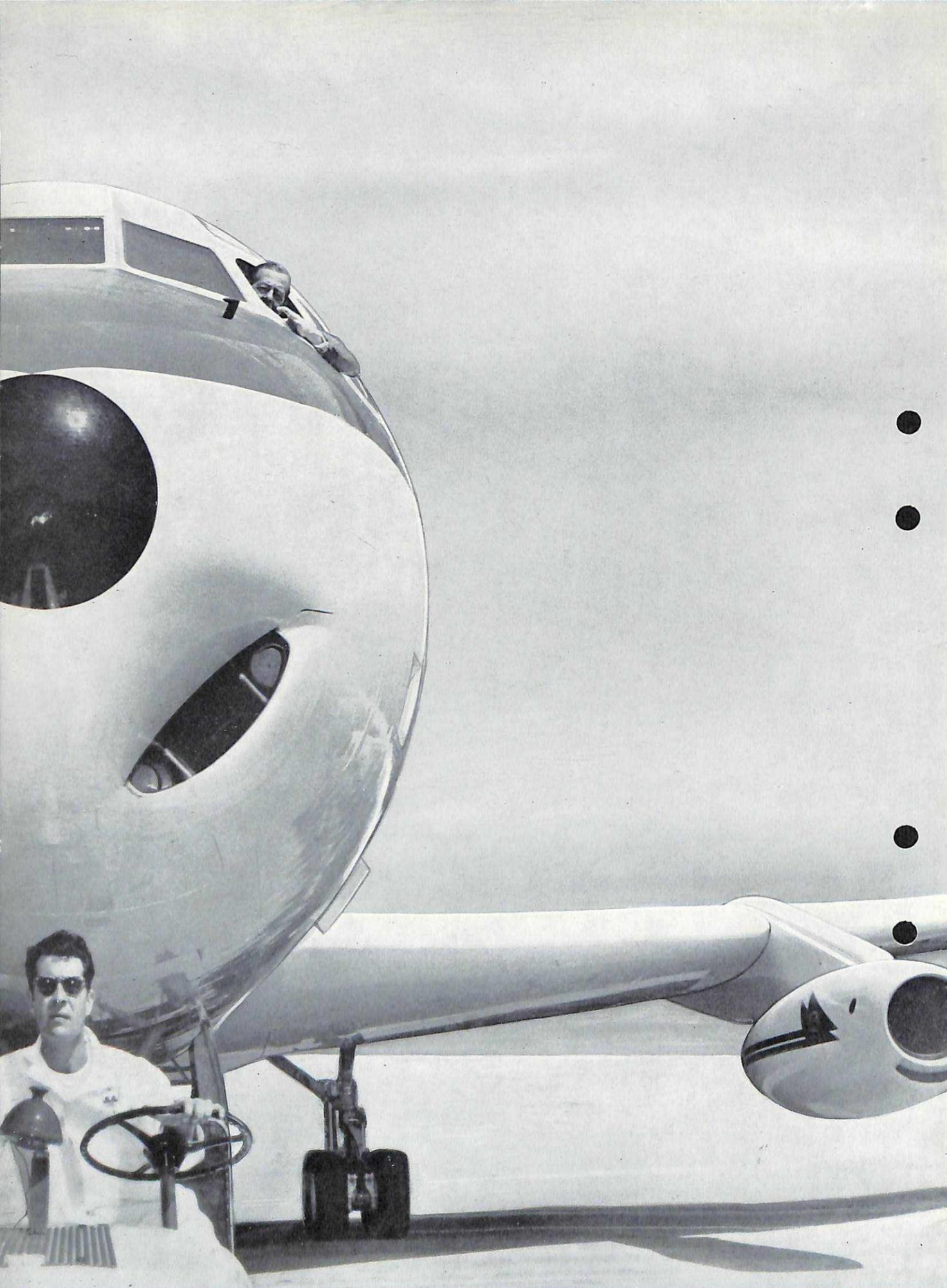




*SAS*  
annual report  
1957-1958





*Douglas DC-8 will become the flagship of SAS in 1960.*



# 1957

Annual Report for the Fiscal Year October 1 — September 30

# 1958

## SAS OPERATIONS - GENERAL

SAS operations have shown a certain increase during the fiscal year 1957-58. The production increase has, however, been less pronounced than during the preceding fiscal year.

The modernization of the fleet has continued. Three additional Douglas DC-7Cs and four Convair Metropolitans have gone into operation, while older equipment has been sold. The modification program for the DC-6 fleet has been completed. The costs for this program, which has been carried out during the last two fiscal years, have been charged to the operations of the respective years.

The operational results for 1957-58 have, to a certain extent, been influenced by the economic recession during this period. Production costs have continued to rise, and fare adjustments introduced have not sufficiently compensated for the increase in costs.

The coming transition to jet operations has entailed considerable costs within all branches of the Consortium during the past fiscal year. These preparation costs have, as in previous years, been charged to current operations. Depreciation has been provided for mainly in accordance with the principles applied in previous fiscal years. A small residual amount has been used for additional depreciation.

The SAS activities have been characterized by extensive preparations for the transition of civil aviation to jet operations. Six Caravelle jet airliners have been ordered, in addition to the six already on order. This will make

SAS one of the very first international carriers to operate a fully modern medium-range jet fleet, which will successively go into service in 1959 and 1960.

Extensive efforts have been made to counteract the continuous increase of production costs. In this connection, the advantages of closer co-operation with other airlines have been carefully studied. Negotiations with the Swiss carrier Swissair during the spring and summer 1958 have resulted in an agreement between SAS and Swissair concerning a co-ordinated equipment policy, a distribution between the carriers of maintenance work for their future jet fleets, and a close co-operation in every respect in the technical and operational fields.

Under this agreement, SAS will, in 1960, obtain a new type of jet aircraft by leasing a number of four-engine Convair 880s from Swissair. This leasing of the Convair 880s, in addition to earlier orders for DC-8s and Caravelles, means that SAS, from 1961, will operate a completely modern jet fleet, composed of the aircraft types economically best suited to its various operational areas.

## WORLD AVIATION IN 1957

Scheduled civil aviation (excluding the Soviet Union and China) in the calendar year 1957 continued to show a considerable traffic increase over the preceding year. Ton-kilometres flown rose from 8,180 million to 9,330 million, i.e. by 14%. Passenger-kilometres increased by 15.5% to 82,000 million, and the number of passengers by approximately 12% to about 87 million.



The number of air passengers over the North Atlantic passed the million mark for the first time, and rose, compared to 1956, by 22% to 1,020,000.

Total traffic revenue of the scheduled airlines in 1957 is estimated at about \$ 4,100 million. As production costs increased heavily at the same time, the profit margin is expected to be only about \$ 50 million, or 1.2%.

## SAS PRODUCTION AND TRAFFIC

(Figures in parentheses refer to the fiscal year 1956-57).

### System-wide

Production during the fiscal year amounted to 397.9 million ton-kilometres (339.0 million)\*, a 17% increase. Of the total production, 60% was flown on intercontinental routes, 27% on European and Middle-East routes, and 13% on inter-Scandinavian and domestic routes.

Traffic amounted to 203.1 million revenue ton-kilometres (179.5 million), a 13% increase. Passenger traffic rose by 14%, cargo traffic by 11%, and mail traffic by 3%. The load factor was 51.0 (52.9)\* and the cabin factor 54.6 (56.1).

### Intercontinental Routes

Of the total production increase during the fiscal year, 65% was allotted to the intercontinental routes.

A new route to Djakarta, the capital of Indonesia, was inaugurated in January, 1958, with one flight per week. In May, 1958, the frequency was increased to two flights per week, and at the same time Kuala Lumpur, Malaya, was incorporated into the SAS network. The number of weekly flights on the New York route was increased to 13 (11) in the winter season, and to 31 (26) in the sum-

mer peak season. Of these flights, 11 (7) per week were flown non-stop between Copenhagen and New York.

Production on all intercontinental routes amounted to 239.8 million ton-kilometres (201.6 million)\*, a 19% increase.

Traffic rose by 16% to 126.8 million ton-kilometres (109.4 million).

The load factor was 52.9 (54.3) and the cabin factor 58.8 (61.2).

### European and Middle-East Routes

Production during the fiscal year rose by 9% to 107.5 million ton-kilometres (98.6 million)\*. The political situation in the Middle East during the summer of 1958 caused certain disturbances in the production program for this area.

Traffic increased by 6% to 53.2 million revenue ton-kilometres (50.2 million).

The load factor was 49.5 (50.9) and the cabin factor 50.3 (49.8).

### Scandinavian Routes

Production on the inter-Scandinavian routes and the domestic routes in Denmark, Norway, and Sweden totalled 50.6 million ton-kilometres (38.8 million)\*, a 30% increase. All SAS domestic routes in Scandinavia are now flown with Convair Metropolitan or four-engine equipment.

Traffic rose to 23.1 million revenue ton-kilometres (20.0 million), i.e. by 16%.

The load factor was 45.7 (51.5) and the cabin factor 48.2 (52.1).

The Swedish domestic routes flown by Linjeflyg AB, in which SAS is a share-holder, have been expanded to cover nineteen points in Sweden.

## THE SAS - SWISSAIR AGREEMENT

For many years, there has been good co-operation between SAS and the Swiss carrier Swissair. At the beginning of 1958, negotiations were initiated concerning the expansion of the co-operation. It was soon found that both carriers were facing many similar problems, particularly pertaining to re-equipment programs, maintenance organizations, etc. A thorough analysis of these and related questions resulted in an agreement, signed in Zurich on October 6, 1958, providing for a considerably extended co-operation between SAS and Swissair.

The basis for the agreement is the conviction shared by both carriers that their investments can be reduced and operational economy improved by a co-ordinated equipment policy and joint utilization of workshops and technical and operational organizations.

In connection with the signing of the agreement, both carriers placed substantial orders for jet aircraft. Swissair purchased five Convair 880s for delivery at the end of 1960. Two of these will be leased to SAS for four years, to be flown under its own colours. In addition to the five Convair 880s, SAS and Swissair hold a joint option for six more aircraft of this type.

SAS ordered four additional Caravelles for delivery during the summer of 1960. Of the total SAS Caravelle fleet four aircraft will be leased to Swissair, to be flown under the Swissair flag. SAS holds an option for further deliveries of Caravelle aircraft.

SAS and Swissair have both previously ordered Douglas DC-8 jet airliners. The two carriers will have their DC-8s, Convair 880s and Caravelles delivered with identical interiors, instruments and other equipment. The choice of the same types of aircraft, and the standardization of equipment and interiors, form the basis for a joint maintenance organization for the SAS and Swissair jet fleets.

At its workshops in Scandinavia, SAS will handle the maintenance of the DC-8s and Caravelles owned or leased by Swissair. Correspondingly, Swissair will, in

Switzerland, maintain the Convair 880s leased by SAS, and additional aircraft of this type which SAS may purchase in the future. This will enable both carriers to improve the efficiency of their maintenance operations and to make more exhaustive use of their workshop facilities.

The high technical, economic and service standards characteristic of Swissair have brought the Company an excellent international reputation. It is the conviction of SAS that the close co-operation with Swissair will become of great importance to both carriers, and that a further expansion of this co-operation will be possible in future years.

## THE FLEET

### The Jet Program

SAS has previously secured jet equipment for the longest intercontinental routes (New York, Los Angeles, and the North Pole Route to Tokyo) by ordering seven Douglas DC-8s, deliveries starting at the turn of the year 1959/60. Under the agreement with Swissair SAS will, at the end of 1960, obtain the required complement to its jet fleet for medium-long routes by leasing initially two Convair



The Caravelle Jet will be put in operation, during spring and summer, 1959, on 24 cities in Europe, Middle East, and Africa.

\*) New methods for computing production and load factor were introduced in 1957-58. The 1956-57 figures have been adjusted accordingly.

880s. This four-engined jet airliner is manufactured in San Diego, California, by the Convair Division of the General Dynamics Corporation. Convair is well-known as the manufacturer of the Metropolitan and other civil and military aircraft.

In size, the Convair 880 can be classified between the Douglas DC-8 and the Caravelle. It is designed to accommodate 90 passengers in a combined first and tourist class configuration. This compares with 120 passengers in the DC-8, and 70 in the Caravelle.

The speed of the Convair 880 is the same as that of the DC-8, 950 kms. p. h. With full passenger load and normal fuel reserves, the range of the Convair 880 is 5,500 kms. as compared to 8,000 kms. for the DC-8 and 2,350 kms. for the Caravelle. The Convair 880, which is powered by four General Electric jet engines, will be flown on the SAS routes to South America, South Africa, and the Far East via India/Pakistan.

In spring, 1959, SAS will start operating the first of the six Caravelle airliners ordered in 1957 for the European and Middle-East medium-range routes. An analysis of the traffic development in these areas has shown that SAS will need additional equipment of the same class. Since SAS's experience with the manufacturers of the Caravelle and their production techniques has been fully satisfactory, a contract for six additional Caravelle aircraft was signed in July, 1958, for delivery during the summer of 1960.

#### Piston-engine Aircraft

The last three of the fourteen Douglas DC-7Cs ordered were received during the autumn of 1957. This has enabled SAS to operate all intercontinental routes mainly with DC-7C. These aircraft have also been used on certain Middle-East routes.

The delivery of four Convair Metropolitans, at the beginning of 1958, brought the SAS Metropolitan fleet to a total of twenty. The additional four aircraft have been used mainly for expanding the Scandinavian network.

As for other twin-engine aircraft, all SAAB Scandias have left the fleet, five Douglas DC-3s have been sold and five have been leased to Linjeflyg AB.

### PERSONNEL

The expansion of the Consortium's activities, including the preparations for the introduction of the new equipment, has required an increase of personnel. The number of employees as of September 30, 1958, was 12,233, of which 1,889 were flight personnel. The corresponding numbers, as of September 30, 1957, were 10,997 \*) and 1,636 \*), respectively.

### THE FINANCIAL RESULT

(Figures in parentheses refer to the fiscal year 1956-57).

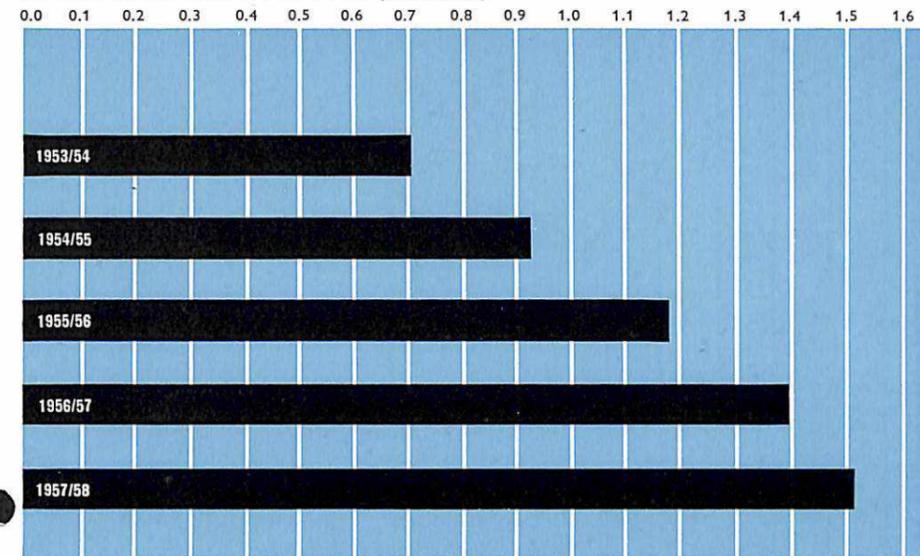
The SAS accounts cover all activities of the Consortium and its subsidiaries, within as well as outside Scandinavia. The operational result of the fiscal year 1957-58, and the financial status of the Consortium as of September 30, 1957, are set forth in the enclosed Profit and Loss Account and Balance Sheet. Unless otherwise stated, all amounts in the comments below, as well as in the Profit and Loss Account and the Balance Sheet are given in Swedish Crowns.

The total revenue for the fiscal year amounts to Crs. 546.3 million (Crs. 497.7 million). Traffic revenue, after deducting commissions, amounts to Crs. 501.5 million (Crs. 460.4 million), and other income, together, to Crs. 44.8 million (Crs. 37.3 million). After deduction of operating expenses, Crs. 469.9 million (Crs. 407.7 million), administration costs, Crs. 14.5 million (Crs. 12.2 million), and other expenses, Crs. 12.9 million (Crs. 10.1 million), a surplus of Crs. 49.0 million (Crs. 67.7 million) remains before providing for depreciation. After ordinary depreciation, provided largely in accordance with the principles applied during previous fiscal years, a small residual amount remains, which has been used for additional depreciation.

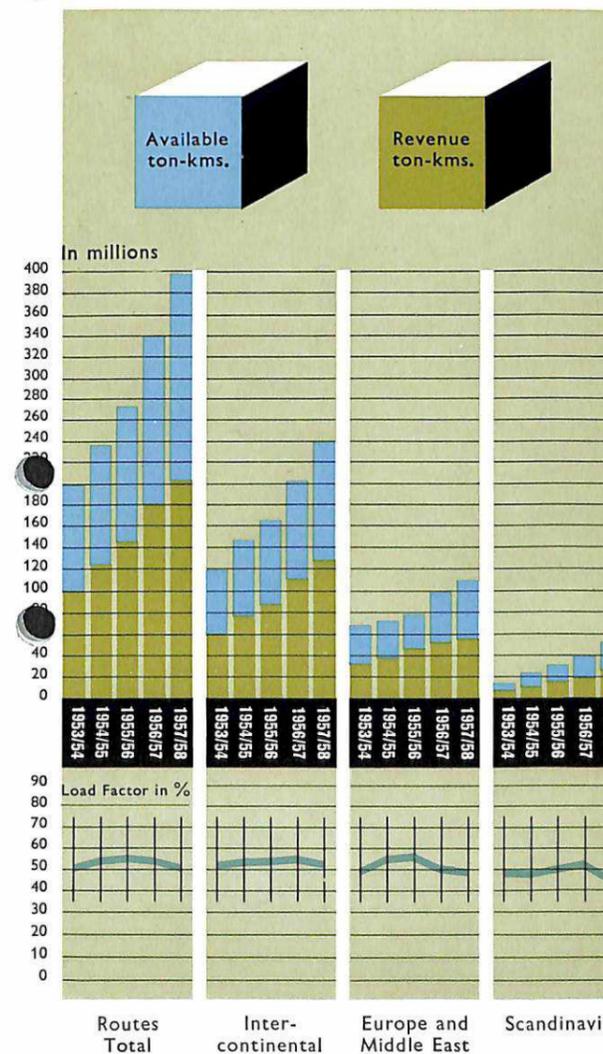
Total depreciation amounts to Crs. 49.0 million (Crs. 57.2 million) and is apportioned with Crs. 42.6 million (Crs. 48.6 million) to aircraft, spare engines, spare propellers, and other spare parts, Crs. 1.2 million (Crs. 1.3 million) to buildings, and Crs. 5.2 million (Crs. 7.3 million) to other assets.

\*) During 1957-58, new methods have been introduced for the registration of part time and hourly paid employees. The number of employees as of September 30, 1957, has been adjusted accordingly.

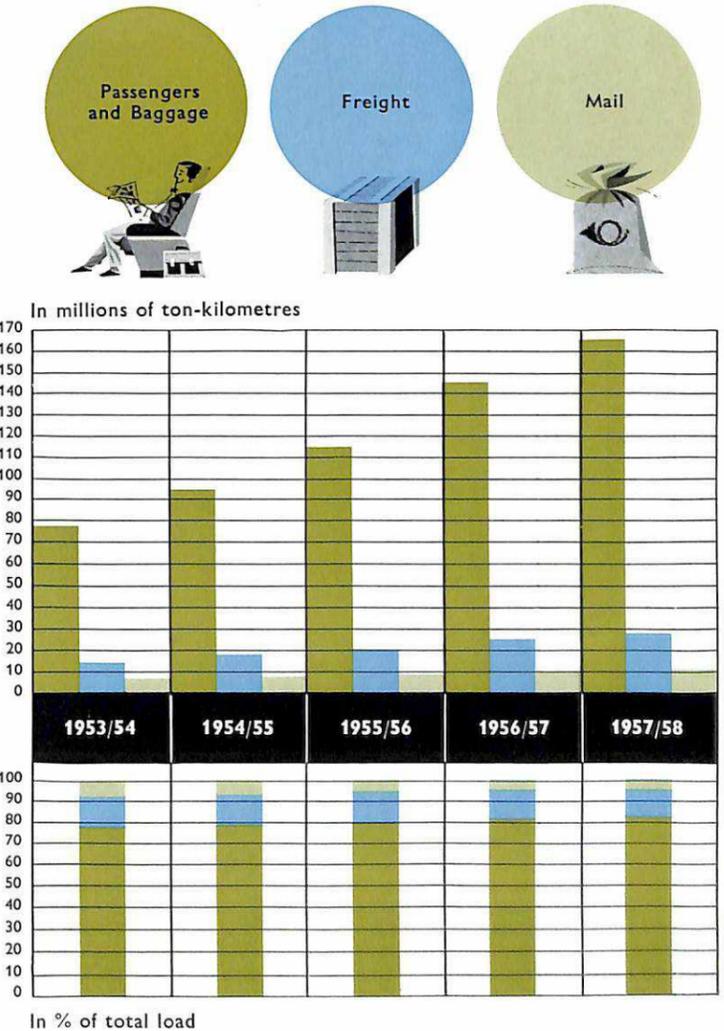
### PASSENGERS FLOWN (In millions)



### PRODUCTION AND TRAFFIC



### LOAD DISTRIBUTION



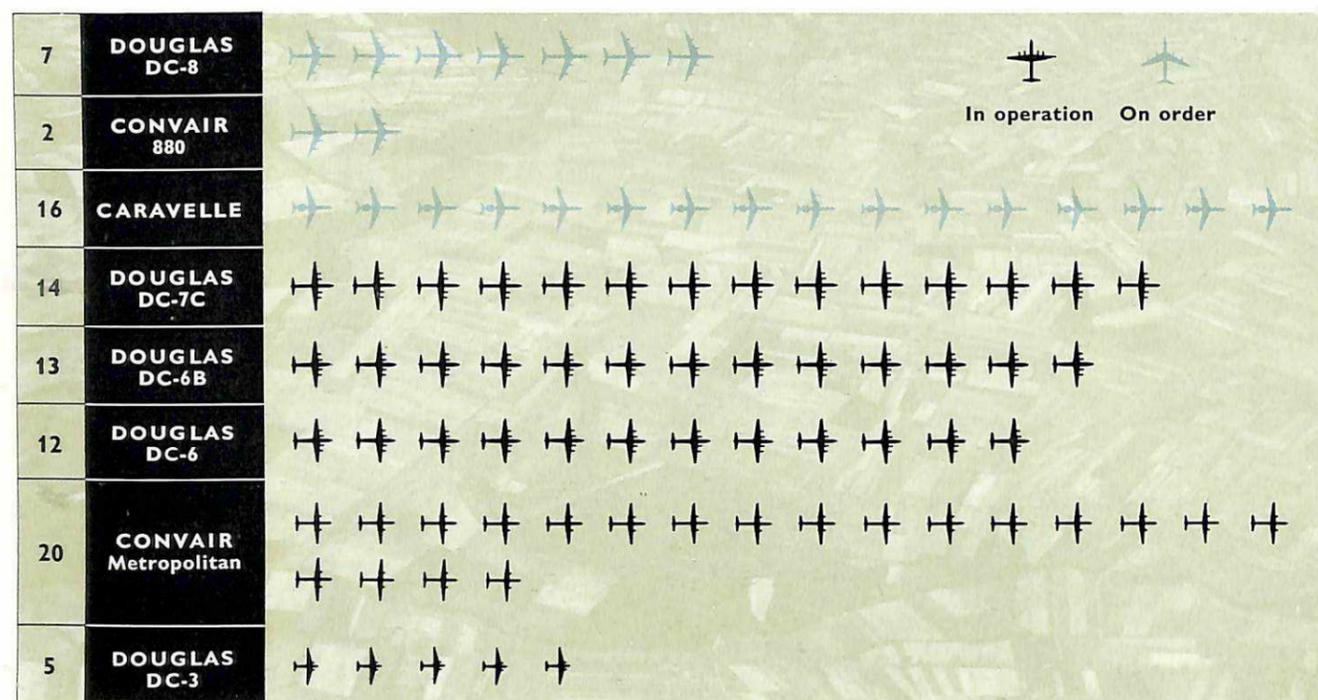


**SAS**

**Route Network 1957-58**

The total, un-duplicated length of the route network was 209,054 kms. (129,902 statute miles).  
*SAS* served 83 cities in 42 countries on 5 continents.

## THE FLEET



Two Convair 880s will be leased from Swissair.  
Four Caravelles will be leased to Swissair.  
Five Douglas DC-3s are leased to Linjeflyg AB.

## PERSONNEL

	Total		Flight Personnel		Other Personnel	
	Sept. 30 1957	Sept. 30 1958	Sept. 30 1957	Sept. 30 1958	Sept. 30 1957	Sept. 30 1958
DENMARK	2 833	3 230	455	529	2 378	2 701
NORWAY	1 701	1 828	406	500	1 295	1 328
SWEDEN	4 328	4 668	767	851	3 561	3 817
ABROAD	2 135	2 507	8	9	2 127	2 498
<b>TOTAL</b>	<b>10 997</b>	<b>12 233</b>	<b>1 636</b>	<b>1 889</b>	<b>9 361</b>	<b>10 344</b>

million) to workshop equipment, other equipment, and vehicles.

The costs during the fiscal year for modifications of the DC-6 aircraft, and for the preparations for jet operations have been charged to the current operations, as in previous years.

The item "Sundry income", Crs. 18.7 million (Crs. 14.4 million), represents partly revenue, after deduction of book value, etc., from the sale of eight Scandia and five DC-3 aircraft with spare parts, Crs. 12.9 million, partly insurance indemnification of Crs. 5.8 million for the total loss of one DC-6B aircraft, mentioned in the preceding annual report, less the book value of this aircraft.

The turnover of shop work for third parties, mainly carried out in the SAS workshops at Copenhagen, amounts to Crs. 23.8 million (Crs. 24.2 million). The result of this activity is included in the item "Other operating revenue".

Of the total revenue for the fiscal year, non-Scandinavian currencies constitute the counter-value of about Crs. 405 million (about Crs. 364 million).

The total purchase value of the three DC-7C and four Metropolitan aircraft delivered during the fiscal year amounts to Crs. 52.4 million.

For practical reasons, the various clearing accounts for traffic revenue are, as previously, included as a net balance in the item "Sundry creditors".

The Consortium's balances in foreign currencies have been entered in the books at rates of exchange which provide for the risks deemed to exist.

The loan granted by the Danish Government through Det Danske Luftfartselskab A/S amounts, as of September 30, 1958, to Danish Crowns 15.1 million (Danish Crowns 16.2 million).

The loans raised in the United States amount, as of September 30, 1958, to \$ 22.8 million (\$ 23.9 million). Flying equipment and other physical assets were insured as follows, as of September 30, 1958:

	1958	1957
	mill. Crs.	mill. Crs.
Aircraft . . . . .	442.1	396.0
Spare engines, spare propellers, spare parts and technical stores . . . . .	175.5	159.8
Buildings . . . . .	30.5	18.2
Workshop equipment and tools . . . . .	21.9	18.9
Other equipment, vehicles, and sundry stores . . . . .	42.2	40.8

During the last few years, SAS has placed substantial orders for jet aircraft and extensive preparations have been made throughout the Consortium for the introduction of the new equipment. SAS may thus be considered well equipped for the coming important stage in the history of civil aviation. The co-operation agreement with Swissair will, in an important way, make these preparations even more effective.

It is evident, however, that during the transition into and at beginning of the jet age, civil aviation will operate with narrower profit margins, and with sharper competition among the airlines, than ever before. During the next few years, SAS will therefore be confronted with its most exacting task so far, that of maintaining its position as one of the leading international airlines, while at the same time achieving satisfactory economic results.

The Board of Directors wishes to express its gratitude to all SAS personnel for the efforts contributed during the fiscal year 1957-58, and the co-operative spirit displayed towards the Consortium.

This Annual Report and relative Profit and Loss Account and Balance Sheet, which have been approved by the Board of Directors of SAS, have, by the authority of the said Board, been signed by the Executive Committee of the Board.

COPENHAGEN, OSLO, AND STOCKHOLM, DECEMBER, 1958

M. Wallenberg  
Axel Gjores

P. Kampmann  
Axel

Per M. Hansson  
E. F. Eckhoff





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*1st Vice-Chairman*  
 P. Kampmann

*2nd Vice-Chairman*  
 Per M. Hansson

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Åke Rusck

The Board of Directors of the Consortium is composed of the members of the Boards of Directors of the three Parent Companies, DDL (Denmark), DNL (Norway) and ABA (Sweden). At SAS Board Meetings, however, a maximum of six representatives from each country have the right to vote.



The Caravelle Jet is now in production at Sud-Aviation in Toulouse.



*SCANDINAVIAN AIRLINES SYSTEM*

DENMARK - NORWAY - SWEDEN