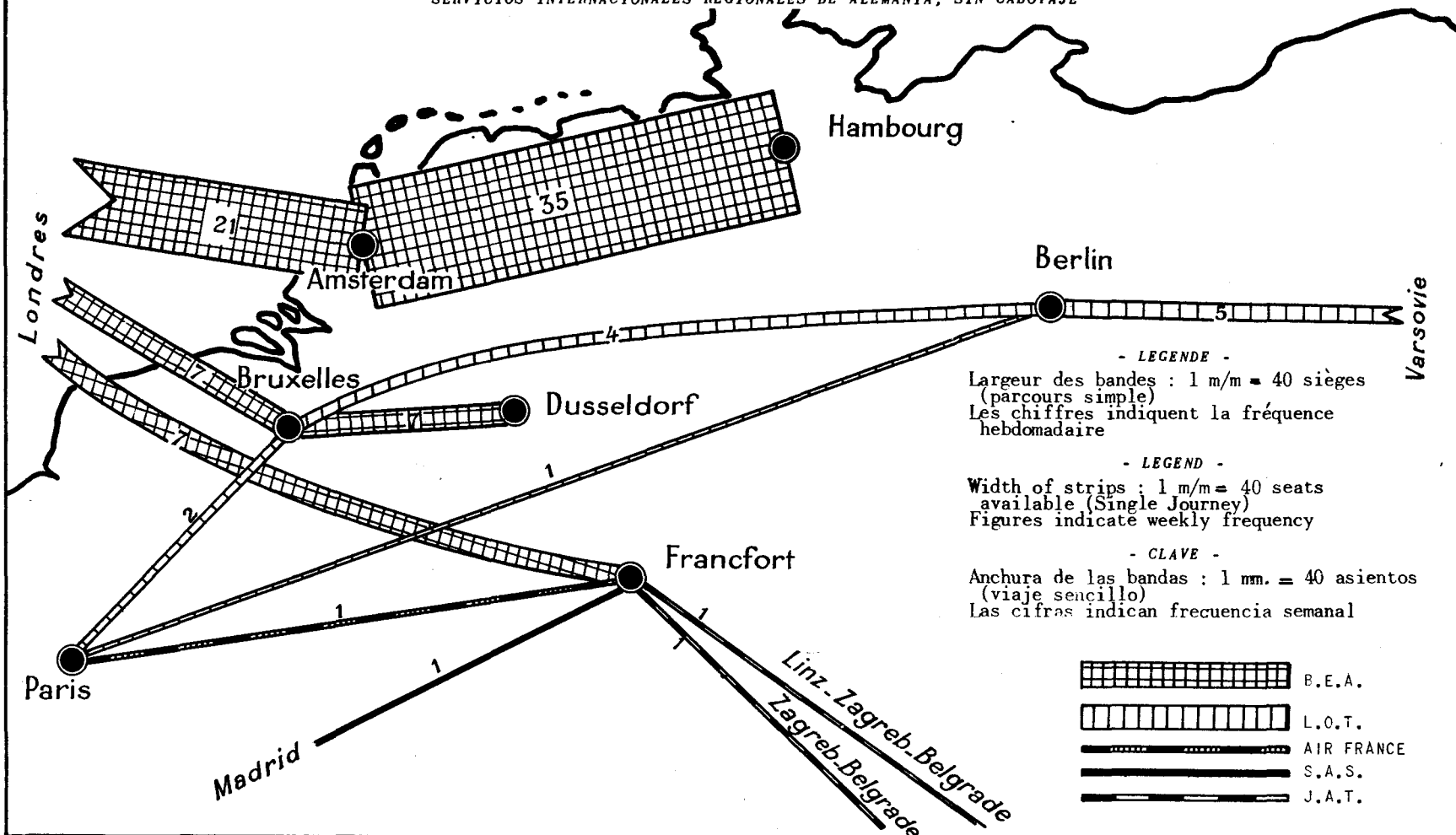


ROUTES DE PENETRATION ETRANGERES EN ALLEMAGNE AUTRES QUE CELLES DE K.L.M. ET SABENA (Eté 1951)

FOREIGN AIRLINE ROUTES PENETRATING INTO GERMANY OTHER THAN THOSE OF K.L.M. AND SABENA (Summer 1951)

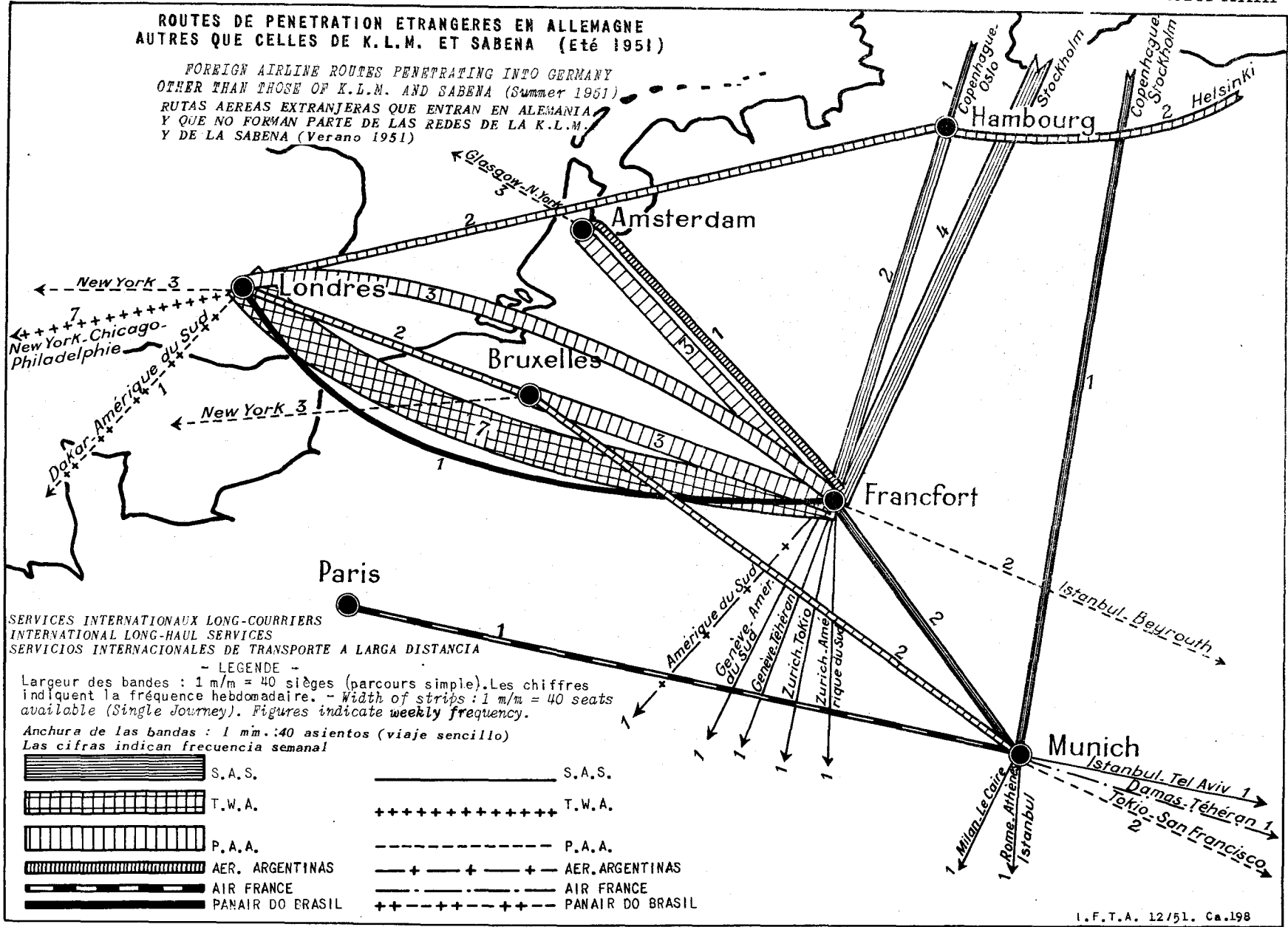
RUTAS AEREAS EXTRANJERAS QUE ENTRAN EN ALEMANIA Y QUE NO FORMAN PARTE DE LAS REDES DE LA K.L.M. Y DE LA SABENA (VERANO 1951)

SERVICES INTERNATIONAUX REGIONAUX SANS CABOTAGE EN ALLEMAGNE
INTERNATIONAL REGIONAL SERVICES WITHOUT CABOTAGE IN GERMANY
SERVICIOS INTERNACIONALES REGIONALES DE ALEMANIA, SIN CABOTAJE



ROUTES DE PENETRATION ETRANGERES EN ALLEMAGNE
AUTRES QUE CELLES DE K.L.M. ET SABENA (Eté 1951)

FOREIGN AIRLINE ROUTES PENETRATING INTO GERMANY
OTHER THAN THOSE OF K.L.M. AND SABENA (Summer 1951)
RUTAS AEREAS EXTRANJERAS QUE ENTRAN EN ALEMANIA
Y QUE NO FORMAN PARTE DE LAS REDES DE LA K.L.M.
Y DE LA SABENA (Verano 1951)



SERVICES INTERNATIONAUX LONG-COURRIERS
INTERNATIONAL LONG-HAUL SERVICES
SERVICIOS INTERNACIONALES DE TRANSPORTE A LARGA DISTANCIA

- LEGENDE -

Largeur des bandes : 1 m/m = 40 sièges (parcours simple). Les chiffres indiquent la fréquence hebdomadaire. - Width of strips : 1 m/m = 40 seats available (Single Journey). Figures indicate weekly frequency.

Anchura de las bandas : 1 m/m : 40 asientos (viaje sencillo) Las cifras indican frecuencia semanal

	S.A.S.		S.A.S.
	T.W.A.		T.W.A.
	P.A.A.		P.A.A.
	AER. ARGENTINAS		AER. ARGENTINAS
	AIR FRANCE		AIR FRANCE
	PANAIR DO BRASIL		PANAIR DO BRASIL

In addition to the German regional network operated under the conditions indicated above, there are the segments of the KLM long-haul routes. KLM is the only one of the two airlines operating in this pool which has services in transit through Germany to South America, Middle East and Indonesia.

The methods of allocating the revenue of the pool are not known. Table X(a) gives the following figures on ton-kilometres offered:

Sabena: 448,260

KLM : 1,242,790 of which 325,760 relate to regional segments of long-haul services in transit through Germany. It will be noted that the ton-kilometres offered by KLM on these segments represent 72 per cent of the ton-kilometres offered by Sabena on its routes which are regional routes. The quest for long-haul traffic therefore leads the companies to inflate the capacity offered on the regional network and, while Sabena, like KLM, may expect to balance the deficits resulting from a low coefficient of utilization on this network by means of the receipts from long-haul operations, it is clear that the most systematic effort undertaken in this respect is that by KLM. Here again the pooling of regional traffic only solves one aspect of the problem.

However, the co-operation which this involves may serve as a means of defence against other competitors, and most probably this is one of the reasons for maintaining the system. Among the other European airlines, Air France, BEA, SAS and Swissair have entered into the German market making use of the present possibilities of cabotage traffic. Maps XXI and XXII show that today these airlines serve most of the German cities covered by the Sabena-KLM pool. In addition to the competition by these airlines in the regional system there is the competition for long-haul traffic, since the policy of these companies also is to attract the German long-haul traffic to their companies. The map gives a clear indication of the important role played by Frankfurt as a collection point for KLM and SAS long-haul services, and by Munich in the case of KLM and Air France.

In addition to the European companies it is necessary to consider the part played by the North and South American companies - Map XXIII shows their operations through Germany. The United States companies, PAA and TWA, compete directly with the European airlines since they serve not only the German cities, but the main long-haul terminals of the western countries.

Consequently the effectiveness of the KLM-Sabena pool in Germany as a means of defence has been fairly limited. The status itself of German territory has laid it wide open to foreign operators: the relative importance of foreign regional services making use of German cabotage traffic and direct international regional exchange services is seen clearly in Maps XXI and XXII.

It is instructive to see between the development of cabotage services and the relatively minor development of the international services operating under the Third and Fourth Freedoms which are the services which would normally exist under a sovereign Germany. Thus the European and American airlines have taken advantage of the permanent fact of the industrial and economic decentralization of Germany and the incidental -- and no doubt temporary -- factor of Germany's loss of sovereignty and lack of national aeronautical activity.

Nevertheless, we can conclude that none of these factors has contributed to bringing order into European air transport. Whether the European airlines compete directly with each other in their operations in Germany or whether they work co-operatively as two airlines have done, the overall and final result is that they merely carry over into Germany the competition that is characteristic of their operations; as elsewhere in Europe, the problem of co-ordination between regional and long-haul services is further complicated by the presence of non-European long-haul operators.

C. - CONCLUSION

In concluding this chapter we will first of all give some comparative data with regard to the situation before the war. Then we will examine, in relation to the advantages generally recognized in pooling agreements, the actual results which may be considered as the effect of the system. We will then refer to the problems which this system appears to raise in Europe and the limits of its co-operative efficacy.

1. - COMPARATIVE DATA WITH THE PRE-WAR SITUATION

Prior to 1940, there were no air services crossing the North Atlantic; there were only mail services over the South Atlantic; the number of passengers carried on the services to India and the Far East were still very few (and a substantial part of this traffic was on British operations which were not involved in pooling agreements). Therefore it should be assumed that to a very great extent the traffic carried on the European pooled routes was internal European traffic or internal regional traffic.

The important new fact of the present period is the establishment of the high intensity long-haul international systems, which became possible as a result of the rapid technical development. Consequently these long-haul air routes have been superimposed on the regional routes and extended them, so producing a far more complex operations network than that existing previously and with it raising problems in organization of a very different nature. Almost all these European airlines now interested in pools in European territory are long-haul operators also.

In addition, whereas before the war there was practically only a single category of passenger-traffic carried on the European internal system, there are now two. This fact has a direct and fundamental impact on the conditions of international co-operation examined here. The enclosed maps covering the system in 1935 and in 1951 illustrate this situation. It will be seen that today almost all the capitals located in this small European continent are long-haul terminals. Therefore, a part of the European internal traffic is constituted by long-haul components. Having allowed for this, it is a fact that the position occupied by pools as a system of regional co-operation was far more important before the war than it is today.

Tables XII, XIII and XIV which follow, indicate for the period of summer 1935:

- the details and characteristics of services operated under pooling arrangements;
- the proportion of pooled traffic in relation to the total international European traffic of each participating airline;
- the proportion of total pooled traffic in relation to the total international European traffic.

Tables XV and XVI show the ratio of pooled traffic to the total international European traffic, in the first case in terms of the figures for each participating airline and in the second case in terms of the total covering all these airlines.

On comparing these two sets of figures the following observations and conclusions can be made:

1) Taking the airlines participating in pools as a whole, the pooled operations in relation to the total international operations in Europe, the percentage was 68 per cent in 1935, whereas it is only 37 per cent in 1951. Considering the airlines separately it may be seen that from 1935 to 1951 the percentages changed as follows:

- from 96 (ABA) and 89.5 (DDL) to 52.4 (SAS);
- from 100 to 55 for Aero O/Y;
- from 68.5 to 34.4 for Swissair;
- from 77 to 32.3 for the Italian airline;
- from 55 to 13.7 for Czechoslovakia;
- from 61.5 to 9.7 for Air France.

On the contrary Sabena increased from 34.5 to 40.8 per cent and KLM from 46.5 to 67.6 per cent; but the combined operations over German territory by these two airlines serve to explain an apparently conflicting result.

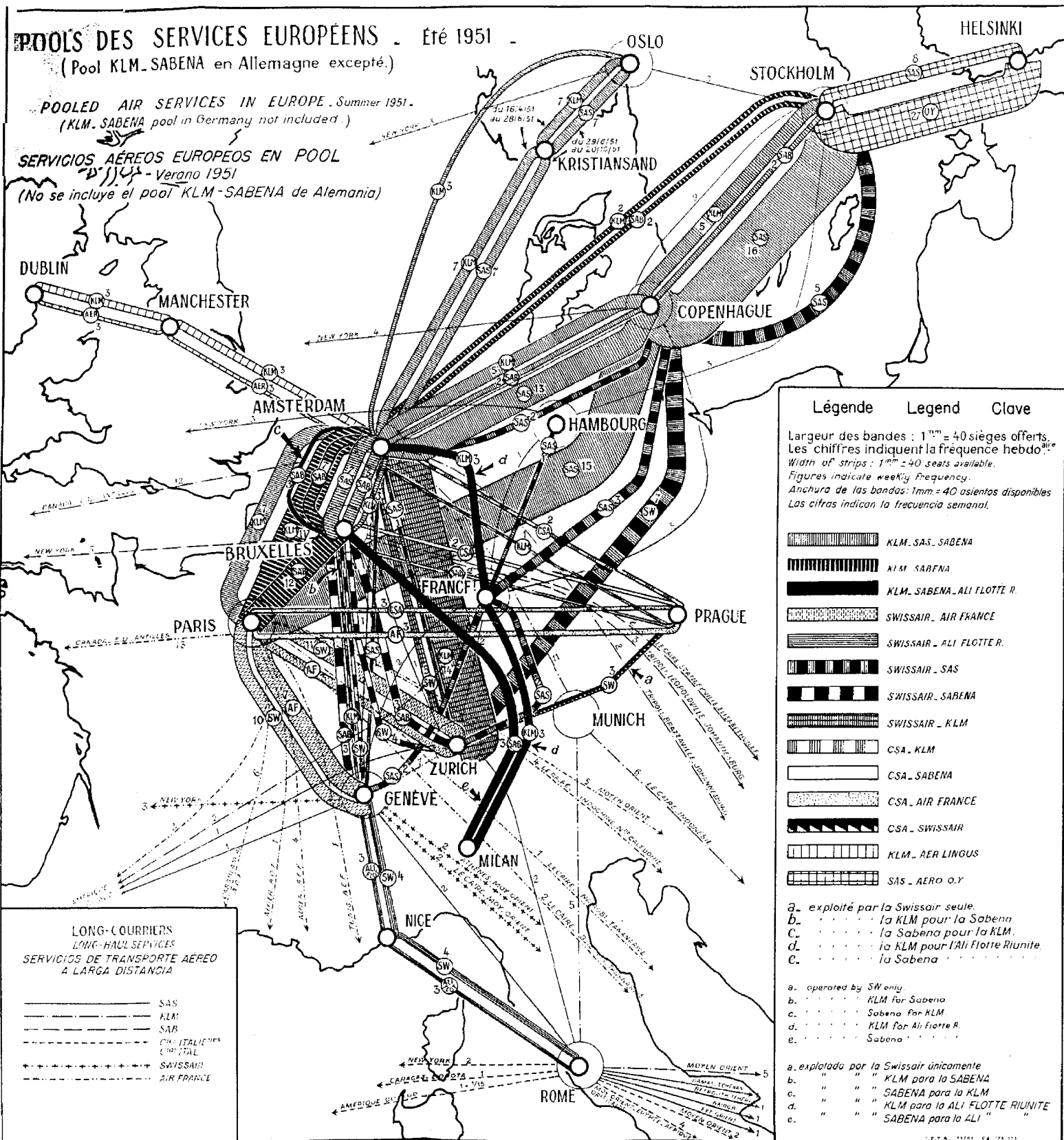
2) Taking Tables XIV and XVI we ascertain the proportion of pooled traffic compared with the total international European traffic, and it may be seen that this represented 60 per cent in 1935, whereas in 1951 it is reduced to exactly 20 per cent. In addition to the tables a graphical comparison is given in Maps XXIV and XXV of the systems of European pools for the two periods of reference, 1935 and 1951.

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POOLS DES SERVICES EUROPÉENS - Été 1951 -
 (Pool KLM-SABENA en Allemagne excepté.)

POOLED AIR SERVICES IN EUROPE - Summer 1951 -
 (KLM-SABENA pool in Germany not included.)

SERVICIOS AÉREOS EUROPEOS EN POOL
 - Verano 1951
 (No se incluye el pool KLM-SABENA de Alemania)



Légende Legend Clave

Largeur des bandes : 1^{mm} = 40 sièges offerts.
 Les chiffres indiquent la fréquence hebdo.^{aire}
 Width of strips : 1^{mm} = 40 seats available.
 Figures indicate weekly frequency.
 Anchura de las bandas: 1mm = 40 asientos disponibles.
 Las cifras indican la frecuencia semanal.

- KLM, SAS, SABENA
- KLM, SABENA
- KLM, SABENA, ALI FLOTTE R.
- SWISSAIR, AIR FRANCE
- SWISSAIR, ALI FLOTTE R.
- SWISSAIR, SAS
- SWISSAIR, SABENA
- SWISSAIR, KLM
- CSA, KLM
- CSA, SABENA
- CSA, AIR FRANCE
- CSA, SWISSAIR
- KLM, AER LINGUS
- SAS, AERO O.Y.

a. exploité par la Swissair seule.
 b. " " " la KLM pour la Sabena.
 c. " " " la Sabena pour la KLM.
 d. " " " la KLM pour l'Ali Flotte Riunite.
 e. " " " la Sabena

a. operated by SW only.
 b. " " " KLM for Sabena.
 c. " " " Sabena for KLM.
 d. " " " KLM for Ali Flotte R.
 e. " " " Sabena

a. explotada por la Swissair unicamente
 b. " " " KLM para la SABENA
 c. " " " SABENA para la KLM
 d. " " " KLM para la ALI FLOTTE RIUNITE
 e. " " " SABENA para la ALI

LONG-COURRIERS
 LONG-HAUL SERVICES
 SERVICIOS DE TRANSPORTE AÉRO
 A LARGA DISTANCIA

- SAS
- KLM
- SAB
- COMPAGNIE ITALIENNE D'AVIATION
- SWISSAIR
- AIR FRANCE

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T A B L E X I I

EUROPEAN-MEDITERRANEAN REGIONROUTES OPERATED UNDER POOLING ARRANGEMENTS (Summer 1935)

Aircraft employed, number of seats and seat-kilometres offered per week,
weekly frequencies

R O U T E	Partici- pating airline	Aircraft	Length of the route (km)	Seats offer- ed per week		Seat-kms. per week	Weekly fre- quency (**)
				Round trips *			
<u>Pool ABA - DDL - DLH (1)</u> Malmö-Copenhagen-Berlin (1) Germany	(ABA	Fokker F-XII	) 410	224	91	840	7/7
	(DDL	"		224	91	840	7/7
	(DLH	Junkers G-38		448	183	680	7/7
<u>Pool ABA - DDL - DLH - KLM</u> Copenhagen-Hamburg- Amsterdam-Hamburg- Copenhagen-Malmö	(ABA	Junkers Ju-52	) 1360	224	304	640	7/7
	(DDL	Fokker F-VII		96	130	560	6/7
	(DLH	Ju-52		224	304	640	7/7
	(KLM	Fokker F-VII		96	130	560	6/7
Malmö-Copenhagen	(ABA	Fokker F-XII	) 30	224	6	720	7/7
	(DDL	Fokker F-VIII		420	12	600	14/7
	(DLH	Ju-52		192	5	760	6/7
	(KLM	Fokker F-XVIII		168	5	040	6/7
<u>Pool ABA - DDL</u> Copenhagen-Hanover Copenhagen-Malmö (night operation)	(ABA	Junkers W-34	) 910	60	54	600	5/7
	(DDL	Fokker F-VII		48	43	680	3/7
<u>Pool DDL - DLH</u> Copenhagen-Hamburg	(DDL	Fokker F-XII	) 290	192	55	680	6/7
	(DLH	Ju-52		384	111	360	12/7
<u>Pool ABA-KLM</u> Amsterdam-Copenhagen-Malmö	(ABA	Fokker F-XII	) 712	224	159	488	7/7
	(KLM	id.		192	136	704	6/7
<u>Pool ABA-Aero O/Y (2)</u> Stockholm-Turku-Helsinki- Tallinn (2) Finland	(ABA	Ju-52	) 535	224	117	152	7/7
	(Aero O/Y	Ju-52		192	100	416	6/7

Table XII (contd.)

<u>Pool DLH-CSA-OLV</u> (3) Berlin-Dresden-Prague-Vienna (3) Austria	(DLH (CSA (OLV	Ju-52 Fokker F-XII Ju-52	) ) 535)	160 32 192	85 600 17 120 102 720	5/7 1/7 6/7
<u>Pool DLH-KLM-Ala Littoria</u> Amsterdam-Frankfurt-Milan	(DLH (KLM Ala Littoria	Ju-52 Fokker F-IX SM-71	) ) 900)	96 240 48	86 400 216 000 43 200	3/7 6/7 3/7
<u>Pool DLH-Ala Littoria</u> Berlin-Munich-Venice-Rome	(DLH (AL	Ju-52 SM-71	) ) 1358)	224 112	304 192 152 096	7/7 7/7
<u>Pool DLH-Swissair</u> Berlin-Leipzig-Stuttgart- Zurich	(DLH (Swissair	Ju-52 DC-2	) ) 700)	224 168	156 800 117 600	7/7 6/7
A'dam-Cologne-Frankfurt- Mannheim-Ludwigshafen- Basle-Zurich	(DLH (Swissair	Ju-52 Clark CA-43	) ) 735)	96 48	70 560 35 280	3/7 6/7
<u>Pool DLH - LOT</u> Berlin-Poznan-Warsaw	(DLH (LOT	Ju-52 Fokker F-VII	) ) 520)	192 48	99 840 24 960	6/7 3/7
<u>Pool DLH - CSA</u> Leipzig-Chemnitz-Karlovy- Vary-Marianske Lazne	(DLH (CSA	Ju-52 Fokker F-XII	) ) 350)	96 96	33 600 33 600	3/7 3/7
<u>Pool DLH - OLV</u> Berlin-Vienna-Budapest- Belgrade-Sofia-Salonica- Athens	(DLH (OLV	Ju-52 Fokker F-XII	) ) 2050)	96 192	196 800 393 600	3/7 6/7
Vienna-Salzburg-Munich- Zurich	(DLH (OLV	Ju-52 G-31	) ) 628)	192 144	120 576 90 432	6/7 6/7
<u>Pool DLH-Sabena-Air France</u> Cologne-Brussels-Paris (night postal pool)	(DLH (Sabena (Air France	Ju-52 Ju-52 Wibault 282	) ) 428)	(224 (	( 95 872 (	Service provided by Sabena only in July 1935 7/7
<u>Pool DLH - Air France</u> Berlin-Cologne-Paris	(DLH (Air France	Ju-52 Wibault 282	) ) 888)	96 60	85 248 53 280	3/7 3/7

Table XII (contd.)

<u>Pool OLV-Ala Littoria</u> Vienna-Klagenfurt-Venice	(OLV (AL	Fokker F-XII SM-71	) ) 500	192 48	96 000 24 000	6/7 3/7
<u>Pool KLM-CLS (4)</u> Amsterdam-Leipzig-Prague (4) Czechoslovakia	(CLS (KLM	Fokker F-XVIII id.	) ) 893	42 168	29 506 150 024	1/7 + 1/15 6/7
<u>Pool CSA-Aeroput (5)</u> Zagreb-Susak (5) Yugoslavia	(CSA (Aeroput	Caproni CA-97 Potez 29	) ) 200	36 60	7 200 12 000	3/7 6/7
<u>Pool Air France-Swissair</u> Paris-Geneva Paris-Basle-Zurich	(Air France (Swissair (Air France (Swissair	Wibault 282 DC-2 Wibault 282 Lockheed "Orion"	) ) 420) 490	120 168 120 72	50 400 70 560 50 400 35 480	6/7 6/7 6/7 6/7
<u>Pool Air France-Ala Littoria</u> Paris-Marseilles-Rome	(Air France (AL	Wibault 282 SM-74	) ) 1440	120 240	172 800 345 600	6/7 6/7
<u>Pool Air France-LAPE (6)</u> Paris-Bordeaux-Madrid (6) Spain	(Air France (LAPE	Potez-62 Fokker F-XXII	) ) 1075	196 120	210 700 128 900	7/7 3/7
<u>Pool Air France-Sabena</u> Paris-Brussels Paris-Brussels-Amsterdam- Hamburg-Copenhagen-Malmö	(Air France (Sabena (Air France (Sabena	Wibault 282 Ju-52 Wibault 282 Ju-52	) ) 256) 1100	120 192 60 96	30 720 49 152 66 000 105 600	6/7 6/7 3/7 3/7
<u>Pool Air France- OLV-Aeroput</u> Belgrade-Zagreb-Graz- Vienna	(Air France (OLV (Aeroput	Potez-29 Fokker F-XIV Potez-29	) ) 680)	20 72 60	13 600 48 960 40 800	2/7 6/7 6/7

Table XII (contd.)

<u>Pool OLV-Malert</u> (7)						
Vienna-Budapest (7) Hungary	(OLV (Malert	Fokker F-XII Fokker F-VII	) 225	32 96	7 200 21 600	1/7 6/7
<u>Joint German Russian airline: DERULUFT</u>						
Berlin-Danzig-Koenigsberg- Kaunas-Velikje Luki-Moscow		Ju-52	1682	224	376 768	7/7
Berlin-Danzig-Koenigsberg- Riga-Tallinn-Leningrad		Ju-52	1675	224	375 200	7/7

* The most commonly used seating capacity for each type of aircraft used in European services has been taken as a basis on which to calculate the seats offered. This capacity is as follows:

- Fokker F-VII	: 8	- Savoia Marchetti SM.71	: 8
- " F-VIII	: 15	- " " SM.73	: 18
- " F-IX	: 20	- " " SM.74	: 20
- " F-XII	: 16	- Junkers Ju-52	: 16
- " F-XIV	: 6	- " G-38	: 32
- " F-XVIII	: 14	- " W-34	: 6
- " F-XX	: 12	- " G-31	: 12
- " F-XXII	: 20	- Wibault 282	: 10
- Douglas DC-2	: 14	- Potez 62	: 14
- Lockheed "Orion"	: 6	- Potez 29	: 5
- Caproni CA-97	: 6	- Clark CA-43	: 4

(**) The first figure indicates the number of services, the second the number of days of the week; example: 7/7 means seven services per week.

T A B L E XIII

PROPORTION OF POOLED TRAFFIC OF EACH PARTICIPATING AIRLINE IN RELATION
TO THE TOTAL INTERNATIONAL EUROPEAN TRAFFIC (1)

(Summer 1935)

Airline	Pooled traffic (a) (in seats-kms offered per week)	Total traffic (b) (DLH + Deruluft)	Ratio $\frac{a}{b}$ of pooled traffic to total traffic (in %)
DLH) Deruluft)	1 845 056) 751 968)	3 353 928	) 77)
OLV	738 912	975 840	75.6
ABA	734 440	766 920	96
Air France	647 900	1 055 800	61.5
KLM	638 328	1 378 316	46.5
Ala Littoria	564 896	734 112	77
DDL	334 360	373 720	89.5
Swissair	258 920	376 960	68.5
Sabena	250 624	720 724	34.5
LAPE	128 900	359 010	36
Aero O/Y	100 416	100 416	100
CSA and CLS	87 426	158 397	55
Aeropot	52 800	54 085	97.5
LOT	24 960	124 026	20
Malert	21 600	42 480	51
Total	7 181 506	10 574 734	68

(1) Excluding Europe-Near East and Europe-North Africa traffic.

T A B L E XIV

PROPORTION OF POOLED TRAFFIC IN RELATION TO THE TOTAL INTERNATIONAL
EUROPEAN TRAFFIC (1)

(Summer 1935)

Pooled traffic (a) (in seat-kms offered per week)	Total traffic (b)	Ratio a/b of pooled traffic to the total traffic (in %)
7 181 506	11 975 262	60

(1) Excluding Europe-Near East and Europe-North Africa traffic.

T A B L E X V

PROPORTION OF POOLED TRAFFIC OF EACH PARTICIPATING AIRLINE IN RELATION TO
THE TOTAL INTERNATIONAL EUROPEAN TRAFFIC

(Summer 1951)

	Pooled traffic (a) (in seat-kms offered per week)	Total traffic (b)	Ratio $\frac{a}{b}$ of pooled traf- fic to the total traffic (in %)
SAS	4 098 850	7 809 000	52.4
KLM	3 790 280	5 607 000	67.6
SABENA	1 471 395	3 612 000	40.8
SWISSAIR	1 450 015	4 214 000	34.4
AIR FRANCE	564 860	5 817 000	9.7
AERO O/Y (Finland)	527 310	959 000	55
ALI FLOTTE RIUNITE	501 180	1 554 000	32.2
CSA (Czechoslovakia)	262 350	1 911 000	13.7
AER LINGUS	94 500	2 870 000	3.3
Total	12 760 740 1)	34 353 000 2)	37.2

1) Figures for July 1951

2) Figures for July 1950, extracted, in order to avoid lengthy calculations, from the data contained in IFTA. Research Paper No. 201: "Air Transport in Europe and the United States compared, taking account of geographical, demographical, economic and political background."

T A B L E X V I

PROPORTION OF POOLED TRAFFIC IN RELATION TO THE TOTAL INTERNATIONAL
EUROPEAN TRAFFIC *

(Summer 1951)

Pooled traffic (a) (in seat-kms offered per week)	Total traffic (b)	Ratio a/b of pooled traffic to total traffic (in %)
12 760 740	63 782 000	20

* Excluding Europe-Near East and Europe-North Africa traffic.

2. - ADVANTAGES OF POOLING AGREEMENTS

It is generally recognized that the pooling system has the following advantages:

- a. - Limitation of the effects of competition which are detrimental to the public service;
- b. - Better utilization of equipment;
- c. - Greater opportunity for companies to extend their traffic markets;
- d. - Reduction of operating costs.

a. - Limitation of the effects of competition which are detrimental to the public service

The demand for air transport is never uniform: it varies not only with the season, a factor which applies to both long-haul and regional services, but also with the day of the week and the time of the day especially in the case of regional services. If two companies compete with each other in the operation of parallel services over a direct traffic route between two points at a frequency of one service each per day, they will naturally concentrate on the "busy" days and sacrifice the "slack days" (Sunday is usually a "slack day"); consequently on some days airlines will offer an excessive overall capacity and on others the public may not find any services to suit them. The same situation arises when two airlines operate several services daily under similar conditions, although in this case it is a question of "peak hours" and "slack hours". (In Europe morning services are more practical than afternoon services; the midday service, in particular, is usually preferred by the public.) The pool formula, which provides for a distribution of effort over the period considered and a spacing of the services provided, solves this particular problem. Therefore the pool while not eliminating competition between the participants, neutralizes certain of its effects which would be harmful to both the operator and the user. It is for this practical reason, to a great extent, that in 1951 -- as in 1935 -- so many airlines resort to pooling arrangements in an area such as Europe where there is a large number of carriers.

b. - Better utilization of equipment

An agreement on the types of aircraft to be used by the parties permits more efficient utilization of the fleet flown in the joint operation, and thereby reduces the capital investment that would be required by each airline acting independently.

Under an agreement which provides for an allocation of routes, if it is decided that a certain route is to be operated by one airline for a specific period, and then by the other, or one of the other airlines for another period, then each airline in turn will be able to use the equipment thus released for other purposes,

which have been taken into consideration in determining the periods during which it does not operate the service. This was done in the case of the Amsterdam-Kristiansand-Oslo route, which is operated in turn by the parties to the Sabena-KLM-SAS pool.

Under an agreement which provides for allocation of services over a given route the airlines would derive the same advantage from a formula whereby, for example, each airline alternately would operate one flight more than its associate during six months of the year, each airline thus having one aircraft released for one period. This was the system adopted by KLM and Swissair in 1950 for their Convair 240's in the Amsterdam-Zurich pool.

Furthermore, in the event of unserviceability or loss of an aircraft, pooling reduces difficulties, since the associate of the airline affected will be able to provide the service using one of its own aircraft, and obviously will be interested in doing so. Even if the service is not provided under normal conditions, as when, for instance, the associate can only replace an unserviceable Convair with a DC-3, the more serious difficulty, i. e. a suspension of service, will be avoided. Obviously, under present operating conditions, these risks are not so common as they were a short time ago and the present cost of aircraft makes the former widespread practice of using stand-by aircraft quite prohibitive. The assurance of continuity of operation thus provided by the pool is therefore of considerable importance.

Efforts aimed at rationalizing services within the framework of a pool may also enable participating airlines to improve the utilization factor of their aircraft. It does not appear that any major improvement in this respect may result from the European bilateral pools on direct low traffic density routes operated by each of the airlines, usually with a frequency of one service per day (e. g. the pools between CSA and KLM, Sabena and Swissair and Air France and Swissair). On the other hand, in the case of pools which provide for seasonal allocation of services (KLM - Swissair pool) or allocation of networks (SAS-KLM-Sabena tripartite pool and the ESAS pool), we consider that unquestionably better aircraft utilization has been achieved. Although the airlines consulted have not provided specific figures on the subject, they have nevertheless admitted that the efforts to rationalize services through co-operation are aimed, inter alia, at achieving higher utilization factors. The considerable effect which increased aircraft utilization may have on the economics of operation is itself well known.*

* In a New Year's message published by the "BEA Magazine" in January 1950, Mr. Peter Masefield wrote: "Our rate of utilization of aircraft is still pretty poor - an average of only four hours a day is really not enough ... There is still a good deal we can do to get more hours ... we must have a crack at it and we will. Every extra hour we can fly, above the 140,000 planned, will mean about £26 off our deficit ... Even half an hour a day's extra flying at the same load factor on every aeroplane would give us another million pounds in the year. That's the way to wipe off the deficit."

c. - Extension of traffic markets

The conclusion of a pooling agreement may in certain cases enable airlines to gain access -- or to have access more readily and more effectively -- to national or regional markets which would remain more or less closed to them under a purely competitive system. The pool may thus be the key to a door which, for many reasons, may otherwise remain locked. At times the public prefers to travel on the aircraft of its national airline; in this case, a pooling agreement (combined according to usual practice with an agency agreement) may enable the foreign airline to participate to a greater extent in the national traffic of its associate. It may also happen that an airline has for certain types of its national traffic, e. g. for freight, such an efficient organization that the foreign airline is unable to compete in that field simply by means of a bilateral agreement between States or by an operating agreement. However, if a pooling arrangement can be concluded with that airline, at least part of its national traffic will become accessible to the members of the pool. Something must obviously be given in return, however. Experience has shown on several occasions that in the case of countries which are in some respects very unequal -- for instance in traffic potential -- the pool is the only practicable form of operation: it has even been imposed by the party which would otherwise be at a disadvantage. The wealthier country may have its traffic, but the poorer country remains master of the air space over its territory and will naturally not permit access to it without compensation.

But such haggling may also lead to the rejection of any co-operation. When, before the war, the United Kingdom requested landing rights in Italy for the Imperial Airways route to India, the Italian Government laid down as a condition that, in addition to the same rights being granted at Alexandria, an agreement should be concluded providing for pooling of traffic (passengers and mail) over the entire London to India route, the revenue from which would be split evenly between the Italian airline and Imperial Airways. This, the British declined to accept, and they routed their service through Central Europe. * Were it not that negotiations between European airlines -- as the instruments of an important public service -- are protected by the secrecy of private business, our study would certainly not be limited to a single case of recent failures of this kind.

d. - Reduction of operating costs

This would be the main benefit if it could be established definitely. Only very general indications can be obtained in this connection, however. In a debate on Swissair in the Swiss Parliament (September 1950) the co-operative efforts of this airline were referred to in the following terms:

"They (the pooling agreements signed by Swissair) demonstrate the desire of our national company to overlook no opportunity of co-operating

* Cf. Tolles, "A History of French Subsidies to Commercial Aviation", Smith College Studies in History, Vol. XVIII, page 161 (quoted by M. W. H. Wager, "International Airline Collaboration in Traffic Pools, Rate-Fixing and Joint Management Agreements", the Journal of Air Law and Commerce, Spring 1951, Vol. XVIII, No. 2, page 194).

with foreign companies with a view to reducing costs and increasing revenue. In general, these pools tend to rationalize services and improve aircraft utilization. The reduction in cost price per ton-kilometre available - from 2.99 Fr. in 1946 to 1.83 Fr. in 1949 - is a clear indication of the constant efforts of Swissair to rationalize its operations".*

Furthermore, the following statement appears in the 1949 Report of KLM:

"In 1949 there was an extension of the co-operation with other airlines in the form of pooled services with the result that production could be better adapted to the existing demand. Mainly in consequence of this the average load factor of our aircraft in 1949 was 6.4 per cent higher than in 1948".** (Underlining ours.)

It will be noted however that these estimated figures are obtained as a result of the use of all the various forms of co-operation: commercial agency agreements, ground service agreements, special technical agreements such as the Beneswiss Agreement, and finally pooling agreements. All of these represent an effort aimed at overall rationalization of operation. The share of the results due to commercial pools alone is not known. Nevertheless it will be noted that the results referred to by KLM are attributed "mainly" to co-operative efforts.

3. - PROBLEMS INVOLVED IN POOLING ARRANGEMENTS AND LIMITATIONS OF THIS CO-OPERATIVE SYSTEM IN EUROPE

Without doubt the most important problem and one which has been referred to frequently in this study is due to the co-existence of regional operations and long-haul operations: the system of regional pools and its effectiveness as a means of co-operation is directly affected by the fact that the same companies operate both these types of services on routes which often merge.

Since all except three of the participants in European pools (Aer Lingus, CSA and the Finnish company Aero O/Y) are long-haul operators, their prime objective is the search for long-haul traffic, for which there is intense competition. The effectiveness of the pools and, even the sincerity of their members cannot fail to be deeply affected thereby.

* "Bulletin sténographique de l'Assemblée Fédérale Helvétique" - Autumn Session 1950 - Meetings held on 14 September 1950, page 196.

** "KLM Annual Report", 1949, page 8.

This subordination - almost general in Europe - of the regional to the long-haul was brought into sharp focus during the parliamentary debates on the position of Swissair, some relevant extracts of which are given below:

"Since the dollar has not been devalued, transatlantic fares have remained at practically the same level for us Swiss - who have not devalued our currency either - whereas they have increased for the British, French, Scandinavians, etc.

"It is therefore possible to appreciate the great importance to Swissair of an air service to the United States the development of which should provide our national company with the necessary dollars to pay for its spare parts, fuel and oil without suffering any loss on the exchange rate ...

"It is worth noting that in the field of long-haul services, it (Swissair) has been far more cautious than certain foreign airlines. Swissair took the decision to establish one or two scheduled long-range services only after it had become convinced that the future of commercial aviation lay in this type of operation, and that such services would actually meet a need.

"The Federal Council, recognizing the seriousness and urgency of the situation, attempted to remedy it as rapidly as possible. Last June it submitted a message to Parliament dealing principally with the problem of purchasing long-range aircraft which were absolutely essential to Swissair if the company was to retain the source of revenue provided by long-haul routes, particularly the transatlantic route to the United States ...". (Underlining ours) *

In fact this policy trend of the main European companies has resulted in their making of the regional network a feeder system for the long-haul routes. This fact is clearly stated by KLM, for instance, as may be seen from the following extract from its Annual Report for 1949:

"Through the use of these up-to-date aircraft (Convair 240's) an equal standard of speed and comfort is provided on both intercontinental and European routes, and that is to the advantage of the Company's European services in their function as feeder lines for the intercontinental services". **

* "Bulletin sténographique de l'Assemblée Fédérale Helvétique", Autumn Session, 1950, Meetings of 14 September 1950, pages 196 and 197.

** KLM Annual Report", 1949, page 8.

Consequently, under the present situation in Europe, priority is given to long-haul operations. The companies decide first on their long-haul programme and then arrange their regional services accordingly. The result is that on certain regional routes additional services are offered which are useful in bringing long-haul traffic towards the long-haul terminals, but which, nevertheless, provide an excessive capacity on the regional segments. In other words, the regional services are diverted from one of their essential functions, which is to satisfy regional requirements. Pooling arrangements are also diverted to this end. They will - if possible - be a means of reducing losses on the regional routes but they will also - deliberately - be one of the means used in the intensive competition for long-haul traffic.

A further negative aspect of the system of European pools is the fact that, to the extent that competition remains the rule of the game, pools tend to increase the discriminatory rather than the constructive effects of competition. Two airlines, for instance, will resort to pooling in order to squeeze out a third company which is trying to operate over the route or the system operated by the two companies. There is also the case where there is competition between two pools or two systems of pools, one and the same airline being a member of different combinations. Thus, organizing a collective system that excludes one airline may be tantamount to organizing a system against that airline. "Competition from a third airline can be met jointly (by the two members of the pool), thereby reducing the expenditure involved."*

Thus the benefits which the participants derive from the pool serve as weapons to be used against third parties.

Finally, air transport being a public service, any view on the co-operation to which it gives rise should take into account the benefits derived by the user. We have seen, of course, that the organization of pools occasionally gives the public the benefit of a more practical time-table or even a service rendered possible only by a sharing of effort among several companies. But the real issue is the reduction in rates. However real the financial advantages of the pooling system are or may be in Europe, they have not, up to the present time, been passed on to the public in the form of a reduction in the regional rates.

These rates are still very high and, when considered in relation to the service rendered, they are too high. It is generally admitted that the long-haul operator can charge more because the time he can save the passenger is

* "Summary notes on the operation and benefits of pools", document transmitted by KLM to IFTA (18 July 1951).

considerable. In Europe, on the other hand, the limited facilities for night flying, the existence of a dense network of excellent roads and railways, combined with the relative shortness of distances should have led to the setting of rates likely to attract the general public. This has not been the case however. At the present time, the fares applied by Air France (and, under the IATA system, all airlines apply the same rates) are calculated on the basis of 20 French francs per kilometre for "European routes" (and even 23 francs for Paris-London), whereas 23 francs is also the rate on the transatlantic services. In the case of long-haul operations within the French Union, the rate is 18 francs per kilometre, and only 13 francs on services between Paris and North Africa, where Air France is free to set its own rates since these are cabotage operations.

The airlines therefore appear to be proceeding just as though the present section of the public using European regional services were in the same financial bracket as users of long-haul services. In our closing chapter, some explanations of this fact will be suggested. At this point, however, it is sufficient to note that European pools have not, so far, benefited the public by bringing about a reduction in fares.

CHAPTER VI

FROM THE COMMERCIAL POOL TO THE POLITICAL POOL

The role played by the conventional commercial pool in European air transport operations is, as we have just seen, a limited one, and consequently its significance in the orderly development of air transport is equally limited.

The very nature of commercial pooling arrangements emphasizes the weakness of the system. They are, in fact, private agreements the contents of which are kept secret from the general public and even from government authorities. They are short-term arrangements and may be very easily terminated. Furthermore, experience has shown that the present commercial pools are in most cases not so much a means of co-operation, as of limited and secondary neutralization, the effects of which -- if not the purpose -- are to place the participating parties in a better position to compete against each other elsewhere, particularly in the relentless pursuit of long-haul freight traffic now going on throughout Europe.

Finally, "pooling" is applied only to a few services of airlines which are the "chosen instruments" of European Governments; it does not involve or affect to any extent the operations of private companies which provide many of the scheduled services in Europe and especially in the Mediterranean, or of the charter operators who are also very active in that part of the world.

There is, however, a very urgent and widespread need for co-operation in European commercial air transport. A whole series of attempts at organization has been witnessed in the European-Mediterranean Region, and these, taken together with the pools, represent an increasingly marked desire for co-ordination and understanding. These attempts -- unlike the pooling arrangements -- all have the common feature that the public authorities are concerned in them. Some of these efforts are being pursued at the national, others at the international, level.

A. - NATIONAL ATTEMPTS TO ORGANIZE AIR TRANSPORT

Among the urgent problems facing Europe, is that of competition between various categories of operators of one State; some of these operators have a clearly defined status and, as the "chosen instrument" of the State, enjoy a privileged position (they are often called the "scheduled" airlines); others (the "non-scheduled" airlines) have a somewhat more uncertain status, though

their operations are already quite substantial in some instances; the latter attempt to gain access to the traffic markets of the former. As is known, "scheduled" and "non-scheduled" are the terms used in Articles 5 and 6 of the Chicago Convention; they are inadequate however as a basis for regulations, since they do not correspond to generally accepted criteria of operation, which ICAO is currently attempting to define. This, therefore, is another aspect of competition which affects both international and domestic air transport. It will therefore be useful for the purposes of our survey to consider the various methods which have so far been used in solving the problem. Two typical solutions are those tried out by France and the United Kingdom.

1. - THE FRENCH SOLUTION: ATAF

a. - Origin of the agreement

The conditions governing participation of French national airlines in the operation of domestic and international services, and the relations between the airlines themselves have not yet been defined in France, pending the adoption of a Statute of Commercial Aviation which is still under consideration. This has resulted in a competitive situation which, in its keenest form, has opposed the interests of Air France and those of private airlines operating so-called charter services, some of which, including the largest, were actually operating, as in some other countries, under conditions closely resembling those of scheduled operations. As was the case elsewhere, French independent airlines were able to take advantage of the favourable post-war conditions in purchasing transport aircraft (DC-3 and DC-4) at low cost.

The less well-managed airlines of this category or those less well-prepared to withstand competition gradually disappeared. The only private airlines remaining today are those that have adequate resources and have proved their efficiency.

Since the independent airlines could obtain only limited rights on international routes, competition among themselves and with Air France in the international field was practically non-existent. Their activities were therefore of necessity mostly in France and the French Overseas Territories, particularly in Africa (North Africa, French West Africa and French Equatorial Africa). In these regions, competition which, from the outset was very keen, became all the more fierce as it developed into a "rate" war, a field outside the scope of international control and not covered by national regulations.

These were the conditions that led to the Accord de coopération entre Transporteurs Aériens de l'Union Française (Co-operative Agreement between Carriers of the French Union), known in its abbreviated form as ATAF.

b. - Objects

The four main objects of ATAF are as follows:

- sharing of traffic on a friendly basis;
- joint study of the various types of traffic to determine in each case rates which will be profitable and yet attractive to the public;
- setting up of effective enforcement machinery to ensure compliance with jointly established regulations, with provision for various types of sanctions;
- standardization of operating rules and practices.

1) Sharing of traffic

The main objective in this connection was to give consistency to the French route pattern as a whole, which implies co-ordinating the various categories of traffic (long-haul and medium-haul), on the one hand, and the participation of the airlines in such operations on the other. The assignment of roles was carried out on the basis of the requirements of the territories to be served and on the characteristics of the aircraft used. This programme, as is evident, is based on a principle of organization similar to that adopted in the United States where the establishment of an integrated system has also necessitated an allocation of routes among the operators. In the United States it is the CAB, a Federal Agency, which is responsible for the allocation of routes. In France, it can be said that the State has made a tacit delegation of authority to the operators, reserving, however, its control and its power to veto, should the need arise.

2) Uniform regulation of services and rates

The regulations prepared by ATAF provide for different types of services according to the demands of the public, and for standardization of rates on the basis of this differentiation. First, second and third class services have been established, taking into account the comfort offered, the performance of the aircraft and the number of stops. Within these same categories there is a further differentiation of service according to the types of aircraft and the different versions of the same aircraft. This has provided for a broad and flexible range of services, the operation of which is discussed in preparing seasonal programmes.

The regulations cover the entire rate-fixing machinery; in this field, decisions are taken by unanimous consent of the members present or represented, while in other matters, the two-thirds majority rule has been adopted. In practice, however, the principle has been accepted that all matters relating to the establishment of programmes should be decided by common agreement, the airlines undertaking to respect such decisions. The different types of rebates have been standardized (for

children, families groups; seasonal rates, etc.) as well as the regulations applicable to air express and baggage. Conditions of carriage and charters are also included in the proposed standardization programme.

Considerable attention has been devoted to cargo, a type of traffic which has been operated hitherto on an experimental basis, and which obviously cannot be easily organized while the market is still being explored. A schedule of rates varying according to the type of cargo and the country of destination is in preparation. It would apply to operations with special freighter aircraft.

Passengers holding tickets issued by an airline which is a member of the ATAF will be allowed to perform part of their journey on the aircraft of other member airlines. Here again is to be found the practice of "interavailability of documents", provided for, as we have seen, in the "inter-line traffic agreements".

Since the character of the commercial agency service provided, directly affects the quality of the air service, it also has been the subject of regulation. Only agents recognized by ATAF are authorized to sell tickets and air waybills on ATAF member airlines.

Finally, sales promotion in France and in French Overseas Territories is handled by authorized agents of the member airlines acting for and on behalf of ATAF. Sales promotion is a paramount factor in the operating arrangement we are now considering, since the results obtained in this field will determine ATAF's policy in establishing rate scales and in adjusting services to the fluctuations of the market.

3) Enforcement machinery

The supervision of compliance with the regulations has been entrusted to officers with very broad powers. Their investigations may cover both the technical and the economic sides of operations. ATAF inspectors may question agencies on their activities, check the rates applied and the commissions collected and request production of the business accounts of member airlines; in respect of technical operations, their supervisory powers extend, for instance, to checking of aircraft weight computations and loading plans, to the regular maintenance of equipment, compliance with flight rules, etc.

Violation of the regulations is first referred to a three-man committee which rules on the type of sanction to be imposed (censure, warning or fine). There is provision for appeals machinery, the competent body being a committee composed of representatives of all member airlines except the airline appealing the decision.

4) Standardization of operating rules and practices

Finally, ATAF has included in its programme the standardization of rules and practices concerning equipment, conditions of operation and personnel. These regulations, some of which are already in force, are designed to standardize such matters as:

- the determination of air distances;
- aircraft loading;
- ground facilities;
- airborne equipment;
- operating rules (flight instructions, crew documentation, etc.).

Finally, provision has been made for regular exchange of technical information for the benefit of all members. Here again we find a co-operative principle already applied in Europe by the CPAM and in the Beneswiss Agreement.

c. - Internal structure

Established in January 1950, the ATAF now includes the following eight companies: Air France, Aériomaritime, Air-Atlas, Air-Maroc, Air-Transport, Transports Aériens Intercontinentaux, Tunis-Air, Union Aériomaritime de Transport.

The various functions have been allocated among the following bodies:

- A Central Committee (General Directorate) consisting of one representative of each member airline;
- Four specialized Subcommittees:
 - A Programme Subcommittee (organization and allocation of services; determination of frequencies, etc.);
 - Rates Subcommittee (organization of various categories of services, commercial agencies, sales promotion);
 - Conditions of Carriage Subcommittee (standardization of methods and practices, charters, traffic documents, etc.);
 - Information and Action Subcommittee (relations with customers and the general public).

In addition to these main committees ATAF has an Air-Sea Co-ordinating Committee, which is essentially an advisory and research body of which the members of the Central Committee are ex-officio members. Among the problems it has been called upon to consider, the foremost is that of the rates applied by airlines and steamship companies. Present efforts are aimed at standardizing, for both air and sea transport, the rebates applied on different types of services (France-Mediterranean regional services and long-haul services) and for the various categories of passenger traffic (children, families, groups etc.). While the Committee has no plenary powers, its activities are an endorsement of the principle of co-operation which present competition between maritime and air transport within the French Union has indicated as being highly necessary.

d. - Conclusion

The role played by ATAF in French air transport is similar, on the whole, to that performed at the international level by bilateral agreements between States, supplemented by the co-ordinating and supervisory activity of IATA. In fact, the regulations of ATAF cover practically all the subjects dealt with in international air transport agreements, and implemented under various additional provisions (supplementary inter-line operating agreements, machinery for periodic consultation, etc.); certain aspects of these regulations (establishment of rates, determination of periods of operation, seasonal or otherwise, etc., joint arrangement of operating programmes for the various regions) resemble more closely the activities at present performed by IATA.

Just as inter-governmental agreements and IATA have failed to solve the many and complex problems of international air transport, ATAF has been unsuccessful in solving those of French air transport, if only for the simple reason that this agreement does not include all the airlines operating on French routes. However, the creation of ATAF has provided a means of co-operation which has produced results, and its effectiveness will increase as the two categories represented in this co-operative venture, the "national airlines" and the "independent airlines", become in time two more equally balanced groups which can be better geared to each other. Nor do we see any reason why the co-operative principles underlying this national agreement should not set the pattern for an international organization.

2. - THE BRITISH SOLUTION: ASSOCIATE AGREEMENTS

The problem to be solved in the United Kingdom, just as in France, was that of competition between the scheduled air transport services (operated in this case by the public corporations) and the charter services operated by private airlines. In this field, the most systematic effort was concentrated on the domestic network of the United Kingdom. The solution aimed at involved both BEA and a certain number of private airlines. The

objective was stated as follows: "The orderly development of internal air services in the United Kingdom for the next five years". *

We shall now examine the principles underlying the type of organization envisaged, the machinery for ensuring the proper functioning of the scheme and the results achieved.

a. - Principles of organization and machinery

Unlike France which did not have any statutory provisions governing air transport, the United Kingdom had a firm starting point in the existing Civil Aviation Act of 1946. In fact, the Act provides for co-operation between the public corporations established by the Act and the so-called "associates", namely, undertakings capable of ensuring, subject to certain terms and conditions, the operation of air transport services which the corporations have power to carry out. (Part I, Section 14)

Furthermore, the act provides for the constitution of an Air Transport Advisory Council, a body which is independent of the Ministry of Civil Aviation and whose function it is to consider representations from the public with respect to the adequacy of the facilities provided by the corporations and with respect to the charges for these facilities, as well as any other matters referred to it by the Minister. (Part III, Section 36)

Pursuant to these terms of reference, the ATAC was called upon to define the directives governing associate agreements, and arrived at the following conclusions:

The operation of associate services must not involve new expenditures for ground and navigational aids; maximum charges on routes operated by the corporation or on routes competing with such services, must not be less than those charged by the corporations, except in agreement with them; the period of an associate agreement must not normally exceed two years.

Further information is contained in the official statements defining the United Kingdom's policy in this field:

- The right reserved to the Minister to terminate any associate agreement deemed to be incompatible with safety conditions or contrary to public interest;

* BEA press release, 2 October 1950, commenting on a meeting of representatives of the private airlines held in London, on 27 September 1950, under the chairmanship of the Chairman of BEA.

- The requirement on the part of independent operators to submit monthly returns to the Minister on their traffic operations.

b. - Implementation of programme

Associate agreements concluded between BEA and private operators generally cover the following three types of services:

- internal "Ferry" services;
- internal "cross-country" services;
- regular seasonal services to holiday resorts on routes not in operation by a corporation where there is an excess of traffic demand over the capacity provided by the corporations.

According to official statements, the services thus assigned to private airlines were to be considered as complementary elements of the overall domestic network rather than as supplementary services paralleling the scheduled operations. They were intended to give rise to the establishment of a number of feeder lines bringing traffic to the main routes allocated to the public corporations. Thus the concept of competition is replaced, at least in the minds of the responsible authorities, by a more logical allocation of functions and division of work based on statutory provisions.

This appears to be the most novel feature of the system which in August 1951 had already led to the conclusion of forty-nine "associate agreements", nineteen of which are to have a duration of five years.

B. - INTERNATIONAL EFFORTS

The aeronautical utilization of German territory, as already pointed out in Chapter V, is an example of the actual division of traffic areas among non-German airlines, in other words, among the "chosen instruments" of States other than Germany. Such a scheme, in view of the political factors which had to be considered ("Occupying" or "non-Occupying" Powers, boundaries of the occupation zones, etc.) could obviously be worked out only through negotiation between States and is being carried out under their control. The scope and therefore the significance of the conventional commercial pool in Europe, which is based on the parallel operation of a same route by two or more airlines, thus appear even more limited than was indicated at the beginning of this chapter.

1. - IMPLEMENTATION OF BILATERAL AGREEMENTS ON COMMERCIAL RIGHTS

In Europe, to a larger extent than elsewhere, because of the greater partitioning of the area into national territories, the operation of international air transport is governed by bilateral agreements concluded between States. Ninety-two bilateral agreements concluded between the twenty-three States of the European-Mediterranean Region freely engaging in commercial air traffic have been filed with ICAO to date, while fifteen others have already been concluded but have not yet been filed. At least fifteen more are now being negotiated (Table XVII).

A large number of these bilateral agreements -- particularly those to which the United Kingdom and France are parties -- express, sometimes in very precise terms, the intention of the governments to control and even to ensure through appropriate regulation the implementation of the principles of orderly and sound development of air transport which are embodied in the Chicago Convention.

This firm intention of the parties is reflected in this type of agreement by the inclusion of provisions for the setting up of suitable control and implementation machinery. These bilateral agreements between States compensate, to a certain extent, for the lack of a multilateral agreement.

The regulations generally bear on the following points:

- determination of traffic;
- capacity to be provided on the basis of the above determination of traffic;
- division of capacity (usually on an equal basis);
- organization of alternate services;
- agreements on schedules and tariffs.

The regulating principles are inevitably expressed in general and abstract language; sometimes, they are the outcome of compromise formulae (the Bermuda compromise is certainly not the clearest) which acquire meaning particularly through the implementation provisions associated therewith. The consequence is that in most cases, whenever direct competition between the airlines of the participating States is likely to have serious effects, it is necessary to resort to the implementation and control machinery contemplated under the agreement. Generally, this is a Joint Committee composed of representatives of the administrations and of the national airlines of each of the two States, meeting under the alternate chairmanship of the representatives of the participating States.

One of the most interesting examples of this type of regulation, and one which has already been successfully tested, is the United Kingdom - France Agreement of 28 February 1946 concerning routes between Metropolitan France and the United Kingdom, the main provisions of which are as follows:

a. - The competent aeronautical authorities of both countries shall agree upon the capacity to be provided at the outset on each of the routes (specified in the attached Schedules).

This capacity shall be adjusted from time to time, in order to conform with traffic demands, by direct agreement between the airlines concerned.

These airlines shall also make temporary adjustments of capacity to meet unexpected or exceptional traffic demands.

They shall report such adjustments forthwith to the competent aeronautical authorities of their respective countries, who may consult each other on the subject if they deem it expedient.

b. - The capacity shall be divided equally between the British and French airlines operating the same routes.

c. - If the competent aeronautical authorities of one of the two countries should not wish, on one or more routes, to operate in whole or in part the capacity which has been allotted to them they shall consult with the competent aeronautical authorities of the other country with a view to transferring to the latter the whole or part of such capacity within the limits of the agreed total. The authorities which have thus transferred their rights in whole or in part may however at any time recover them.

d. - The rights granted to one country for the operation of an air route confer on the other country the right to participate in the operation of the same route.

e. - The airlines designated by the two countries operating services on the same route shall mutually agree on the conditions under which such services shall be operated. This Agreement, which shall take into account the capacity to be provided by each airline, shall determine the frequency of the services, the timetables and in general the conditions under which the services shall be operated jointly and in pool by the designated airlines.

f. - The Agreements reached between the airlines and any modifications which may be made in them shall be subject to the approval of the competent aeronautical authorities of both countries.

An analysis of these provisions indicates that they are based on the following principles:

- 1) capacity to be allocated on an equal basis, the possibility of pooled services or even joint operations being contemplated;
- 2) direct agreement between airlines subject to approval by the State aeronautical authorities;
- 3) consultation between the aeronautical authorities, whenever necessary.

How are these principles applied?

Capacities have been allocated on the basis of the stated principle of equality, but in a flexible manner. It has never been felt necessary to resort to joint operations or even to the pooling of services, although both systems are contemplated under the agreement. While flexibility has been retained, reciprocal control has not been abandoned as shown by the following example.

In 1949 Air France sold 2,725,000 ton-kilometres on the Paris-London route; British European Airways sold 3,534,000. As of September 1949, it was agreed that each carrier would be permitted to offer daily, for the period ending 30 March 1950, an increased number of seats (about 200-250, according to our recollection), this figure to be further increased by common agreement, if justified by traffic requirements; it was also decided to introduce on this important route a reduced rate for "off-peak" services, £ 10 instead of £ 14. However, statistics show that during 1950 the volume of traffic sold by Air France rose to 4,523,000 ton-kilometres while that sold by BEA rose to 5,789,000. Both competing carriers thus increased their traffic by 65 per cent, each therefore maintaining its proper share of the traffic on the route.

These results were not achieved by chance; they are the consequence of periodic consultation between operators (Principle No. 2 stated above) and the agreements regularly concluded between British European Airways and Air France concerning a number of routes, on the basis of seasonal requirements and traffic trends. The method applies particularly to the Paris-London route, the most important direct link in Europe.

Principal No. 3, of course, has not remained a dead letter. The machinery for consultation between government administrations is the Anglo-French Standing Joint Committee, whose composition and functions were defined in Article VII of the 1946 Agreement, as follows:

"The two contracting parties agree to appoint a Standing Joint Committee to co-ordinate their respective air services and, where necessary, to submit for approval of the competent aeronautical authorities of the two countries proposals for the modification of the Annex of this Agreement. This Committee shall be composed of two representatives of the competent aeronautical authorities of each of the contracting parties and of two representatives of the airlines of each of the two countries. The

Committee shall meet alternately in London and Paris under the chairmanship of one of the representatives of the competent aeronautical authorities of the contracting party in whose territory the meeting is held."

The establishment of this Joint Committee has made possible regular and effective co-operation between both countries. Its meetings, which are held in principle every three months--although there is no strict rule in this respect -- afford an opportunity to review the various problems of joint operation in all its different aspects (economic, administrative, technical), which are placed on its Agenda.

The above-mentioned decisions concerning the Paris-London route were taken at a meeting of the Joint Committee held in September 1949. Two years earlier, the discussion of one of the items on the agenda led to denying BSAA (which at the time was operating the British routes to South America) the right to make traffic stops at Paris. In May 1950, no agreement could be reached on allowing BOAC a stop at Nice; no doubt, the French authorities feared that the balance established and maintained between Air France and BEA might be upset on the route London-Nice-Rome, then in full development.

Many other problems among those dealt with by the Committee--whose work extends to all the traffic routes of both countries-- are of particular interest to Europe; discussion takes place, for instance, on the possible effect of new British exchange regulations for British nationals who use French airlines when travelling to France; decisions are taken on the problems raised by the development of charter services between France and the United Kingdom; and agreements are reached on new charges applied at certain aerodromes.

Equally strict regulatory provisions have been included in a number of agreements concluded between the United Kingdom and other European countries. The bilateral air transport agreements signed with Greece (26 November 1945) and with Portugal (6 December 1945) provide for the pre-determination of capacity, equal sharing of traffic and periodic adjustments as well as the pre-determination of the load factor on the specified routes.

The agreements signed by France with Spain (August 30, 1948) and with Italy (February 3, 1949) provide, in respect of a type of services designated as "vicinity services", for the regulated adjustment of capacity between the airlines. The France-Italy Agreement, just as the France-United Kingdom one, provides for the establishment of a Joint Standing Committee "to co-ordinate air relations between the two countries... and to submit their proposals to the aeronautical authorities of the two countries" (Article VII). This instrument of co-operation has not been as active, however, as its Anglo-French counterpart which naturally covered a more extensive field of activity; yet, the Franco-Italian Joint Committee is significant in that it functioned in

connection with the Air France-Alitalia pool organized between 1948 and the end of 1950 (when it was terminated), on the Paris-Rome, Paris-Nice-Rome and Paris-Lourdes-Rome vicinity services. To our knowledge, this is the only example of a body whose functions involved the supervision of a pooled service in the European Region*.

Mention should also be made of the following provision included in the France-Portugal Agreement of 30 April 1946 (sub-paragraph (f) of the Addendum relating to routes linking Metropolitan France and North Africa with Portugal):

"In the event of third countries beginning to operate services on the routes referred to in the present addendum, the French and the Portuguese airlines concerned may, with the approval of their respective aeronautical authorities, come to an agreement with the airlines of the said third countries on the terms of a system of co-operative working based on the same principles."

The purpose of this provision, as is seen, is to extend multilaterally the principle of consultation whenever the interests of third parties are affected by the operation of the services on the routes covered by the Agreement. Consultation between States, it will be recalled, was one of the devices intended to facilitate the conclusion of a Multilateral Agreement on the Exchange of Commercial Rights, which the ICAO Commission endeavoured to draw up at Geneva in November 1947; in the absence of agreement on the basic provisions of the draft, this supplementary principle -- appearing here in a bilateral agreement -- was given only cursory consideration.

Even a summary examination of the bilateral agreements entered into by the 23 States of the European-Mediterranean Region bears out the conclusion that regulation of traffic is dealt with in a comparatively small number of agreements. But, in an area with such a high density of national territories, this small number is of the utmost significance. Furthermore, certain countries, particularly Belgium, have generally avoided entering into bilateral agreements, for the very reason that they wish to be in a better position to obtain -- from each foreign carrier and without being accused of discrimination -- the guarantees or rights considered essential by their aeronautical authorities.

One may in fact conclude that many European countries, particularly those that administer a great number of bilateral agreements and those that are geographically well situated within the European air pattern of routes, tend to

* Pooling has not led to the establishment of any special supervisory bodies; certain airlines however (KLM, SABENA, Swissair) have appointed special "co-ordinators" for co-operative agreements.

adopt a uniform policy on the implementation of such agreements. This policy, in turn, leads to the development of common principles for the grant and exercise of commercial rights between States that are in frequent consultation for the purpose of interpreting their agreements and making adjustments. Thus a second and still more important result is gradually being achieved: a common doctrine regarding the part played by competition and methods of competition in European international air transport.

The doctrine can no longer be reconciled with cut-throat competition; neither is it compatible, unrestrictedly, with an interline agreement so tight as to be detrimental to the public interest; thus, a middle-course is to be steered between unduly arbitrary a priori determination and a posteriori controls and adjustments resting on vague principles.

The system of permanent negotiation, however cumbersome, has at least resulted in opening up a school of thought in Europe where administrations and operators, who of necessity remain in constant touch with hard facts, may be preparing the ground for what might later become a regional multilateral agreement, based on the particular characteristics of operation in the European-Mediterranean Region. At the same time, both operators and public authorities are acquiring the habit of co-operation, a habit which can and must find, in the near future, more fruitful fields of application.

2.- TRANSITION TO JOINT OPERATION AND HIGHER FORMS OF AUTHORITY (GENERAL TRENDS)

It is often stated that one of these forms of co-operative activity no longer requires to be demonstrated and has already attracted considerable attention in Europe and throughout the world; this is the system which has been applied by the three main flag-lines of Denmark, Norway and Sweden and which, with the encouragement and guidance of the three governments concerned, has led to the creation of the well-known company SAS, the Scandinavian Airlines System.

The establishment of SAS must certainly be considered as one of the successes in the field of co-operative effort by European operators. At the same time it is essential to have a clear understanding of its objectives in order to appreciate its exact significance.

a.- The experience of SAS.

What the guiding powers of Scandinavian aviation have had in mind for the last fifteen or twenty years was not an idealistic programme of co-operation, but rather a very practical problem of existence and survival. Denmark, Norway and Sweden were having difficulty in solving their problems individually; at the same time there were many obvious factors in favour of a co-operative solution for this group of neighbouring countries. Without going back to the origin of this co-operation, we might consider the reasons why, in 1945, it suddenly appeared more urgent than it had been ten or fifteen years earlier.

In 1945 the Scandinavian commercial airlines were faced with a choice between continuing to operate on a very modest scale within a regional framework, and venturing for the first time into the field of long-haul services. The long experience of managements and airline crews, the general good feeling towards the Scandinavian countries throughout the world, their difficulties either in maintaining their level of prosperity or in rehabilitating their economies which had been seriously affected by war, all these factors encouraged them to enter the field of long-range operations. At the same time it was clear that, individually, each of the three aviations was too weak to attempt this new venture alone and that each of the countries was in a poor bargaining position at a time when the battle for commercial rights looked like being a hard one, the Scandinavian operators having to rely mostly on Fifth Freedom traffic.

Consolidation was obviously needed. It was facilitated by the fact that the Scandinavian countries adjoin one another and by their long historical association (which nevertheless has its drawbacks), by the affinity of language and by analogous aeronautical regulations which further efforts were to bring into still closer conformity. As regards external trade, the three countries taken together would largely compensate for the weaknesses of each taken singly in solving the problem of foreign currency earnings. On the other hand, the diversity of their respective national policies towards those countries from which air traffic commercial rights were to be obtained, could not but improve the position of the Scandinavian group in the overall framework of bilateral negotiations.

Since the beginning, however, it was recognized that the system had its limitations. National sovereignties remained untouched and consequently there remained different responsibilities -- if not different political positions -- in respect of national defence; thus the Scandinavian group was not proposing "internationalization", but was thinking in terms of a system of close co-operation, under which each country would retain the right to recover its "equity" at any time. Likewise each country would wish to continue to maintain within its own territory installations and facilities essential to its security; hence duplication and overlapping; and these facilities, if used by civil aviation, inevitably reduce the advantages of grouping together.

Finally any effort at re-organization undertaken between States tends to promote individual or group suspicions and can easily foster nationalistic feelings which threatened interests may be tempted to exploit. Here also, the attempts of SAS to achieve greater efficiency were to encounter many obstacles. The stature achieved by SAS in the last six years is now well-known, following efforts which proved more painful in solving internal problems than in dealing with foreign countries. At the time of writing, the "Consortium Agreement" of 8 February 1951 is already in force. The term "consortium" has been chosen by the participating parties and we shall not quarrel with the terminology, even though the agreement reached clearly establishes a far greater solidarity between ABA, DNL and DDL than that which normally exists between the parties to a consortium. Later, we shall examine the scope and objectives of the organization thus established. The inter-government agreement which will give the required sanction to the arrangement has not yet been published. Neither is there any information concerning the texts by which the governments

will authorize the airlines to transfer to the Consortium the operation of the services granted to each of them. Until these texts are known it is impossible to evaluate the exact significance of the Scandinavian precedents as a model for application in Europe. We shall attempt here, through a brief review of the well-known development of SAS, to explain how the airlines which had grouped together in SAS gradually moved from a system of co-operation in operations to actual joint operation.

From the very beginning, SAS succeeded in uniting forces entirely for the operation of long-range services: traffic potentials were combined, and operations unified. For a consortium whose route pattern enters Europe across the territories of wealthier States and links its services with the long-established air networks of much stronger competitors, the problem was a matter of life or death. Thus was conceived the OSAS (Overseas Scandinavian Airlines System), which, operating only extra-European services, performed most successfully the task for which it was designed.

But at the same time, and for many reasons - such as the instinct of self-preservation and survival already mentioned - it was understood that, within the regional framework, the three associated airlines would maintain not only their individual existence but also their own financial responsibility and their own operating personnel. They would merely pool their revenue, and central co-ordinating bodies would be established to manage the pool in order to avoid the ill-effects of internal competition.

Experience soon showed that this was not enough. Each of the three airlines was interested in its own survival and naturally attached the greatest importance only to that traffic which best served its own interests. This gave rise to surprising rivalries which adversely affected passengers and shippers using the long-range services, quite in contrast with the previous example set by OSAS. There was a noticeable increase in the tendency to serve individual interests of the airlines; the whole organization was endangered.

At this juncture, the ESAS (European Scandinavian Airlines System) which was in charge of co-ordination for Europe, attempted to impose a more drastic apportionment of traffic among the three operators, by associating with the allocation of services the requirement that certain overall ratios be respected. This was the "joint traffic programme". However, in order to implement this programme it was necessary to superimpose additional administrative machinery, in the form of different co-ordination bodies, on the services of three airlines ABA, DDL and DNL which already had very similar functions in their respective fields. These new "joint departments", which were placed under the sole authority of the Director General of SAS increased friction, multiplied documentation and so rapidly threatened to bring on administrative paralysis that the present SAS, 1951 formula, was introduced even earlier than had been anticipated.

The change-over to this new system became all the more urgent as the overall financial picture for the period from 1948 to 1950 had worsened considerably, making economies very imperative. Complete unity under one authority seemed to be the only solution.

The basis of this joint operation is the unrestricted availability of all operating resources--personnel and equipment--under such conditions that all the practical effects of joint ownership will be achieved. Having established this firm basis, the Agreement states in an essential article that operations will be based on "sound business considerations, practice and policy". This probably suggests that the earlier systems could not be entirely considered as "sound business"; but in any event it is a clear indication that the consortium is essentially a means of improving efficiency. Thus, after five years of co-operation between three carriers (involving the establishment and "co-ordination" of as many as five different managing bodies), SAS now takes on more definitely the aspect of a single airline, comparable to others except that it acquires greater strength through unity and will now be able to compete on the same footing with larger or smaller airlines.

What lessons can be drawn from the evolution of SAS and applied to co-operation between European airlines? In our opinion they are the following:

1) The OSAS could have functioned alone, and perhaps made profits. But the ESAS operating as a separate organization would certainly have lost money, and its losses would have been all the more serious since competition in Europe was less restricted between the three participants. An attempt was made to eliminate this competition while retaining the identity of the three airlines, but the administrative and psychological drawbacks proved too costly. Complete integration was the only solution and it was accepted. It no doubt indicates that the directors of SAS are convinced that they must continue to operate in Europe in order to "feed" the Scandinavian long-haul network; it also indicates that the directors are relying on long-haul services to make SAS "a sound business". But it should be emphasized that these conclusions--if they were actually arrived at by the SAS directors--are valid only under the present circumstances. Thus the evolution of SAS towards a structure which now integrates regional and long-haul traffic is by no means a proof that such a structure is the right one from the overall point of view of European air transport; the evolution of SAS simply proves that for the time being, and at least until the whole subject is reviewed, the game has to be played, whether nationally or by a group of associated national operators, according to the rules followed by the other airlines.

2) It is natural also for airlines to seek to increase their individual strength, without, however, causing too much concern to their competitors. Just as Denmark, Norway and Sweden have done, others may therefore be tempted to try out the formula of collective nationalism, which is something entirely different from internationalism. It must be remembered, however, that the system has its limitations from the very fact that it is a means of

increased efficiency within a competitive system, and that it would not be tolerated in all cases. It was accepted in the case of SAS, because the three Scandinavian countries - for many well-known reasons, political, economic and social - were generally looked upon sympathetically in Europe; because the common instrument created by SAS is a comparatively modest one, and does not create any alarm among more powerful operators; because the recent re-organization does not change the essential feature of the Scandinavian position, namely that of depending on Fifth Freedom traffic; finally, if the SAS group were to become too powerful, it would always be possible to re-establish certain barriers against an instrument of expansion which was being used too effectively. Nevertheless, SAS certainly intends to make the best of its present position. Indeed, the Report of the "Little Committee", which demonstrated the need for a new organization, emphasizes that in addition to obvious advantages of more intensive operation and aircraft utilization, such organization would permit "co-ordination of all SAS lines inside as well as outside Europe into one routing network which has given good results in carrying traffic to and from inter-continental routes"(*).

3) SAS has likewise shown in a very striking manner, the limited possibilities of the pool system and the internal conflicts to which it gives rise as long as the participants retain their responsibility for, and therefore their concern with, making individual profits. Among the major advantages of the new system, the Little Committee mentioned the fact that "... there is no (longer) any individual advantage in operating the 'fat' rather than the 'meagre' lines of the program" and to escape this apparent paradox, the Little Committee concludes: "The joint traffic program can, therefore, be prepared nationally to the greatest advantage of all three parties...".

4) Leaving aside the three partners in the SAS Consortium, it is obvious that the three States (for which the consortium becomes the sole "chosen instrument") consider themselves the most direct beneficiaries of the system; if this were not so, they would not have encouraged it and given it approval. And in justice it must be said that the directors of SAS have never separated their own major interests from those of their State. Again, to quote the very words of the Little Committee, "a complete and energetic Scandinavian effort in air transport will redound to the general and social interests of the three countries". That is a government view and it was shared by the three governments.

5) Political considerations have therefore prevailed ultimately, and from now on the political approach is imperative. Since it is obviously necessary to make the best of the system prevailing in Europe, that of the "chosen instrument" or of the "State carrier" (the latter system being often the result of an earlier merging of several airlines), the lesson to be drawn from the SAS experiment is that it is possible to go one step further and to adopt one "chosen instrument" for several States. But other States will then want to look very carefully into the real aims of this type

* Quoted by W. H. Wager, "International Cooperation and the Scandinavian Airlines System", "Revue Générale de l'Air", No. 2, 1951, page 108.

of operation which would run into serious difficulties if, for example, it were to become a means whereby an already powerful carrier could obtain, under preferential conditions, the cargo traffic of another State, or if it allowed the operators of two States to combine their "cargo potentials" in order to protect themselves against operators of other States. SAS has not yet encountered obstacles of this kind, both because it has been reasonable and because its efforts, as stated earlier, have been looked upon favourably.

6) One gathers the impression that legal objections could have been raised against the SAS system, and that they have not been raised, particularly during the negotiation of certain bilateral agreements. This is partly explained by the limited attention hitherto given to the provisions of Chapter XVI of the Chicago Convention, which deals with joint operations. Political recourse to this system having so far been limited, ICAO Contracting States have found it easy to give it their blessing, as for instance in Resolution 17 of the Fourth Session of the Assembly, by which the Council is directed to give assistance - when requested - to those States that take the initiative in developing co-operative arrangements of the type envisaged in Chapter XVI of the Convention. To our knowledge, no such request has been presented as yet to the Council; it may well be, however, that an opportunity will soon arise for ICAO to give more attention to a matter which has itself become more important.

b. - Political Plans for the Co-ordination of Air Transport in Europe

European thinking has for a long time, especially in political circles, asked why the problem of improving co-ordination of air transport and of increasing the benefits it provides to the public should always be raised at the airline level. Our survey has already shown that airlines do not encounter the problem to a great extent, and that they have only found a solution to it to an even smaller extent. This is inevitable, as long as the major European airlines, even if they are "national" airlines, are criticized in their own countries for every demand they make on the public treasury. The result is that they do everything possible to improve their own balance sheets, even if this involves reducing the quality of one of the services they are normally expected to provide to the taxpayers of their own country.

Even now the most practical results of co-operation are achieved through consultations between national administrations together with their main operators, simply because in these discussions public interest is the chief consideration and the political view can and often must extend beyond the horizon of aviation. One wonders, therefore, whether through co-operative action it might not be possible to maintain the same standard of service and yet reduce the overall costs of European civil aviation at a time when the burden of taxation is continually increasing; one wonders also what would happen to European civil aviation if the international situation should deteriorate and if it were no longer possible to rely on American supplies; and finally, one may ask what commonly-agreed aviation policy could facilitate the creation of a large "air transport capacity", considered as a vitally important asset. The various political plans

for air transport co-ordination and co-operation now under consideration in Europe have arisen from problems such as these, and it is not irrelevant to this survey to review these plans briefly.

Since early in 1951, three plans have been submitted to the Council of Europe:

- the Plan submitted by the Special Transport Committee of the Council, known as the "Bonafous" Plan;
- the Plan prepared by the Committee on Economic Questions of the Council of Europe;
- the Italian Plan known as the "Sforza Plan".

The first project includes, in principle, all categories of transport; the other two are limited to air transport.

All three projects state as their dual purpose:

- to adjust transport as closely as possible to the characteristics of the overall European economy;
- to ensure that the fullest and most economic use be made of European transport, by eliminating duplications and undue competition, by reducing travelling time, by standardizing equipment and increasing its utilization, etc.

We shall not attempt, in this study, to single out the advantages or disadvantages of any of these projects; we shall merely explain their main provisions in order to facilitate their understanding.

1) European Transport Authority (Bonafous Plan)

This plan was conceived mainly in relation to the particular problems of the European railway network and in relation to the present bodies entrusted with the study of these problems and their solution. Other forms of transport are mentioned only in the paragraph dealing with the Executive Committee which would be assisted by four specialized sections:

Rail, road, air, ports and waterways.

The European Transport Authority is patterned on the organization of the Authority which is to be responsible for carrying out the Schumann Plan. The implementation of that Plan is based on the co-ordination of coal and iron ore

transport by boat and railway; in fact, co-operation between the European coal and steel industries is essentially dependent on the manner in which this transport will be organized and particularly on the rates applied; hence the necessity of creating a European Transport Authority. Problems relating to air transport are not covered in these texts, not even by allusion. This explains why air transport was the subject of a second project emanating from the Committee on Economic Questions.

2) Association or Consortium of European Air Companies

The project prepared by the Committee on Economic Questions is more in the nature of a suggestion than an actual plan.

The report makes a rapid survey of the European air transport situation and the various forms of co-operation now in effect and concludes by advocating the creation of a consortium similar to that of SAS or a charter company which would manage the European network by leasing the aircraft of existing companies against payment on a suitable mileage basis. The airlines would retain their trunk services which would be left outside the European organization.

The report recommends the convening of a meeting of governmental experts and airline representatives who would consider the possibility of creating the proposed agencies and report other possible methods of securing a more efficient operation of European air transport.

3) European Air Transport Authority and European Air Consortium - ("Sforza Plan" submitted by Italy)

This project combines the concept of a European Authority contained in the Bonnefous Plan with the concept of a European consortium proposed by the Committee on Economic Questions. However, it goes further than the Bonnefous Plan in that it advocates the establishment of a "European Air space", within which the European airlines would enjoy complete traffic freedom, and the adoption of a regional multilateral agreement which would replace the present bilateral agreements regulating commercial operations in Europe. Within such an air space the European Authority would replace the civil aviation departments of European States in regulating and supervising transport operations in accordance with the provisions of the multilateral agreement.

The most provocative aspect of the Sforza Plan is obviously the new legal concept of a "single air space" to be established by European States, each of which would nevertheless retain its individual political sovereignty. The proponents of this plan fully realized the difficulties which might arise from the apparently discriminatory use of such a "single air space" in which all internal traffic would be cabotage for the European States parties to the present agreement, but would nevertheless still be dependent on the system of exchange of

commercial rights through bilateral negotiations as far as non-European States are concerned. The preamble presenting the justification for the Sforza Plan recognizes that there is some conflict with the provisions of the Chicago Convention, but adds that "bearing in mind the political objectives pursued", it should not be difficult to obtain, for a plan of general interest, the approval of non-European States which are signatories to the Chicago Convention.

This may be considered somewhat optimistic. However, the political significance of the proposal of a "single air space" for Europe cannot be overlooked at a time when so many pressures, both internal and external, are being exerted for the "economic integration" of Europe, at least the Europe of the OEEC to which the Sforza Plan is addressed.

CONCLUSION

The present limited use made of pooling arrangements in Europe has resulted in economies in certain areas and on occasions has been of some benefit to passengers. However, the effectiveness of the system is still very limited and it has been seen that it is in most cases used as a means of neutralization or of rivalry rather than of co-operation. In fact, since each operator relies only on long-haul services to approach a balanced operation, he does not hesitate--even on pooled services, let alone on all other services to inflate somewhat his available traffic capacity.

In this exhausting pursuit of "financial self-sufficiency", the airlines are constantly reconsidering the basis and working methods of their "co-operation". Both in the case of ground service and traffic agreements, the combinations change from year to year and from season to season, according to the prevailing hopes or calculations. Admittedly, a living organism is constantly developing, as are the requirements it is intended to fulfill. In Europe, however, the aeronautical requirements of the community are not the main factor in this seemingly uncontrolled development. The overriding need is that of the airlines which are ever seeking new expedients and stratagems to gain a greater share of European air traffic. The real problem, in fact, is to find ways and means of expanding that traffic by increasing the service provided. A solution may be found, not by continuing the present struggle, but by breaking down the barriers now partitioning Europe, where there is a considerable traffic potential, and by tempering competition.

The problem, in these terms, is a political one. Its solution lies with the governments, assisted by their administrations and their air transport operators who--even at short range--have everything to gain from this attempt at re-organization.

Once these teams get down to their task, it will very soon become apparent that the European-Mediterranean regional programme is to be

solved concurrently with the equally serious problem presented by the lack of European co-operation on long-haul routes. In this connection, a few final points may be of assistance in showing how these two problems are related.

There are two aspects of the long-haul problem for those European countries whose sovereignty extends to overseas territories: the national aspect, in the case of established routes between European capitals and such territories, and an international aspect in the case of other inter-continental routes.

As a result of the extension of their sovereignty to overseas territories, the European countries concerned hold, throughout the world, a certain number of de facto monopolies, which they organize and defend. From the point of view of the operators, this policy is justified immediately one realizes that the latter are compelled to compensate -- as and where best they can -- the losses they incur on their regional services in Europe. The most typical example of this type of monopoly is that of Belgium, whose link with the Congo is the mainstay of the Sabena network.

This privileged position enjoyed by certain European colonial powers may, however, be modified by world political developments. This has been the experience of KLM in Indonesia since the end of the war; this airline is now driven to intensify its efforts in certain other nationally protected areas (West Indies) and to engage in competition elsewhere, even with countries linked by certain political bonds, and whose operators co-operate through pooling arrangements (South Africa, where KLM is competing with the SAA-BOAC pool).

As for the international long-haul routes, it is known that these give rise to the keenest competition between European operators. One of these routes, that over the North Atlantic, is of particular significance to them as it represents the most important source of hard currencies for the airlines.

It is generally thought that combined operation of these various types of networks (regional routes, national long-haul routes, international long-haul routes) by the European airlines would only serve to complicate the organizational problem we have been considering. But it is equally possible to find in such a scheme certain aspects conducive to constructive organization. It is reasonable to assume that the interests of four European countries in the African continent, for instance, would contribute towards establishing the main North-South air traffic route linking Europe and Africa. Similarly, certain routes to the Far East are of joint concern to a group of European Powers. It will be noted also that the main international long-haul routes of interest to Europe are both few and well-defined (North America, South America). Once competition is reduced on these long-haul routes which are the main source of revenue for European airlines, it will be possible to get a clearer picture of

the problem of the internal organization of the European network. A basis would therefore appear to exist for co-operative effort, whether it be geographic solidarity within defined regions, or purely functional solidarity in the case of sufficiently well-defined air traffic lanes. This basis could doubtless be used, if those concerned were determined to overcome the initial obstacles.

If a determination were applied to reach these goals, the Contracting States of ICAO could well combine such a determination with a desire to apply the principle of limitation of competition to which they subscribed in signing the Chicago Convention, and with a desire to use the methods of "joint operation" to which, it will be recalled, Chapter XVI of that Convention is devoted.

The very limited extent to which co-operative formulae are applied in European aviation has been mentioned, as have the favourable results already obtained in certain limited fields of national or international planning through action of the public authority. The conclusion to be drawn would therefore appear to be that the problem goes far beyond the responsibilities of the airlines. Neither the question of solidarity in regional or long-haul operations, nor that of the granting of traffic rights, which are certain basic elements of the European problem, can be settled at the level of the operators. Proof of this can be found in the debates on Swissair, and in the development of the internal and external relations of the Scandinavian Consortium.

Furthermore, the task of organization undertaken on the initiative, and under the authority, of the States could not bear fruit unless the latter maintain efficient control of activities so organized. Whether this organizational effort brings about a multilateral extension of traffic rights, under the formulae recently developed by ICAO, or by the grouping of airlines and the joint use of facilities along the lines we have described in Europe, the public authorities cannot evade their responsibility, and it now seems that they are rapidly becoming aware of that responsibility.

APPENDIX IGENERAL AGENCY AGREEMENTconcluded on 17 May 1947BETWEEN AIR FRANCE AND SCANDINAVIAN AIRLINES SYSTEM*

AN AGREEMENT

Between:

- AIR FRANCE, Société Nationale de Transports Aériens, having its principal office at 2, rue Marbeuf, Paris, hereinafter called: AIR FRANCE

and

DET DANSKE LUFTFARTSELSKAB A/S (DDL)
DET NORSKE LUFTFARTSELSKAP A/S (DNL)
SVENSK INTERKONTINENTAL LUFTTRAFIK A/B (SILA)

operating under the name SCANDINAVIAN AIRLINES SYSTEM, having its principal office at 9 Kommendörsgatan, STOCKHOLM, 5, hereinafter referred to as SAS

Whereby it is agreed as follows:

Article 1

SAS appoints AIR FRANCE, as its sole general agent in all French territory (Metropolitan France, colonies, protectorates, mandates and all countries of the French Union), this appointment being accepted by AIR FRANCE.

Article 2

In this capacity, AIR FRANCE shall make available to SAS its commercial and administrative services, as provided in this agreement, for the carrying out of the following operations:

- sales promotion for passengers, cargo and mail;
- investigation and supervision of qualified travel agencies and intermediaries;

* Filed with ICAO under No. 685.

- distribution of publicity material provided by the Operating Company;
- provision of advice to SAS regarding publicity which that company may carry out on its own behalf;
- ticket sales and checking of cargo;
- passenger and cargo reservations;
- accounting, compilation of statistics and conduct of correspondence;
- filing of time-tables etc., with the French Authorities on behalf of SAS.

Article 3

The services rendered to SAS under the terms of this agreement shall normally give rise to payment of the customary commissions fixed by IATA. In respect of all sales in French territory, however, an additional super-commission of 25 per cent shall be paid to AIR FRANCE as General Agent.

Article 4

SAS shall be responsible for the maintenance and operation of its aircraft and AIR FRANCE shall in no way be liable for:

- a) delays of any nature whatsoever in transportation of passengers or cargo on SAS routes, on departure, en route or on arrival, whether caused by unfavourable weather conditions (fog, rain, or storms) or by unscheduled break of journey due to damage to the aircraft;
- b) accidents of any kind to persons or objects carried by SAS (resulting in death, injuries, damage or partial or total loss of cargo, baggage, clothing, etc.) whatever the cause thereof, gross negligence on the part of the management of AIR FRANCE excepted.

Article 5

The passenger tickets, consignment notes, etc., issued by AIR FRANCE shall be the IATA - AIR FRANCE forms.

Article 6

Accounting

SAS shall debit AIR FRANCE for all revenue on sales effected on its behalf within French territory in respect of which transportation has been effected (less any commission and over-riding commission applicable).

A statement of such revenue shall be entered in a commercial current account.

A monthly statement shall be prepared by AIR FRANCE from this account and transmitted to SAS for verification.

Detailed arrangements for settlement shall be established by separate correspondence between the two parties hereto, such arrangements taking into account any official regulations concerning transfers of currency.

Article 7

Arbitration Clause

Any dispute concerning the scope, meaning, construction or effect of this agreement or arising therefrom shall be referred to and finally settled by arbitration. If the parties concerned agree to the appointment of a single arbitrator the arbitral tribunal shall consist of him alone. If they do not so agree, the arbitral tribunal shall consist of three arbitrators, one appointed by each party, and the two arbitrators so appointed shall name a third who shall be designated as chairman. Should the two arbitrators appointed by the parties fail to agree on the choice of a third, or should one of the parties fail to appoint his arbitrator, any such appointment required shall be made by the Director General of IATA. The Director General may, at the request of either party, fix any time limit he finds appropriate within which the other party shall appoint its arbitrator or within which the two arbitrators appointed by the parties shall select the Chairman of the arbitral tribunal.

Upon expiration of this time limit, the Chairman shall take the action prescribed in the preceding paragraph to constitute the tribunal.

When the arbitral tribunal consists of three arbitrators, its decision shall be given by a majority vote.

The arbitral tribunal shall settle its own procedure, and, if necessary, shall decide the law to be applied. The award shall include a direction concerning allocation of costs and expenses of and incidental to the arbitration (including arbitrator fees).

The award shall be final and conclusively binding upon the parties.

Article 8

The provisions of this agreement shall, at no time, conflict with any conventions already concluded or which may be concluded between the respective governments of the two parties hereto. Should such conflict arise, any conflicting provisions shall immediately and automatically be cancelled and corrected accordingly.

It is likewise agreed that any provisions of this agreement which are not in accordance with IATA decisions may be modified on mere written notice from one party to the other.

Article 9

This agreement shall have retroactive effect from 1 November 1946 until further notice. Notwithstanding the provisions of Article 8 above, the Agreement may be terminated at any time on one month's notice.

Article 10

Should the regulations of the country of either one of the parties hereto require registration of this agreement, the cost thereof shall be borne by that party.

DONE AT STOCKHOLM in two
copies, 17 May 1947

H. Desbruères

AIR FRANCE

Per A. Norlin

SAS

APPENDIX IISPECIMEN TYPE OF BILATERALGROUND SERVICE AGREEMENTArticle 1

The Servicing Company agrees to provide the Operating Company, at the places specified in the annexes to this Agreement and as provided by the Agreement and the Annexes thereto, the various services specified in Articles 2, 3 and 4 below.

Article 2SERVICE AT AIRPORT AND AT CITY TERMINALS

On each landing of an aircraft of the Operating Company at any one of the airports referred to in this Agreement, the following services shall be provided:

A. - Airport services

- 1) loading and unloading of passengers, baggage, cargo and mail;
- 2) assisting with all formalities at arrivals and departures of aircraft, including Customs, police, health and other similar requirements;
- 3) preparing and forwarding the customary traffic and aircraft documents;
- 4) accepting and delivering mail in accordance with the arrangements with the appropriate postal authorities;
- 5) providing, as far as possible, overnight accommodation and meals for passengers and crews, as requested by the Operating Company;
- 6) preparing, despatching and receiving signals concerning the operations of the Operating Company, when this service is not the responsibility of the airport authorities. The Servicing Company, shall not, however, assume any liability resulting from the provision of such service;
- 7) assisting aircrews in obtaining from airport authorities efficient provision of radio, meteorological and similar facilities;

- 8) providing such special services as may be necessary in the event of special flights, forced landings or accidents;
- 9) cleaning of aircraft cabins and galley equipment;
- 10) routine pre-flight services including assistance in supplying aircraft with water, fuel and oil, starting engines and similar normal routine operations carried out on aircraft arrivals and departures;
- 11) towing of aircraft of the Operating Company where necessary;
- 12) taking all reasonable steps to ensure the safety of the Operating Company's aircraft while at the airport. The Servicing Company shall do its utmost to ensure that the Operating Company's aircraft receive treatment not less favourable than that of any user of the airport in the matter of housing, picketing, towing and general protection, whether such facilities are provided privately or by airport authorities;
- 13) any other services which may reasonably be included under this heading.

B. - City terminal services

- 1) services normally provided at city terminals on arrival and departure of passengers, passenger check-in, collection of excess baggage charges, etc. including the use of such of the facilities of the Servicing Company as may be required for this purpose.

Article 3

SURFACE TRANSPORTATION OF PASSENGERS AND CREWS

The Servicing Company shall provide transportation for passengers and baggage of the Operating Company between airport and city and vice versa, as required by the latter Company, in accordance with the provisions of this Agreement and at the places specified in the annexes thereto.

Where possible, aircrews shall also be carried in the vehicles used for transportation of passengers. When this is not possible the Servicing Company shall endeavour to place a special vehicle at the disposal of aircrews.

Article 4

CLEARANCE, STORAGE AND CARTAGE OF GOODS

On arrival and on departure of aircraft of the Operating Company, the Servicing Company shall be responsible for cartage, forwarding, customs clearance and storage of cargo of the Servicing Company, such service to be on a standard with that provided by the Servicing Company for its own cargo.

Article 5TECHNICAL SERVICES

1) The Servicing Company shall provide assistance to the Operating Company at the places specified in the annexes to this Agreement in carrying out normal ground maintenance of the latter company's aircraft and in effecting such minor repairs as may be necessary.

It is specified, however, that the provision of any technical assistance required for major work or repairs shall be the subject of separate arrangements.

2) In the event of such major work, the Servicing Company may assume responsibility for purchasing on behalf of the Operating Company any technical supplies as may be required and are available locally.

It is understood that the Servicing Company shall obtain such supplies in accordance with official export and import regulations.

In so far as it is able, the Servicing Company shall also provide the Operating Company with any materials and small equipment required to carry out such work.

It is specified, however, that spare parts, equipment, instruments and accessories which it may be necessary to replace shall be provided by the Operating Company. If, in exceptional circumstances of absolute necessity, the Servicing Company provides such items to the Operating Company, such provision shall constitute only a temporary loan and the items involved shall be returned by the Operating Company to the Servicing Company as rapidly as possible.

3) The supply of fuel and lubricants shall be arranged by direct contract between the Operating Company and its supplier. In this connection, the Servicing Company shall merely carry out any necessary liaison with the local office of the supplier on landings of aircraft of the Operating Company.

4) The services referred to in this Article shall be provided under the responsibility of the local representatives of the Operating Company and its aircrews.

Article 6ORDER FORMS

Order forms for all supplies provided by the Servicing Company to the Operating Company shall be made out in writing by authorized representatives of the latter Company.

All work on and repairs to aircraft, except normal maintenance carried out on arrival and departure of aircraft, shall also be covered by written order form made out by the Operating Company.

Article 7

IMPLEMENTATION

The airports at which aircraft of the Operating Company normally land, and at which the services specified in Articles 2, 3 and 4 above are to be provided, shall be specified in the Annexes to this Agreement. It is nevertheless understood that in the case of occasional non-scheduled landings at other airports where the Servicing Company has facilities, the latter Company shall endeavour, in so far as the local facilities permit, to give the Operating Company, at such airports, any assistance the latter may require for the operation of its services.

Article 8

REMUNERATION

The fees to be paid by the Operating Company to the Servicing Company for the services listed in Articles 2 and 3 above shall be specified in the above-mentioned Annexes.

The cost of the services listed in Article 4 above, i. e., customs clearance, storage and cartage of cargo shall be covered by the additional charges collected from customers. Where such charges have been collected by the Operating Company, the Servicing Company shall debit the Operating Company for the amounts involved.

In the case of technical services, all material and supplies provided, other than fuel and lubricants, which do not constitute a temporary loan, shall be debited to the Operating Company at replacement cost plus any additional charges applicable such as those for transportation, insurance, storing, dues, taxes, etc., plus ... per cent service charge.

Labour costs will be charged on the basis of the cost to the Servicing Company plus any increases for overtime, travel allowances and transportation expenses of the staff involved.

Meals and accommodation provided to passengers and crews shall be charged at cost price plus ... per cent for overhead and service charge.

Article 9

EXPENDITURE INCURRED ON BEHALF OF THE OPERATING COMPANY

The charges listed in the annexes to this Agreement do not include out-of-pocket expenses which may be incurred by the Servicing Company on behalf of the Operating Company. Such disbursements as are incurred shall be reimbursed on presentation of vouchers.

The following expenses which may be incurred shall be considered as disbursements:

1) the cost of any surface transport not included in the charges listed in the annexes to the present Agreement;

Where such transport is performed by a third party, reimbursement shall be effected in the amount of the price charged by the latter, plus ... per cent for overhead and service charge;

2) the cost of all telegrams, radio messages and telephone calls concerning the operations of the Operating Company, but not including local telephone calls;

3) payment of overtime for Customs, police, health and similar officials, including any other payments made to these officials;

4) customs duties on any supplies of the Operating Company;

5) the cost of any special services required for special flights, forced landings or accidents, provided such costs are not listed in the annexes to the present Agreement;

6) official airport charges including landing, parking and hangar fees, as well as any fees levied in respect of passengers, cargo or baggage by the airport authority or any other authority;

7) any dues or taxes incurred on behalf of the Operating Company and arising from the operations of the latter.

Article 10

LIABILITY

The Operating Company shall be responsible for the maintenance and operation of its aircraft and the Servicing Company shall in no way be liable for delays in the carriage of passengers or goods on the services of the Operating Company, either on departure, en route or on arrival, due to any cause whatsoever, except in the event of gross negligence on the part of the management of the Servicing Company.

It is specified, moreover, that any movement, housing or storage, of aircraft or supplies of the Operating Company at the airport shall be at the risk and peril of that Company. However, the Servicing Company shall undertake to safeguard such equipment as it would its own. The Servicing Company

shall not be held liable for damage or loss of any kind arising as a result of the provision of services to the Operating Company, both in the case of normal aircraft maintenance and pre-flight servicing (assistance in fuelling, starting, etc.).

The Operating Company assumes all fire risks in respect of its equipment and both it and its insurers renounce all claim against the owners of any hangars used by the Servicing Company and of any aircraft stored therein, as well as against the Servicing Company and its insurers, except in the case of malicious damage.

(The above provisions shall become reciprocal when the two parties to the Agreement provide each other the services specified therein at their respective bases.)

Article 11

ACCOUNTING PROCEDURE

The Servicing Company shall debit the Operating Company for all expenses incurred through implementation of this agreement.

The necessary vouchers shall be made in (currency) and entered in a current account.

Each month, the Servicing Company shall prepare a statement of current account which it shall either:

- 1) submit to the IATA Clearing House if the Operating Company is a member of that body;
- 2) render to the Operating Company, if the latter is not a member of the IATA Clearing House, and such current account shall be settled within . . . days thereafter.

Article 12

ARBITRATION CLAUSE

Any dispute concerning the scope, meaning, construction or effect of this agreement or concerning any rights or obligations arising directly or indirectly therefrom shall be referred to arbitration. Each party shall appoint an arbitrator and the two arbitrators so appointed shall name a third who shall act as Chairman. Where either of the parties has informed the other of its choice of arbitrator, and the other party has not appointed its own arbitrator within fifteen days of such notification, the former party may have recourse to the Director General of IATA who shall then appoint an arbitrator for the party which has not so acted.

Should the two arbitrators so appointed fail to agree on the choice of a third, this appointment shall also be made by the Director General of IATA.

The arbitrators shall determine their place of meeting, shall settle their own procedure and shall be empowered to allocate the cost of arbitration to either one of the two parties. Their award shall be final and binding upon the parties.

Article 13

The provisions of this agreement shall at no time conflict with any conventions already concluded or which may be concluded between the respective governments of the two parties hereto. Should such conflict arise, any such conflicting provisions shall immediately and automatically be cancelled and corrected accordingly.

Article 14

DURATION OF AGREEMENT

This agreement shall have effect from until further notice.

It may be terminated at any time on not less than months' notice in advance, provided this provision does not prevent implementation of the provisions of Article 13 above.

Article 15

Should the laws of the country of either one of the parties hereto require registration of this agreement, the cost thereof shall be borne by that party.

APPENDIX IIIMAIN PROVISIONS OF BENESWISS AGREEMENT IISections reproduced:

- Contractual clauses: Articles 1 to 11;
- Annex A: Allocation of airports;
- Annex B: Extract from spares allocation tables;
- Annex C: Organization of ground mechanic service.

(The text of the Beneswiss Agreement is available only in English)

WHEREAS

Each of the parties operate international air transportation and desire to make available for each of the other parties certain spare parts and technical services for emergency repairs at certain airports, upon the terms and conditions hereinafter set forth;

NOW therefore: in consideration of the mutual covenants and agreements herein set forth, the parties hereby agree as follows:

Article 1

1. - Each of the contracting parties will provide the technical facilities specified in this contract at the airports mentioned in Annex A (hereinafter referred to as the Bases) to each of the other contracting parties operating to and from these Bases.

2. - In this agreement "Servicing Company" means each party which provides the facilities as mentioned above and "Operating Company" means each party which makes use of these facilities.

Article 2

The Servicing Companies are obliged to keep at the disposal of the Operating Companies a stock of such spare parts and such tools as are specified in the Annexes B. The Operating Company will advise the Servicing Company of any change in frequency a reasonable time in advance.

Article 3

At the reasonable request of an Operating Company available spare parts as mentioned above will be lent to the Operating Company for urgent replacement and repair of defective parts of an aircraft of the Operating Company at the Base in question, and other goods and materials - if available in the stock of the Servicing Company - will be furnished for the purpose of such repairs.

Article 4

1. - If spare parts are lent to an Operating Company this Company is under obligation to return the part concerned in good condition to the Servicing Company at the main Base of the latter Company. The part in question must be delivered as soon as possible but in any case within one week after the original part is lent. If an Operating Company should not fulfil this obligation for any reason whatsoever, including force majeure, that Company will indemnify the Servicing Company at its request by paying the list price of the part concerned + 25 per cent.

2. - In special cases it can be agreed between the parties concerned that the lent part can be replaced by a similar part in the same condition.

3. - In the case of goods or materials, other than spare parts, being delivered by the Servicing Company the cost price of such goods or materials at the place of delivery shall be charged.

4. - Any out-of-pocket expenses incurred by the Servicing Company for the Operating Company shall be refunded by this latter Company without extra charge.

5. - An Operating Company may request the Servicing Company to store free of charge, at a base indicated in the Annex A by the words "ground mechanic", a reasonable quantity of spares to be furnished by the Operating Company, for a type of aircraft not used by the Servicing Company at that Base, provided that the Operating Company participates in the payment at that base of the services as fixed in Annex D.

6. - The Servicing Company undertakes to store, process through customs, supervise and administer aircraft spare parts which the operator chooses to have available for its own aircraft if the Operating Company shares in the costs of the ground mechanic, otherwise a separate charge, to be agreed upon between the parties concerned, will be levied for these services.

Article 5

1. - The Servicing Companies keep a ground mechanic stationed at those Bases which are indicated in Annex "A" by the words "ground mechanic".

2. - If, for a IATA - scheduled season, the Operating Company so requests and the Servicing Company so agrees, the ground mechanic of the Servicing Company shall be present on arrival and departure of aircraft of the Operating Company. Such requests shall indicate the airport where the mechanic's presence is asked for and the type of aircraft. The Servicing Company shall be supplied with the operator's time-table sufficiently in advance.

3. - The ground mechanic of the Servicing Company involved shall perform the following services for the Operating Companies:

3.1. - to be present at the ramp with the hand-tools which are most frequently used, "e. g. spark-plug wrench, etc. ;

3.2. - to contact the crew immediately after the engines have been stopped in order to be informed of any technical troubles which may have occurred;

3.3. - to be present at the aircraft's departure, with the hand-tools which are most frequently used, to assist (if necessary) when the engines are started and to supervise the proper use of battery carts, fire extinguishers, etc., by ground personnel;

3.4. - to be available until 30 minutes after the departure in view of the possible return of the aircraft due to technical trouble.

4. - The Servicing Company will base its charges for the Operating Company on the principles as mentioned in Annex "C". These charges have been calculated for a defined period as mentioned in Annex "D", it being understood that this Annex "D" will be replaced or amended for future periods in accordance with the principles of Annex "C".

5. - If no services are requested by the Operating Company from the Servicing Company according to paragraph 2 of this Article, the ground mechanic of the Servicing Company shall, however, if available, and to the extent the Servicing Company does not need him for other purposes, be at the disposal for repairs when requested. In such cases only the man hours actually required shall be invoiced against the rate as specified in Annex "C" paragraph 7.

Article 6

1. - Any services rendered under this contract will be performed according to the standards of the Servicing Company and the instructions of the manufacturers of the aircraft or engines or equipments, as the case may be, and also according to the laws and regulations of local and other authorities in so far as applicable to the Servicing Company. Reasonable requirements of the Operating Companies will be taken into consideration as much as possible.

2. - For any work to be rendered other than the services mentioned in paragraph 3 of Article 5, and for any goods to be furnished, work orders must be signed on behalf of the Operating Company specifying such services and/or goods.

Article 7

1. - The charges mentioned in this contract and its annexes are payable within one month after an invoice is sent to the Operating Company. Work orders specifying the work done and/or goods furnished will be considered as full proof if signed by a member of the crew or by the representative of the Operating Company.

2. - Payments under this contract - with the exception of indemnity payments as mentioned in Article 4 which are only payable in U. S. dollars - will be effected through the intermediary of the IATA Clearing according to the regulations of the IATA - Clearing House.

Article 8

1. - The Servicing Company does not assume any guarantee for the fulfilment of its obligations under this contract to furnish labour and/or parts, tools and other goods and the Operating Company therefore is not entitled to raise a claim for damage sustained by the Servicing Company's failure to furnish the requested labour and/or goods.

2. - However, the Servicing Company in such case is liable to refund to the Operating Company the reasonable extra expenses incurred by the Operating Company for sending from its own Base or hiring the parts or tools in question, respectively for sending a ground mechanic from its own Base or providing technical assistance from third parties, under exclusion of all other claim on whatever legal grounds they may be based.

Article 9

1. - The Servicing Company shall not be liable to the Operating Company for damage sustained by or claims lodged against the Operating Company in connection with or resulting from the rendering of services or the furnishing of goods pursuant to this agreement, unless the same result from or are caused by acts or omissions amounting to gross negligence or wilful misconduct of the Servicing Company.

2. - The Operating Company shall indemnify and save free and harmless the Servicing Company from any liability towards third parties including costs and expenses incident thereto, unless due to wilful misconduct or gross negligence of the Servicing Company, in the event such liability is arising from or connected with the operation or use of the aircraft of the Operating Company, or transportation or other services offered or performed by this Company.

3. - Nothing in this agreement shall affect the mutual liability of the contracting parties in case of damages or claims or liabilities which have no connection with the performance of services by a Servicing Company under this contract, this liability being subject to the rules as set out in any other agreement existing between the Servicing - and the Operating Company or, in absence of such rules, to the applicable laws.

Article 10

1. - In the event of any dispute concerning the interpretation or application of this Agreement, or concerning any rights or obligations based on or relating to this Agreement, such disputes shall be referred to and finally settled by arbitration.

2. - The arbitral tribunal shall consist of three arbitrators unless the parties agree to the appointment of a single arbitrator - and shall be appointed by the Director General of the IATA if the parties concerned have not appointed the arbitrator(s) by mutual agreement within thirty days after any of the parties shall have notified the other party or parties that it wishes to settle a dispute by arbitration.

3. - The arbitrator or arbitral tribunal shall settle its own procedure with due consideration that the provisions of this agreement shall be construed in accordance with, and the performance shall be determined by, the laws of the country of the Servicing Company. The award shall include direction concerning allocation of costs and expenses of and incidental to arbitration including arbitrator fees. The award shall be final and conclusively binding upon the parties.

Article 11

1. - This agreement shall be considered to be effective from 15th April 1951 and shall supersede any existing arrangements between the parties covering the same subject matter, with the exception of any separate written agreements between the parties in respect to technical services or procurements to be carried out at the main base of a servicing company. It shall continue in effect until cancelled by any one party upon 30 days written notice to the others.

2. - It is understood that Annexes A, B, C and D, or such Annexes as will substitute that aforementioned, may be cancelled by any one party upon 30 days written notice to the others.

3. - If the Servicing Company is compelled to withdraw spare parts for a certain type of aircraft owing to the cessation of operations with that aircraft, it will be entitled to do so after giving due notice to the Operating Companies. If all operations to a certain Base are ceased, the Servicing Company has the right to withdraw the mechanic after giving due notice to the Operating Companies.

This agreement may, for identification, be referred to as "Contract BNS 2".

Annex A to Contract BNS-2
(valid from April 15, 1951)

Stations equipped by		(x) Spare parts available at the Stations as per Annex B			
		DC-3	CNV	DC-4	DC-6
<u>KLM</u>					
Hamburg			x		
Stockholm	Ground Mechanic		x		
Frankfurt	Ground Mechanic	x	x	x	x
Munich	Ground Mechanic	x	x	x	x
Rome	Ground Mechanic		x	x	x
Johannesburg					x
Nuremberg		x	x		
London			x		
Amsterdam		x	x	x	x
<u>Swissair</u>					
Copenhagen	Ground Mechanic		x		
Geneva	Ground Mechanic	x	x	x	
Hamburg	Ground Mechanic	x			
Rome		x			
Paris	Ground Mechanic	x			
London		x	x		
Zurich		x	x	x	
<u>Sabena</u>					
Milan	Ground Mechanic		x		x
Nice	Ground Mechanic		x		
Düsseldorf	Ground Mechanic	x	x		
Kano				x	x
Manchester		x			
London		x	x		
Brussels		x	x	x	x

Description	Part No. KLM	Part No. SABENA	Part No. SWISSAIR	KLM							SABENA SWISSAIR				
				Hamburg Q	Stockholm Q	Frankfurt Q	Munich Q	Nuremberg Q	Rome Q	Amsterdam AR	Milan Q	Nice Q	Düsseldorf Q	Brussels AR	Geneva Q	Copenhagen Q	Zurich AR
<u>Landing gear</u>															
Brake hose	240-5180301-50	same as KLM	same as KLM	1	1	1	1	1	1	1	1	1	1	1	
Brake hose	240-5180301-60	"	"	1	1	1	1	1	1	1	1	1	1	1	
Cable assy nosewheel steering	240-3150600-12	"	"	1	1	1	1	1	1	1	1	1	1	1	
High pressure hose mainwheel	240-8980901-20	"	"	1	1	1	1	1	1	1	1	1	1	1	
High pressure hose nosewheel	240-8980901-54	"	"	1	1	1	1	1	1	1	1	1	1	1	
Mainwheel with tire and tube 34"x9.9" less brake	no part no.	no part no.	no part no.	1	1	1	1	1	1	1	1	1	1	1	
Nosewheel with tire and tube 26" x 6"	no part no.	"	"	1	1	1	1	1	1	1	1	1	1	1	
Schrader valve HP	AN 809-1	same as KLM	same as KLM	2	2	2	2	2	2	2	2	2	2	2	
Schrader valve LP	0787	"	"	2	2	2	2	2	2	2	2	2	2	2	
<u>Electrical parts</u>															
Bulb landing light	4560	"	4560 (AN-3110)	1	1	1	1	1	1	1	1	1	1	1	
Bulb wing position	AN 3122-1524	"	same as KLM	2	2	2	2	2	2	2	2	2	2	2	
Cover wing position light L	A 1280-2	"	A 1280-2 (AN3042-1)	1	1	1	1	1	1	1	1	1	1	1	
Cover wing position light R	A 1280-3	"	A 1280-3 (AN3042-2)	1	1	1	1	1	1	1	1	1	1	1	

Q: Quantity

AR: As Requested

ANNEX C to Contract BNS-2
(valid from April 15, 1951)

Table of hours to be applied per scheduled movement for each participant:

<u>Type of aircraft</u>	<u>Transit or turnaround</u>			
	<u>Between 0800-2000</u>		<u>Between 2000-0800</u>	
	<u>Per arr</u>	<u>Per dep</u>	<u>Per arr</u>	<u>Per dep</u>
2 - engined	2 hrs	1 hr	2.50 hrs	1.25 hrs
4 - engined	3 hrs	2 hrs	3.75 hrs	2.50 hrs

1. - The pre-calculation of charges and hours to be expected over a scheduled IATA-period shall be laid down in a separate annex D and shall serve as basis for the division of the cost per station.

2. - The total number of hours per week and per station will be calculated on the basis of each party's timetable.

3. - The total number of hours resulting from the calculation sub 2, divided by 40 shall indicate the number of jointly used ground mechanics which may be taken into account by the Servicing Company.

4. - Deviation from the principle sub 3 will be allowed for practical reasons, subject to approval of the Operating Companies.

5. - The cost of each station will be shared by the parties in proportion to the number of man-hours reserved for each Company.

6. - If, owing to the alteration of a party's timetable during the same IATA period, the number of ground mechanics is to be altered, the Servicing Company will reassess the cost and redistribute it.

7. - Charges for excess hours according to work order form.

For any work (not mentioned in Article 5, paragraph 2) performed by the mechanic on request of the Operating Company only the man-hours in excess of 2 hours per stop (inclusive arrival and departure) shall be charged extra to participants at the rate of \$1.80 per man-hour.

Contracting parties not sharing in the cost of a certain station, yet using it, will be charged for all man-hours performed at the rate of \$2.80 per man-hour.

APPENDIX IVSPECIMEN FORM OF POOLING AGREEMENT

Year 1938

Between:

- 1) A. B. AEROTRANSPORT, having its principal office in STOCKHOLM, hereinafter referred to as "ABA"
- 2) AIR FRANCE, having its principal office in Paris, hereinafter referred to as "AF"
- 3) KONINKLIJKE LUCHTVAART MAATSCHAPPIJ VOOR NEDERLAND EN KOLONIEN NV., having its principal office at The Hague, hereinafter referred to as "KLM"

Whereby it is agreed as follows:

Article 1

The service covered by this agreement is:

- No. 900: PARIS-AMSTERDAM

Daily round-trip service
operated from 1 January to 31 December 1938
by ABA on the one hand, and KLM-AF on the other.

The assignment of operating periods between the parties hereto and all matters relating to the operation of flights shall be settled by a separate exchange of letters.

Article 2

The aircraft used shall be:

- by ABA - multi-engined Ju-53, and DC-3 aircraft
- by AF - multi-engined Potez 62, or Bloch 220 aircraft
- by KLM - multi-engined DC-2 or DC-3 aircraft

Article 3

- 1) Revenue from passenger, baggage, cargo and mail traffic whether local or in transit, carried over this service, shall be pooled and

pro-rated on the basis of the number of kilometres flown each month on this route by each contracting party.

2) In the case of local traffic, revenue from passenger, baggage and cargo traffic shall be paid into the pool at the rates collected, and mail revenue at cargo rates, postal remunerations being retained by the airline which receives it from the postal administration of the country to which it belongs.

3) In the case of transit traffic, revenue from passenger, baggage, cargo and mail traffic shall be paid into the pool on a pro-rata basis established by separate exchange of letters, mail revenue being retained by the airline receiving it from the postal administration of the country to which it belongs.

Article 4

Revenue from the carriage of local or transit passengers, up to a maximum of 12 passengers per aircraft shall be paid into the pool.

Baggage and cargo revenue shall be paid into the pool in toto.

Unless the contracting parties agree otherwise, payment into the pool of revenue from G-I passengers shall be at the full rate. G-II passengers and company stores shall not come under the pooling arrangement.

Article 5

In case the number of passengers carried, on any route segment, or over the whole route, exceeds the maximum specified in the preceding Article, the revenue from the passengers in excess (passengers at full and reduced fares and G-I passengers included in the pooling arrangement) shall be retained by the Operating Company in respect of the distance flown at local rates less 20 per cent.

Article 6

For the purpose of calculating the mileage flown by each company the following distances shall be adopted:

- PARIS-AMSTERDAM (direct)	430 km
- AMSTERDAM (with one or more stops)	440 km
- PARIS-BRUSSELS	268 km
- BRUSSELS-ROTTERDAM	115 km
- ROTTERDAM-AMSTERDAM	57 km

Article 7

In the case of discontinuance of a flight, passenger, excess baggage and mail revenue as well as mileage shall come under the pooling arrangement only in respect of transportation to the airport (Brussels, Antwerp or Rotterdam) preceding the point at which the flight was discontinued. The company involved shall bear the cost of any expenses resulting from such discontinuance (ticket refunds, claims, etc.).

Revenue from the carriage of cargo shall be paid into the pool in toto, the cost of forwarding by surface transportation being debited to the pool. All claims, compensation, etc., shall, however, be borne by the company concerned.

Revenue derived from the operation of additional flights, i.e., those duplicating a scheduled service, shall be paid in to the pool to the extent of that part of the load carried which could have been carried by the scheduled service.

Article 8

The contracting parties shall grant each other a commission of 10 per cent on all revenue from operation of this service (5 per cent for CDB's and BSCI's).

This commission shall be deducted before revenues are paid into the pool.

Article 9

All amounts of revenue shall be recorded in a statement in the currency in which they were received. KLM shall be responsible for the preparation of such statements in respect of transportation from Amsterdam and later from Rotterdam, and AF in respect of transportation from Paris. The two companies shall send each other these statements within fifteen days of the end of the month to which they refer with a copy to ABA.

The amount in French francs and in florins due to each contracting party shall be calculated each month at the average rate of exchange of the month in which the transport was effected, the balance to be paid into the current account.

Any differences which might appear following corrections to statements of revenue shall be calculated in a similar manner, provided complete agreement has been reached by the contracting companies.

The current accounts of each contracting party shall be composed of a French franc account and a florin account, all other currencies being converted into these two.

KLM shall prepare a quarterly statement of the current accounts.

When the balance on each of these accounts has been approved, such approval to be given within fifteen days from the date of their despatch, these balances shall be offset on the last day of that particular quarter and settled within thirty days of despatch of the current account statements.

Article 10

The present agreement shall remain in force from 1 January to 31 December 1938. It may be terminated at any time on one month's notice.

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Equivalents at date of publication:
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