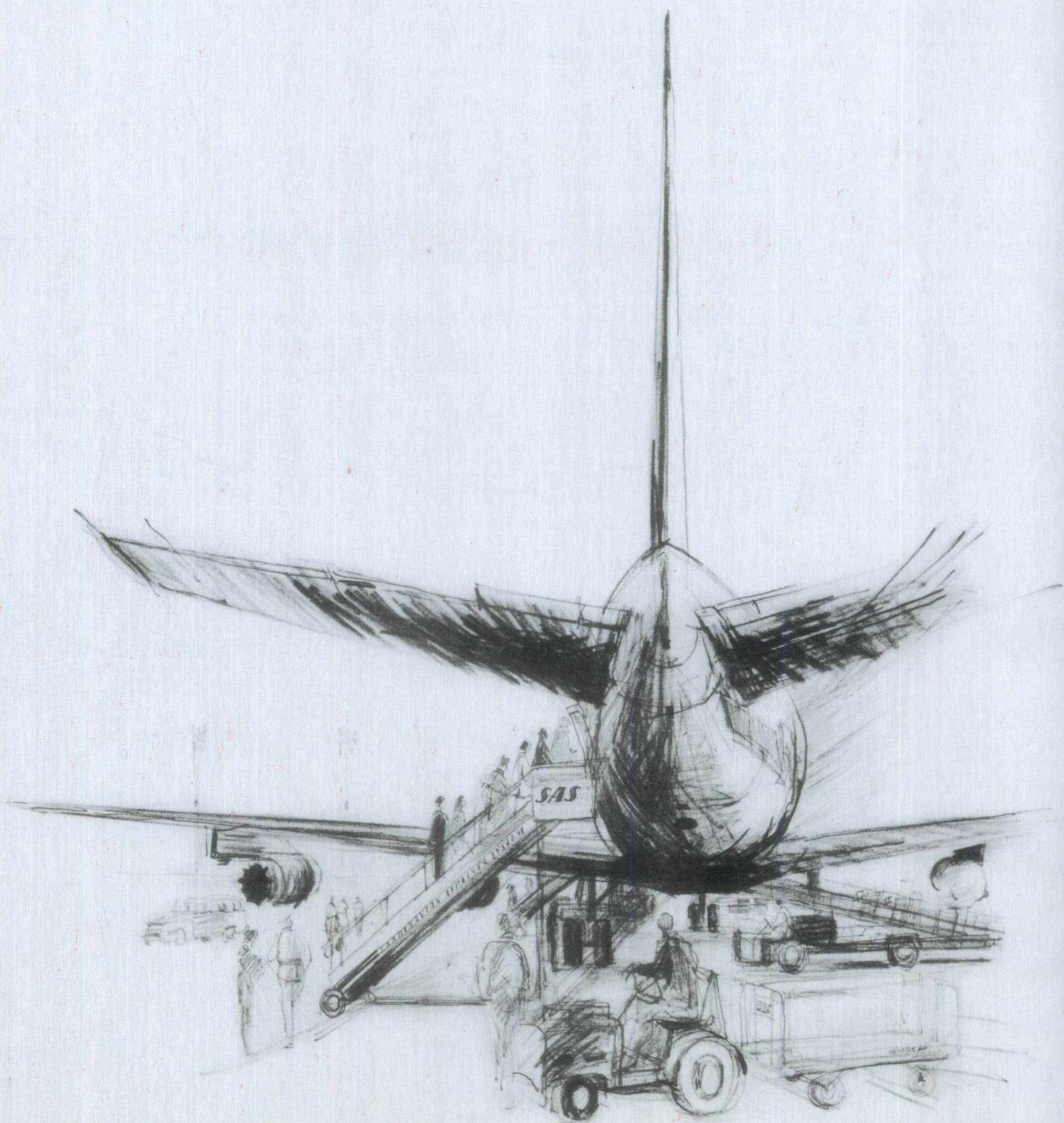
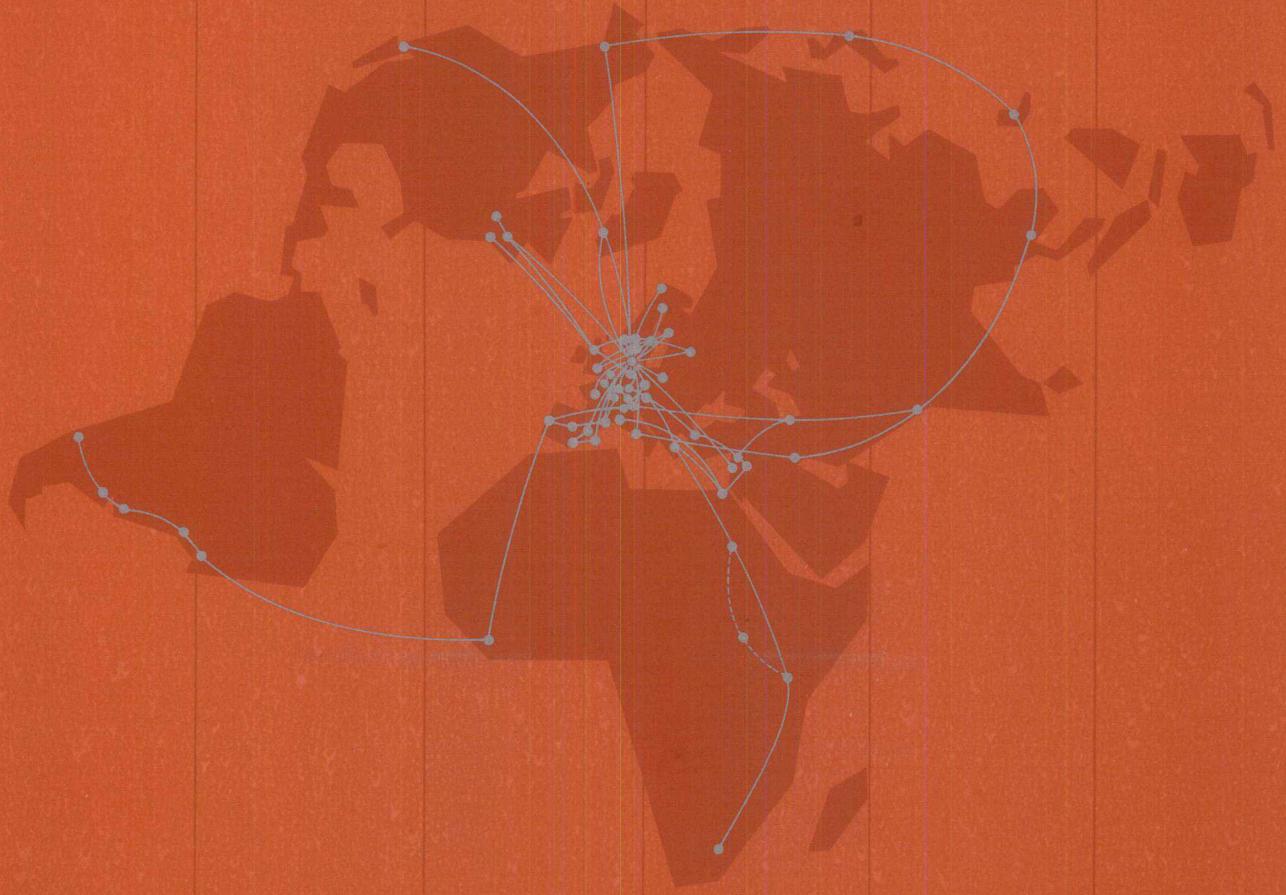




# ANNUAL REPORT

1963-64





**SAS** 

# ANNUAL REPORT

For the Financial Year October First, 1963, to September Thirtieth, 1964

1963-64

## Summary

PRODUCTION		63/64	Variation in %	62/63	Variation in %	61/62
Size of Network	(km 000)	155	+ 6.9	145	+ 5.0	138.0
No. of Countries Served		39		38		38
No. of Cities Served		77		74		76
Kilometers Flown	(Mill.)	63.3	+ 4.3	60.7	+ 5.6	57.5
Hours Flown (airborne)	(000)	125.2	+ 4.7	119.6	+ 2.7	116.5
Avail. Ton-Kms, total	(Mill.)	623.5	+ 5.7	590.1	+ 7.2	550.5
Avail. Ton-Kms, Sched. Serv.	(Mill.)	604.1	+ 6.3	568.1	+ 6.1	535.3
TRAFFIC						
Revenue Ton-Kms	(Mill.)	347.8	+15.0	302.4	+ 9.7	275.6
Passengers		256.8	+15.6	222.2	+ 7.4	206.9
Freight		72.2	+12.8	64.0	+19.0	53.7
Mail		18.8	+16.0	16.2	+ 8.2	15.0
Total Load Factor, Sched. Serv.	(%)	57.6		53.2		51.5
No. of Passengers Carried	(000)	2,617	+11.0	2,358	+10.7	2,131
Revenue Passenger-Kms	(Mill.)	2,871	+14.5	2,506	+ 6.9	2,344
Passenger Load Factor	(%)	52.9		49.9		49.6
Average Length of Trip	(km)	1,109	+ 3.1	1,076	— 3.7	1,117
PERSONNEL						
No. of Employees per Sept. 30		12,219	+ 1.9	11,990	+ 1.8	11,782
Average Staff Strength		12,000	+ 1.3	11,850	— 0.5	11,900
Avail. Ton-Kms/Employee		51,950	+ 4.3	49,800	+ 7.7	46,250
Revenue Ton-Kms/Employee		29,000	+13.7	25,500	+10.3	23,200
FINANCIAL (Swedish Crowns)						
Traffic Revenue	(Mill.)	807.6	+11.2	726.4	+ 9.5	663.5
Passengers	(Mill.)	654.4	+12.0	584.1	+ 8.0	539.5
Freight	(Mill.)	86.3	+10.6	78.0	+16.1	67.2
Mail	(Mill.)	49.7	+10.0	45.2	+ 6.1	42.6
Charters	(Mill.)	17.2	— 9.9	19.1	+34.5	14.2
Net Profit (Loss)	(Mill.)	70.0		21.0		(24.5)
Traffic Revenue/RTK	(Sw. Cr.)	2.27	— 2.8	2.34	— 0.8	2.36
Operating Expense/ATK	(Sw. Cr.)	1.20	+ 0.3	1.20	— 4.3	1.26
“Break-even” Load Factor for Airline Services	(%)	53.1		51.9		54.0

## A Year of Progress

1963/64 proved to be a successful year. SAS is able to report a net profit of 70 million Swedish Crowns (US\$ 13.5 million). This compares with a net profit of 21 million Swedish Crowns in the preceding year. The principle part of the profit will be used for consolidation.

SAS production in ton-kms. increased by 6 per cent over the previous year. Ton-kms. sold rose, however, by 15 per cent. Thus, a welcome jump in load factor was attained — from 53.2 per cent in the previous year to 57.6 per cent in the current year.

The greatly increased demand for the services of SAS has, for the first time, pushed total revenue, excluding income from sales of flight equipment, beyond the one billion mark, to 1024.7 million Swedish Crowns (M.SKR). Of this total, traffic revenue accounted for M.SKR 807.6, an 11 per cent increase over last year. After depreciation charges of M.SKR 85.6 the accounts show an operating profit of M.SKR 64.1. Income from sale of flight equipment amounts to M.SKR 5.9 compared to M.SKR 2.7 for the previous year.

These results would not have been possible but for a combination of favorable circumstances, from which not only SAS, but most airlines, have benefited. In all major industrial areas of the world, economic conditions generally have favored air traffic, and no political upheavals have tended to deter the public from traveling.

In this international climate of orderly progress, there have also been some specific reasons for the increase in traffic. Among these has been the reduction in North Atlantic passenger fares, introduced as from April 1, 1964, by the 18 members of IATA<sup>1)</sup> who serve the North Atlantic. Reductions varied between 3 and 21 per cent, depending on the season and class of service, but represented on average a decrease of approximately 10 per cent in net passenger fares.

This fare cut contributed to a 35.4 per cent growth in scheduled North Atlantic passenger traffic during the six summer months of 1964, compared to the corresponding period in the previous year. Average passenger load factor on the North Atlantic jumped 14 percentage points to 66.2 per cent.

A second reason has been the performance of the jet aircraft. Now in the fifth year since their introduction, their standard of performance has continued high, allowing an even greater degree of utilization.

Thirdly, on all major routes the problems of over-capacity that arose with the introduction of the jets have been solved. The airlines have now achieved a better balance between the great capacity of the jet and the demand of the traveling public.

Total production of the world's international and domestic airlines<sup>2)</sup> is expected to increase in 1964 by approximately 11 per cent over 1963. As to sales, available information indicates that the world total will show a growth of 15 per cent. Together these airlines will have flown more than 150 million passengers in 1964. The downward trend in load factors, which has been the industry's main concern ever since the introduction of jet aircraft, has finally been reversed. The load factor for scheduled carriers will in 1964 average globally around 52 per cent, compared to 50.5 per cent in 1963 and 50.7 per cent in 1962.

The civil air transport industry of the world operates, however, on a slim profit margin. While in 1962 operating profit, according to ICAO<sup>3)</sup> amounted to 1.5 per cent, in 1963 it is estimated to increase to 2.4 per cent, or US\$ 165 million out of operating revenues amounting to US\$ 7,125 million.

More carriers have, in the course of the year, been feeling the competition from charter airlines. As tourist traffic is being taken over to an increasing extent by charter opera-

tors, it may become necessary for scheduled carriers to curtail certain of their routes.

The supersonic transport (SST) which one year ago was the subject of such great interest and of a virtual scramble for options, has become a lesser concern to the industry. There is now some doubt as to whether seats on the SST can be sold to the public anywhere nearly as cheaply as on subsonic jets.

Delivery time has been pushed further into the future. Design problems remain unsolved. Political uncertainty engulfs the two known supersonic projects. SAS, for its part, has refrained from purchasing options on any of the SSTs.

The unit price of air transportation has been steadily decreasing over the past decade. (See chart, page 15). Calculated per ton-km., the price has been reduced sixteen per cent in the last 10 years. Furthermore, last year alone, the unit price dropped three per cent. Meanwhile, costs continue to mount in many areas, mainly due to increased salaries and wages. These trends put a squeeze on the carriers and present them with a challenge. Satisfactory returns can thus be realized only by cost reductions through further improvement in the technical and operational performance of the aircraft, through increased production per employee, and through a greater degree of automation at airports and in offices.

A continued growth in traffic volume, however, represents another essential prerequisite for keeping the industry in the black. Confronted with these challenges, the scheduled airlines, nonetheless, look confidently to their ability to provide air travel at reasonable fares to a steadily increasing number of passengers.

<sup>1)</sup> International Air Transport Association (see page 12—13).

<sup>2)</sup> Excluded from all these figures are the Soviet Union and China.

<sup>3)</sup> International Civil Aviation Organization, a specialized agency of the United Nations.

## SAS and the Market

While SAS has enjoyed the same generally favorable conditions as the industry as a whole, certain events in 1963/64 came to be of special significance for Scandinavia's carrier.

On April 1, 1964, SAS inaugurated a thrice-weekly service from Copenhagen via Montreal to Chicago. This route became an immediate success. Traffic from the Middle Western states burst forth, without this entailing any reduction in SAS traffic out of New York.

With its two routes to Tokyo, SAS furthermore gained from a considerable demand generated by the 1964 Olympic Games. The New York World's Fair became another strong stimulant to air traffic.

However, the year under review also had its set-backs. Atlantic services via Prestwick, maintained by SAS since 1946, were cut, by a decision of the British Government, from seven to four flights a week in each direction during the summer of 1964, and curtailed to no more than three flights weekly as of November 1, 1964. After the financial year came to an end, the British Government has, however, reconsidered its decision and has declared itself willing to permit four flights a week in each direction through Prestwick during the 1965 summer season.

With the agreement of IATA, SAS on October 17, 1963, began operating a DC-7C route four times weekly from Copenhagen to New York, at rates which allowed SAS to offer the same lower fares as Iceland's non-IATA member Loftleidir. This IATA concession was, however, given only for six months, on the assumption that there would be found in the meantime a permanent settlement along lines acceptable to IATA. As this did not develop, it became clear that no extension of the IATA permit would be granted. So after April 1, 1964, Loftleidir regained its advan-

tage of operating on Scandinavia on conditions denied to others.

In 1963/64, SAS extended its route network by 6.9 per cent. Yield per revenue ton-km., which has declined slowly since the middle of the 1950's, fell by another 3 per cent to 2.27 SKR and is expected to continue downwards in 1964/65. For SAS, as for other carriers, the way to counteract this trend is to increase efficiency while at the same time seeking to expand activities. While SAS is expanding in absolute terms, its share of the market is declining. On the most important route — the North Atlantic — SAS in 1957/58 had 8.7 per cent of the total traffic. In 1962/63, the SAS share had fallen to 5.6 per cent and in 1963/64 even further, to 5.2 per cent, in spite of an increase in production (see table, page 14). Additional to the situation mentioned in the preceding paragraph, this proportional decline can be attributed to the expansion by continental carriers to meet their respective national requirements.

Also in Europe and the Middle East, SAS share of total traffic has declined. Here, too, the falling-off can be attributed to European carriers assuming their natural position in the traffic picture. With 9.3 per cent of the market, SAS, nonetheless, still ranks as No. 3 of 16 carriers.

Almost 90 per cent of SAS total traffic is now so-called third and fourth freedom traffic, i. e. passenger, mail and cargo taken out of, or carried into, Scandinavia.

During the year, SAS transported 2,617,000 passengers, or 11 per cent more than in the preceding year. The route net covered 77 cities in 39 countries. The great upsurge in traffic took place during the last six months. Traffic forecasts were revised accordingly. As the year came to an end, preparations were far advanced for a major new investment in the

most modern long-range aircraft available. In November 1964, the Board made the decision to purchase four DC-8-62 with first delivery in the spring of 1967, and to reserve options for another four jet aircraft.

Earlier in the year, the Board had decided to expand the SAS capacity by having two DC-8-50 fan jets for intercontinental use and five more Caravelle SE 210 jets for service on European and Middle East routes. All seven aircraft will be delivered to SAS between December 1964 and February 1966 — one DC-8-50 and three Caravelles in time for the next summer season.

The SAS planes were airborne a total of about 125,000 hours for the whole year. The Caravelle decreased its flying time slightly, and the Coronado considerably, due to employment on shorter routes. All other types of aircraft increased their flying time by approximately 10 per cent; — the seven DC-8s were airborne, on average, 10.8 hours a day, throughout the year.

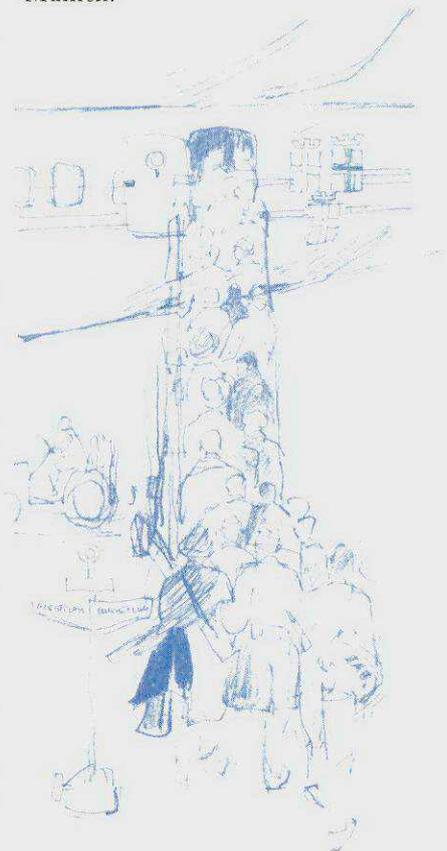
During the peak season, SAS aircraft made, on average, 6 landings or take-offs per day. SAS planes together made 280 landings or take-offs per day, which meant that an SAS aircraft either took off or landed every 5 minutes round the clock.

As to regularity, always a prime airline target, a main factor determining performance is now one which is outside the control of the carriers themselves, namely, the increasing density of traffic at major airports. Another is, of course, weather.

Throughout the year, SAS strove to attain the best in safety and service standards. On the basis of experience gained in the last peak season, no effort will be spared in the future, whether on the ground or in the air, to improve the performance of the carrier, and to meet the wishes of the traveling public.

Towards the end of the year the final component part of SASCO, the new SAS computer for instant booking, was installed in Copenhagen. In four seconds, more than 250 SAS ticket counters throughout Europe will be able to issue a confirmed, definite booking up to seven months in advance on any SAS flight, anywhere. This electronic reservation system, the first to be introduced by any European airline, will become fully operative in February, 1965.

The Board is also pleased to note that the program for re-modelling of SAS ticket offices is now being accelerated. Through these offices, SAS feels it has a responsibility for projecting Scandinavia abroad, and a basically Scandinavian Modern style will be introduced in all public sales offices. Projects, partly or wholly finished by the end of the year, included Helsinki, Nuremberg and Munich.



## The Sales Effort

Demand was very heavy on all SAS routes during the traditional vacation period. In the peak month of August, the average load factor for the whole system reached 66.4 per cent. The lowest systemwide load factor, of 47.4 per cent, was registered in the month of January.

The imbalance in demand between summer and winter is to SAS a matter of concern. On certain routes, the winter load factor has been as low as 30 per cent. As part of the continuous effort to find a solution to the problem, it has been decided to launch a major campaign designed to attract the traveler to Scandinavia during the traditionally slack season. In this activity, SAS is addressing itself mainly to three categories: the businessmen, who might like to choose Scandinavia as a test market for new products; tourists and pensioners, who might want to enjoy Scandinavia's cultural life or study its social structure, at a time when they can avail themselves of off-season rates and less crowded conditions; international associations, for their conventions. The attractions of winter-time Scandinavia are being promoted world-wide. It is realized, however, that no such campaign is likely to register immediate results.

During the year, the greatest stimulus to passenger traffic has been, besides the Atlantic fare cut, the extension for the first time of the 21-day return fare to the summer vacation period.

In all, revenue passenger-km. increased 14 per cent over 1962/63, and the passenger load factor for the whole system reached 52.9 per cent as compared with 49.9 per cent in the preceding year.

The substantial upsurge in passenger traffic did, on occasion, create difficulty for air freight, 75 per cent of which is still shipped by passenger aircraft. The all-cargo routes developed satisfactorily, increasing their

average load factor to 56.3 per cent from 50.7 per cent last year. Many exporters are now beginning to think in terms of having their products delivered overnight to their customers abroad. Under the name of "Total Cost Concept" SAS has actively sought to assist exporters to assess all their distribution costs as one total expense item, thereby bringing into focus the advantages of shipping by air. Also air freight rates, for certain commodities, on the North Atlantic were substantially reduced last April, greatly spurring business, and within the airline industry great attention is presently being given to expanding the facilities for rapid and reliable air shipment.

For the whole system, revenue freight ton-kms. increased in 1963/64 by 13 per cent over the previous year. SAS share of the European air freight market amounted to 10.8 per cent and of the North Atlantic market to 5.4 per cent.

While the world's total mail volume increases by 7 per cent annually and while all IATA carriers in 1963 increased their revenue mail ton-km. by 6 per cent, the increase for SAS in the financial year amounted to 16 per cent. Considering the keen competition which exists in the air mail market, the Board notes this SAS achievement with satisfaction.

On page 14 is reproduced a table showing how and where SAS scheduled traffic has increased over the last 12 years. International traffic has multiplied nearly four times, domestic traffic ten times during this period.



## Production and Traffic

The 6 per cent and 15 per cent increases over the previous year in production and traffic, respectively, on

the production increase was only 7.8 per cent. The table below provides a comparison of 1963/64 and the pre-

Scheduled Services	Total System	1. Intercont.	2. Europe & M. East	3. Domestic
Avail. Ton-Kms (in Mill.)				
1963/64	604	360	187	57
1962/63	568	334	186	48
Increase %/o	+6.3	+7.8	+0.2	+20.4
1963/64 %/o of Total	100.0	59.6	30.9	9.5
Rev. Ton-Kms (in Mill.)				
1963/64	348	210	103	35
1962/63	302	178	95	29
Increase %/o	+15.0	+17.5	+8.1	+22.0
1963/64 %/o of Total	100.0	60.3	29.6	10.1
1963/64 Total Load-Factor %/o	57.6	58.2	55.3	60.9

scheduled services for the whole SAS network have been mainly recorded by the North Atlantic, Far East and the Scandinavian routes. On the other hand, there was a reduction in ton-kms. offered and sold on the South Atlantic and African routes. On the European routes production was virtually unchanged while traffic expanded.

In 1963/64, 59.6 per cent of the entire SAS production was offered on intercontinental routes, 30.9 per cent on European and Middle Eastern routes and 9.5 per cent on domestic routes. The greatest increase over the previous year, of 20 per cent was, however, registered on domestic routes. On the sales side, domestic traffic also noted the greatest relative growth, as much as 22 per cent over last year. From the chart on page 14 it will be seen that traffic on domestic routes is now approximately ten times as large as a decade ago. The increase in sales on the intercontinental routes, in volume much greater, was 17.5 per cent over last year — this increase is the more notable as

ceding year, for the total System and for its three main components: 1) Intercontinental 2) Europe and Middle East and 3) Domestic.

### *Intercontinental Routes*

During the summer season, Copenhagen — New York was served by 20 flights weekly in each direction, otherwise ten. On the Los Angeles route the number of weekly flights was reduced from seven to five in the summer, but increased from four to five in the winter. The new route from Copenhagen via Montreal to Chicago was operated on a thrice-weekly basis in each direction. On the Transpolar route to Tokyo there were two flights a week in each direction; to the Far East via India two flights weekly each way and to both South America and South Africa there was one flight per week. The DC-8 was used on all these routes, except on South America where Coronado has been operating throughout the year and on Africa where Coronado was employed part of the year.

## Intercontinental Routes

Scheduled Traffic (in mill.) (Last year's figures in brackets)

Areas	Pass. Traffic		Cargo		Mail		Load Factor
	Pass-Kms	Change %	Ton-Kms	Change %	Ton-Kms	Change %	%
North Atlantic	1.112	20	36.4	12	6.0	23	59.1
	(996)		(32.4)		(4.9)		(54.4)
Other Intercontinental Routes	459	19	16.2	9	6.1	14	56.4
	(386)		(15.0)		(5.3)		(51.4)
Total Intercontinental Traffic	1.571	20	52.6	11	12.1	19	58.2
	(1.312)		(47.4)		(10.2)		(53.4)

The three weekly DC-8 calls at Prestwick on the Copenhagen—New York route which were cancelled through the action of the British Government, were transferred to Bergen for the duration of the summer season. This new direct service between USA and Scandinavia's western gateway became immediately popular.

On the routes between Scandinavia and New York/Chicago, SAS averaged a load factor of 63.0 per cent compared to 57.5 per cent last year. The load factor on Transpolar to Tokyo reached 61.4 per cent, on Los Angeles 50.1 per cent, Far East 54.4 per cent, Africa 55.8 per cent, South Atlantic 52.1 per cent.

On the North Atlantic, SAS increase of 17.1 per cent in traffic during the fiscal year was less than for the 12 leading airlines, whose average increase was 25.3 per cent.

Of the total freight carried by SAS during 1963/64 more than half was on the North Atlantic routes.

## European and Middle East Routes

Four new routes were opened in this area on April 1, 1964. From Copenhagen via Geneva a DC-8 has been serving Teheran twice weekly. To Tel Aviv, a once-weekly Caravelle from Copenhagen was joined by a 101-seat Coronado, also operating on a once-weekly basis. A new Metro-

## European and Middle East Routes

Scheduled Traffic (in mill.) (Last year's figures in brackets)

Areas	Pass. Traffic		Cargo		Mail		Load Factor
	Pass-Kms	Change %	Ton-Kms	Change %	Ton-Kms	Change %	%
Middle East	91	10	1.3	22	0.4	9	46.1
	(81)		(1.1)		(0.4)		(46.1)
Europe (incl. Inter-Scandinavian routes)	868	6	16.2	15	3.5	6	56.4
	(820)		(14.0)		(3.3)		(51.7)
Total	959	6	17.5	16	3.9	6	55.3
	(901)		(15.1)		(3.7)		(51.2)



litan service was begun, once daily in each direction, between Copenhagen and Cologne. Finally, a SAS Metropolitan service was introduced, once daily in each direction, between Copenhagen—Norrköping—Turku/Åbo. A once-daily service between Oslo and Hamburg, started on November 1, 1963, was, however, terminated a few months later because of slack demand.

For the European and Middle East as a whole, production in 1963/64 went up only 0.2 per cent. Traffic, as expressed in revenue ton-kms., increased, however, by 8.1 per cent. Thus the load factor improved, from 51.2 per cent in 1962/63 to 55.3 per cent in the present financial year. Practically every route in the area shared in this load factor improvement.

The agreements concluded with Lufthansa in 1963 and with Iberia in 1964 governing the traffic to and from the home countries of these carriers have led to a considerable reduction in SAS production on these routes.

In the table on page 8, bottom, the traffic figures for Europe include inter-Scandinavian traffic. In the course of the year there were 16,418 scheduled flights between the three

countries of Scandinavia. Production was 4 per cent above the preceding year, and traffic 15 per cent above. The load factor improved from 46.7 per cent to 51.9 per cent.

### Domestic Routes

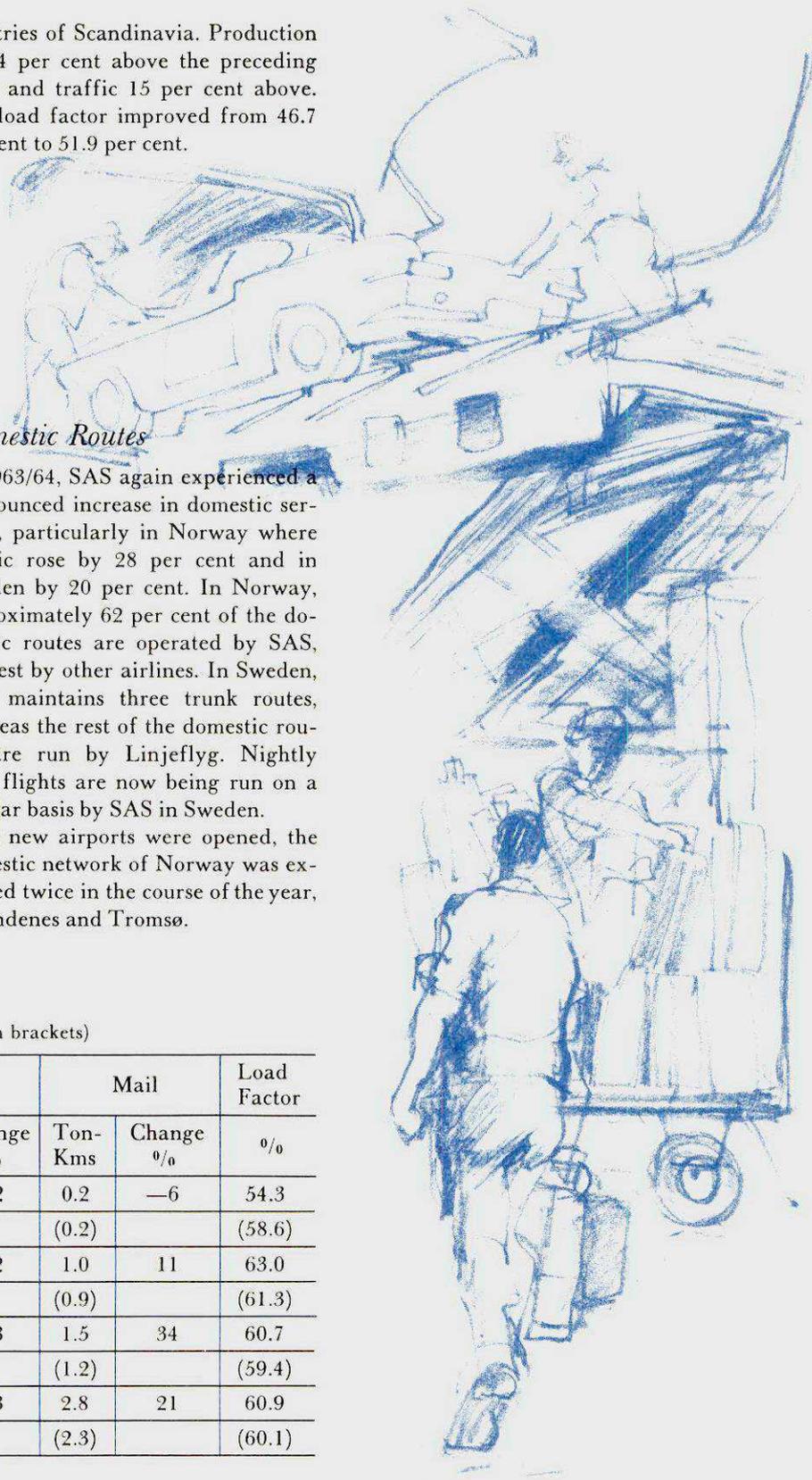
In 1963/64, SAS again experienced a pronounced increase in domestic services, particularly in Norway where traffic rose by 28 per cent and in Sweden by 20 per cent. In Norway, approximately 62 per cent of the domestic routes are operated by SAS, the rest by other airlines. In Sweden, SAS maintains three trunk routes, whereas the rest of the domestic routes are run by Linjeflyg. Nightly mail flights are now being run on a regular basis by SAS in Sweden.

As new airports were opened, the domestic network of Norway was extended twice in the course of the year, to Andenes and Tromsø.

### Domestic Routes

Scheduled Traffic (in mill.) (Last year's figures in brackets)

Areas	Pass. Traffic		Cargo		Mail		Load Factor
	Pass-Kms	Change %	Ton-Kms	Change %	Ton-Kms	Change %	%
Denmark	36	2	0.3	42	0.2	—6	54.3
	(35)		(0.2)		(0.2)		(58.6)
Norway	158	20	0.5	42	1.0	11	63.0
	(131)		(0.4)		(0.9)		(61.3)
Sweden	147	16	1.4	43	1.5	34	60.7
	(127)		(0.9)		(1.2)		(59.4)
Total Domestic	341	16	2.1	43	2.8	21	60.9
	(293)		(1.5)		(2.3)		(60.1)



## The Fleet

Few changes have been made in the SAS fleet during the fiscal year. One new Caravelle was put into operation in March. Four propeller craft — three DC-6Bs and one DC-3 were sold.

The number of DC-7Cs on lease to Scanair was increased from three to four aircraft. The arrangement with Swissair has remained unchanged since last year, with SAS leasing two Coronados from Swissair, and Swissair leasing four Caravelles from SAS. The one remaining DC-3 is on lease to Linjeflyg.

The two Coronados previously employed in the Far East, one by THAI International, have both been transferred, one to the South America route and one to the Stockholm—Copenhagen—London route. Two Caravelles have been leased to THAI International in place of two DC-6Bs and the Coronado previously in use by THAI International.

The redistribution of overhaul and maintenance work on the SAS aircraft fleet has now been completed. Consequently, Kastrup (Copenhagen) is the maintenance base for all DC-8 and DC-7C and F aircraft, Fornebu (Oslo) for Metropolitan aircraft (SAS and Linjeflyg) and Arlanda (Stock-

holm) for Caravelle aircraft. The Linta works have assumed responsibility for performing overhaul of the jet engines for DC-8 and Caravelle whereas the piston engines in the Metropolitan are overhauled at Fornebu maintenance base.

According to the agreed distribution of work between SAS and Swissair all overhaul as well as major maintenance work on the two Coronado aircraft is performed by Swissair. Furthermore, Swissair has carried out all overhaul of the piston engines in the DC-7C and F fleet. SAS, on the other hand, has been overhauling the airframes and engines for the DC-8s of Swissair and also the engines for their Caravelle fleet.

For all the aircraft of the SAS fleet, it has been possible to extend periods between overhauls. In the case of the DC-8 airframe the overhaul period has been lengthened from 4,000 hours to 4,500 hours, and for the DC-8 engines in stages from 3,200 to 4,000 hours.

The introduction of the Caravelles to the THAI International fleet has necessitated an extension of technical services in Tokyo, to enable the SAS station there to perform periodic maintenance work on these aircraft.

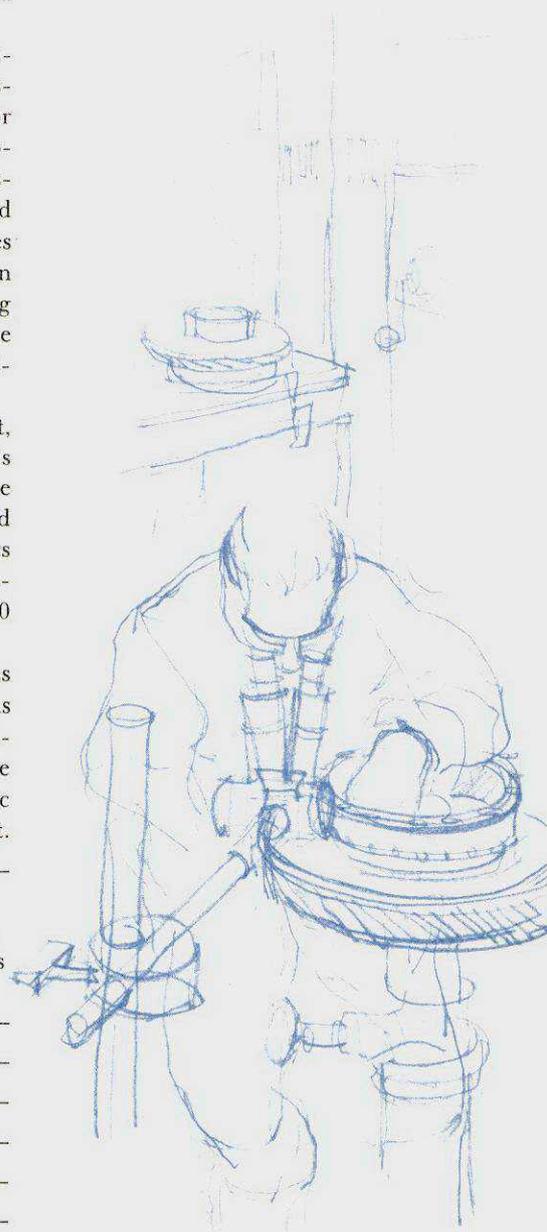
Aircraft Type	Total Sep. 30 1963	Changes during 63/64 bought/sold	Total Sep. 30 1964	In SAS Operation	Leased to others
Douglas DC-8	7	— —	7	7	—
Convair Coronado	2*	— —	2	2	—
Caravelle	18	1 —	19	13	6**
Douglas DC-7C/F	9	— —	9	5	4 <sup>o</sup>
Douglas DC-6B	3	— 3	—	—	—
Convair Metropolitan	19	— —	19	19	—
Douglas DC-3	2	— 1	1	—	1 <sup>oo</sup>
Total	60	1 4	57	46	11

\* Leased from Swissair.

\*\* Four leased to Swissair, two to THAI International.

<sup>o</sup> Leased to Scanair.

<sup>oo</sup> Leased to Linjeflyg.



## Personnel

At the year's end, SAS, exclusive of subsidiaries, had 12,219 employees in all categories, an increase over last year of 1.9 per cent. In order to keep new employment at an absolute minimum, a policy of restraint has been maintained.

Of all personnel, 18 per cent, or 2,250, were non-Scandinavian, of 60 different nationalities. At the end of the year, there were 289 Scandinavians in SAS service outside Scandinavia.

The number of flight personnel lent to THAI International has increased from 5 to 15 in the course of the year, as a consequence of the introduction of Caravelles.

Through continual efficiency drives an increase was achieved in productivity. In the course of the year, a total of M.SKR 305 were paid in wages and salaries, pensions and social benefits.

Employee relations have remained good, though a strike by flight personnel was avoided only at the last minute.

Through their efforts, the SAS employees have greatly contributed to the improved financial result. The Board wishes to express its gratitude to all personnel for the devotion and energy which have been displayed.



	Total			Flying Personnel			Other Personnel		
	1964	1963	1962	1964	1963	1962	1964	1963	1962
Denmark	3764	3634	3452	578	600	552	3186	3034	2900
Norway	2141	1932	1831	459	445	447	1682	1487	1384
Sweden	3843	3999	4075	689	680	685	3154	3319	3390
Outside Scandinavia	2471	2425	2424	18	18	17	2453	2407	2407
<b>Total</b>	<b>12219</b>	<b>11990</b>	<b>11782</b>	<b>1744</b>	<b>1743</b>	<b>1701</b>	<b>10475</b>	<b>10247</b>	<b>10081</b>

# Why IATA?

A lot has been said about IATA, in Scandinavia and elsewhere, during the past twelve months.

That is only natural. There is a lot to be said about the International Air Transport Association, headquartered in Montreal and dedicated to the co-ordination of the world's air traffic network.

The full potential of international air transport cannot be clearly realized unless passengers and cargo can move with ease and rapidity from one place to another, however far apart. No one airline can hope to provide services to every corner of the world.

This means that the routes of the individual carriers must be co-ordinated into a world-wide system, with identical fares, rates, conditions of carriage, documents, systems of agency representation, and codes of commercial practice.

That is what IATA has done during its 45 years of existence.

To the SAS customer it means that he, or his merchandise, will be transported to practically any point on the globe with the assurance that the SAS tickets and waybills will be universally accepted for the exact amount and type of service he paid for.

It is in this respect that the passengers, and the shippers, enjoy their greatest benefit from the existence and operation of IATA.

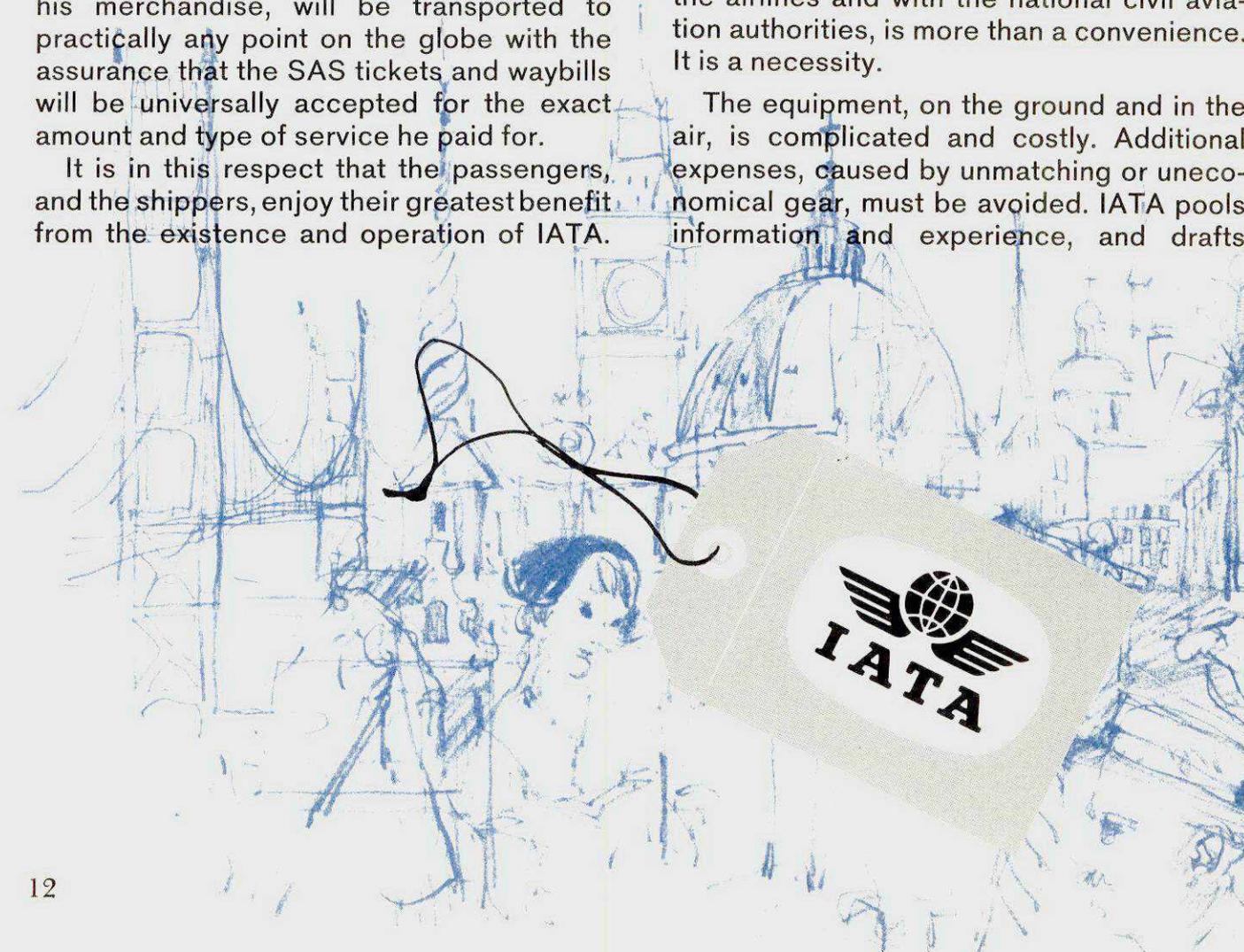
Naturally, this exchange of business between carriers — totalling more than a billion dollars a year — involves a vast machinery for settling the almost infinite number of transactions involved, at lowest possible cost and with full protection to the creditors.

This machinery, and this protection, is provided by IATA. During the past fiscal year, SAS was able to settle a total turnover, receivables and payables, of more than 108 million dollars in interline transactions with almost a hundred other carriers.

The cost for these services amounted to less than .006 per cent. If SAS would have had to settle directly with the other carriers, the figure would have been many times higher.

Commercial aviation is a complex business. A score of airlines may use the same airport; a single carrier, like SAS, may depend on the services and facilities of fifty or more countries. Co-operation, between the airlines and with the national civil aviation authorities, is more than a convenience. It is a necessity.

The equipment, on the ground and in the air, is complicated and costly. Additional expenses, caused by unmatching or uneconomical gear, must be avoided. IATA pools information and experience, and drafts



common operational norms for manufacturers and national civil aviation authorities.

Activities of this type have been carried out by IATA since 1919, as regular, routine business. Little has been written about it, outside the trade publications.

But a great deal has been said and written about another phase of IATA's work: the IATA Traffic Conferences, which set and co-ordinate international passenger fares and freight rates.

This is the point, some critics believe, where international co-operation and co-ordination ought to cease. In the name of free competition, they maintain, each airline should set its own rates.

Unfortunately, the matter is not that simple.

The commercial aviation rights, on which all international air carriers depend, are negotiated at government level and emerge as bilateral agreements between nations. Almost invariably it is stipulated that fares and rates to be charged must be "mutually satisfactory".

It may be simple enough as long as only two nations are involved. But each nation has a series of agreements with a number of other nations, and each route on the international aviation map is related to all the others. Negotiations must, for practical rea-

sons, be carried on multilaterally. All parties concerned must sit down, at the same time and in the same place, to consider the issues at stake.

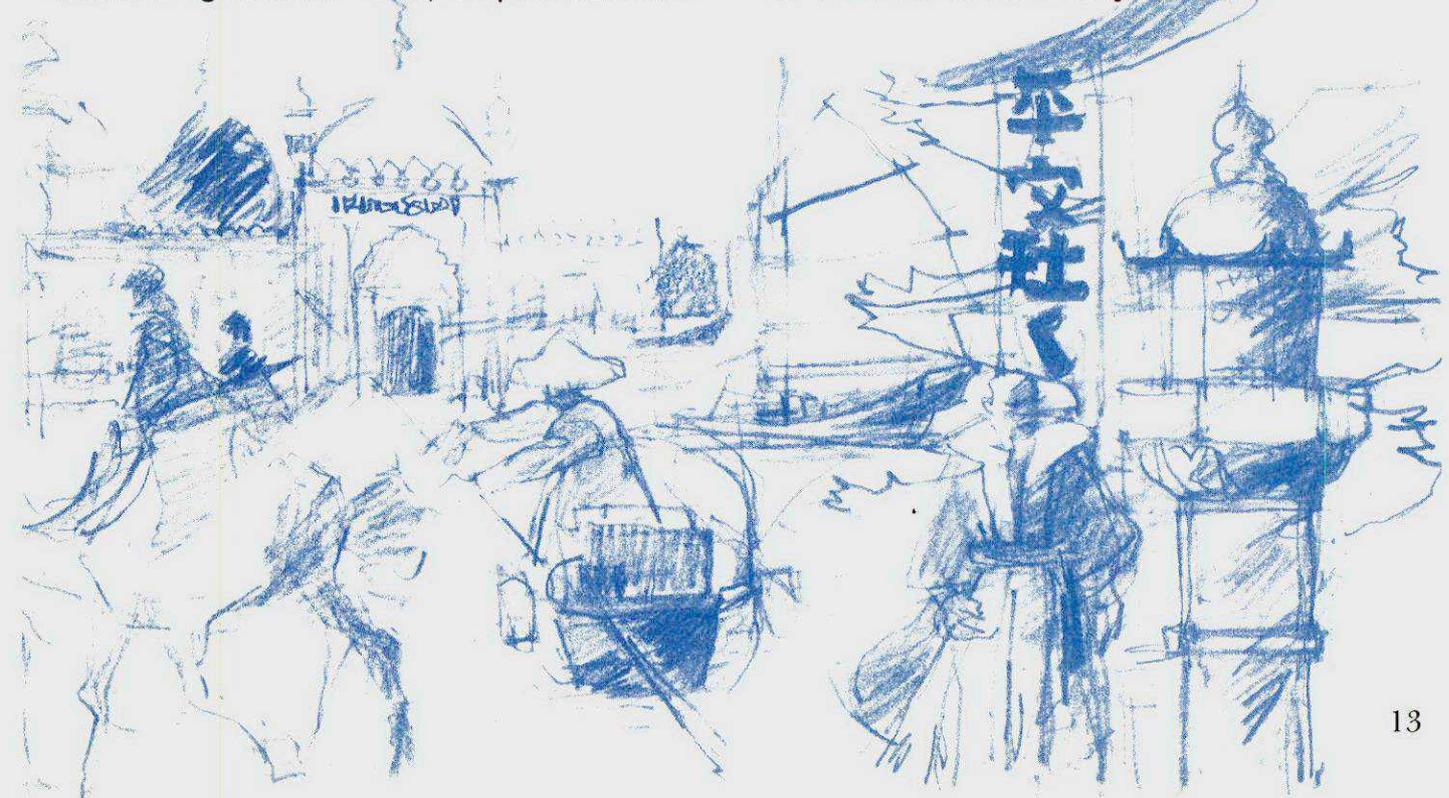
Few governments can afford time and specialists for this type of work. The task has been entrusted to the airline Conferences. Their decisions are, of course, subject to final approval by the respective national governments.

Each Conference member, regardless of size, has one vote and, to safeguard the interests of all members, the Conferences work by unanimity. No airline can be voted down by its competitors.

Political and economic reasons have made the IATA Conferences necessary. The Conferences exist not only because the airlines want them. They are, in effect, required by the national governments.

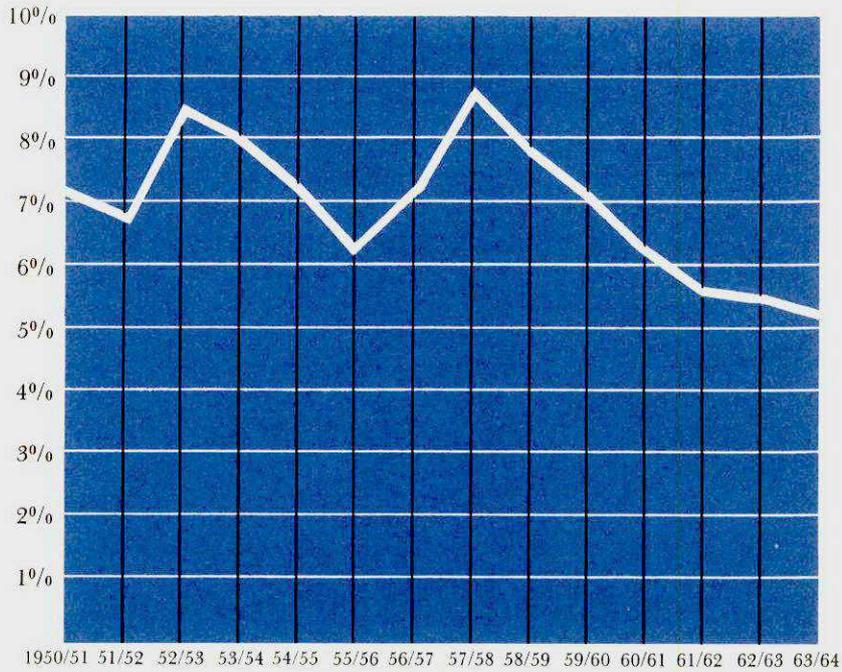
At present, more than 96 per cent of the world's scheduled air traffic is operated under IATA agreements. Only in exceptional cases, arising from unique political and geographical circumstances, is it possible for a route to be established, or for a carrier to function, outside conference membership.

Of course, IATA has its weakness, like any international organization. Compromises are inevitable. Someone, an airline or a government, has to give an inch or two for the sake of unanimity.



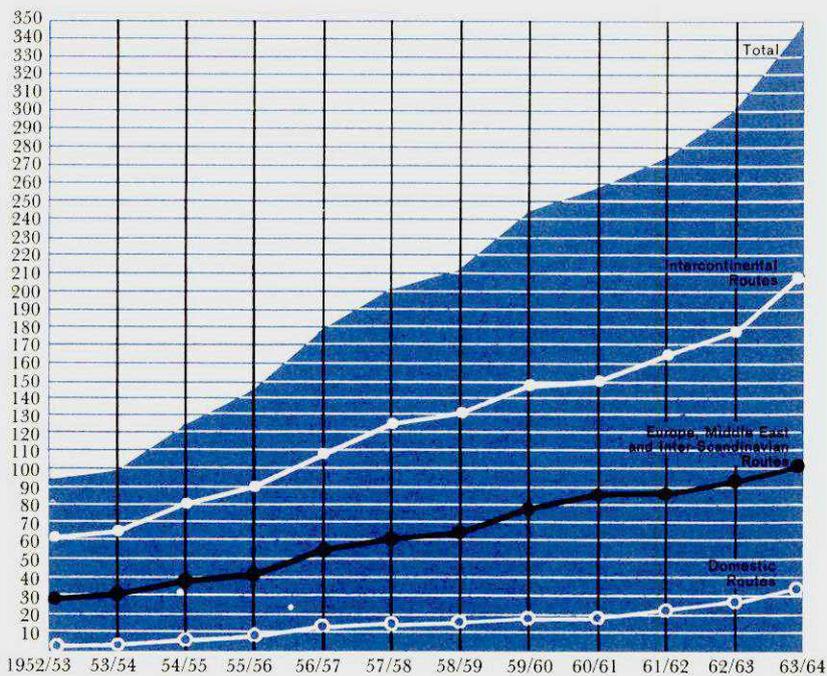
# North Atlantic Passenger Traffic

SAS' Share of IATA Total



# SAS Revenue Ton-kms (in thousands)

(Scheduled Traffic only)



## Subsidiaries

*SAS Catering A/S.* This wholly-owned SAS subsidiary has expanded considerably during the third year of its existence. The largest of the new undertakings are the restaurant and other catering facilities at Fornebu, Oslo. The firm was also chosen to operate the Swedish Pavilion restaurant at the New York World's Fair. SAS Catering now operates 10 flight kitchens, 5 restaurants, 9 cafeterias, 13 canteens and 9 kiosks. In 1963/64, the average staff strength was 853 employees, an increase over the preceding year of 16 per cent. In all, 26 airlines are now supplied from the flight kitchens of SAS Catering, with SAS remaining the chief customer.

The gross revenue of SAS Catering increased by 32 per cent over the previous year to M.SKR 58.0.

*SAS-Invest A/S.* This company, a wholly-owned SAS subsidiary, operates the Royal Hotel in Copenhagen. In its fourth year of business, it has increased its gross revenue by 7 per cent to M.SKR 12.6. There were 118,000 overnight stays in the course of the year, an increase of 3 per cent. Approximately half the clientèle were Americans, and one quarter Scandinavians. The Royal Hotel has a staff of 350 employees of 17 nationalities.

*Linjeflyg AB,* which operates the greater part of the Swedish domestic network, increased its production by 6.5 per cent over the previous year. Revenue pass.-km. went up 8.8 per cent while revenue freight ton.-km. and mail ton.-km. went down by 11.1 and 2.7 per cent respectively, resulting in a decline in load factor from 48.8 per cent last year to 47.4 per cent in 1963/64. The carrier transported 432,947 passengers, or 7 per cent more than in the preceding year.

After depreciation, amounting to M.SKR 2.9 as against M.SKR 3.6 last year, the accounts for the financial year 1963/64 show neither profit nor loss.

## Air Travel – A 16 Year History of Declining Costs to the Public

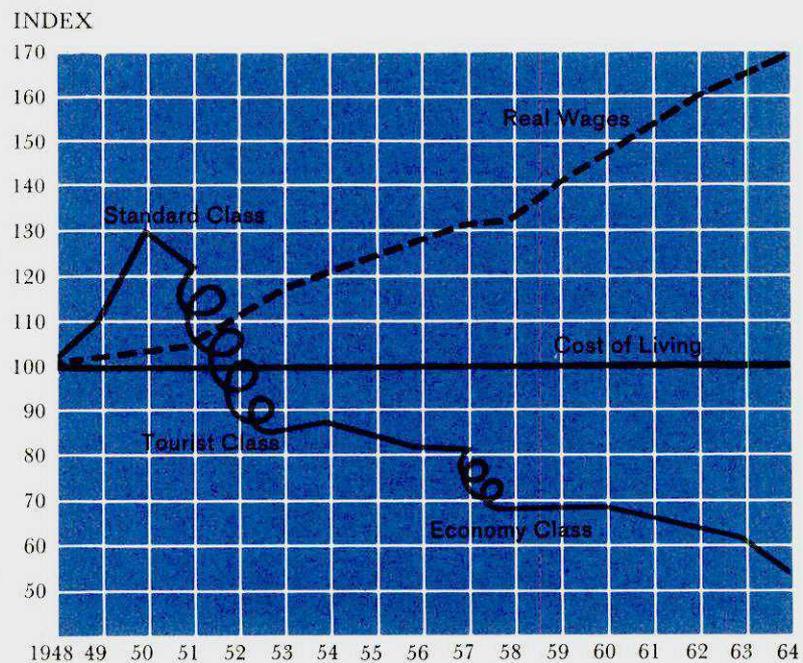
With reference to the remarks made on page 3, this chart points out the extent to which the cost of air travel to the passenger has been steadily reduced throughout the last 16 years.

The wage data used in the chart represent a composite of the increases in the earnings of the average industrial worker in the three Scandinavian countries together, while the air fare data refer to the cost of a ticket on the Copenhagen—New York route.

The chart shows that between 1948 and 1964 real wages have risen by 69 per cent, while the lowest regular fare has declined by 46 per cent.

Translated, this means that in relation to his purchasing power the average wage earner in Scandinavia in 1964 was able to fly to America at 68 per cent less cost than in 1948.

(1964's purchasing power of the Scandinavian currencies has been used in these computations.)



## Co-operation with other Airlines

The SAS policy of seeking agreements of co-operation with airlines of other nations has been further developed in the course of 1963/64. Three new agreements were concluded, with Iranair, Alitalia and Iberia, the national carriers of Iran, Italy and Spain respectively. With Air France, BEA and KLM/Sabena, existing co-operation was extended to include mutual information on long term planning. SAS now has pool agreements with 16 airlines in all.

### *Swissair*

The close co-operation between Swissair and SAS, begun in 1958, has continued to render advantages to both airlines, in terms of operational economy as in a number of other respects. The pool arrangements have comprised routes between Scandinavia and Switzerland as well as to the Middle East, East and South Africa, Tokyo via India and up to December 31, 1964, South America.

The aircraft lease arrangements (See page 10) have remained un-

changed through 1963/64, as have the agreements under which the two carriers perform overhaul on each others' aircraft.

### *Thai International*

Under a new agreement, THAI Airways International Ltd. (Bangkok) leased from SAS first one Caravelle in January and then another Caravelle in April. The introduction of these two aircraft has contributed to an improvement in the carrier's operating result. The employment of the fleet is relatively high, with 8.8 hours per day. The load factor has improved by as much as 11 percentage points to about 54 per cent.

THAI International now plans to extend its operations through a third Caravelle leased from SAS as from the spring of 1965.

When THAI International first began operations, SAS participated partly as a shareholder and partly as a supplier to the carrier of aircraft and of certain experts. At present, SAS owns 30 per cent of the company's share capital.

THAI International	63/64	Variation in %	62/63	Variation in %	61/62
Avail. Tonkm (Mill.)	27.2	-10	30.3	+16	26.1
Reven. Tonkm (Mill.)	14.7	+13	13.0	+23	10.6
Total Load Factor (%)	53.9		43.0		40.5
Traffic Revenue Sw. Crs. (Mill.)	35.6	+14	31.2	+28	24.3

Copenhagen, Oslo and Stockholm, December, 1964

M. Wallenberg

Per Åsbrink

Jens Chr. Hauge

Per M. Backe

Palle Christensen

J. Chr. Aschengreen

Karl Nilsson

President



## Profit and Loss Account, October 1, 1963/September 30, 1964

(Including wholly owned subsidiary companies)

INCOME (in millions of Swedish Crowns)	1963/64		1962/63	
Traffic revenue . . . . .	807.6		726.4	
Other operating revenues . . . . .	202.8	1,010.4	197.2	923.6
Subsidies for domestic operations . . . .	—			0.1
Financial income . . . . .	10.7			6.9
Other income . . . . .	3.6			4.0
Income from sale of flight equipment	5.9			2.7
	<u>1,030.6</u>		<u>937.3</u>	
<hr/>				
EXPENSES (in millions of Swedish Crowns)	1963/64		1962/63	
Operating expenses . . . . .	816.5		768.7	
Administrative expenses . . . . .	23.0		22.2	
Financial expenses . . . . .	20.1		23.0	
Other expenses . . . . .	15.4		8.6	
Depreciation . . . . .	85.6		90.9	
Provision for pension liabilities . . . .	—			2.9
Net profit . . . . .	70.0		21.0	
	<u>1,030.6</u>		<u>937.3</u>	

"Notes to Financial Statements" on page 21—22 refer to the above Profit and Loss Account.

Copenhagen, Oslo and Stockholm, December, 1964

Karl Nilsson  
President

/C E Lindh

M. Wallenberg

Jens Chr. Hauge

J. Chr. Aschengreen

Per Åsbrink

Per M. Backe

Palle Christensen

## Consolidated Balance Sheet,

ASSETS (in millions of Swedish Crowns)	Sept. 30, 1964		Sept. 30, 1963	
Aircraft				
At cost .....	610.0		613.6	
Depreciation and valuation reserves	327.3	282.7	287.9	325.7
Spare engines, spare propellers, spare parts				
At cost .....	259.3		278.1	
Depreciation and valuation reserves	153.5	105.8	147.5	130.6
Flight equipment on order				
At cost .....	13.6		15.6	
Depreciation .....	—	13.6	3.6	12.0
Buildings and land				
At cost .....	56.0		55.9	
Depreciation and valuation reserves	10.4	45.6	8.5	47.4
Workshop and aircraft servicing equipment				
At cost .....	36.8		36.1	
Depreciation and valuation reserves	30.2	6.6	26.1	10.0
Other equipment and vehicles				
At cost .....	57.7		54.6	
Depreciation and valuation reserves	43.9	13.8	38.9	15.7
Discount on debenture loans .....		5.5		5.7
Shares and bonds .....		4.8		7.1
Long-term accounts receivable .....		12.2		12.4
Shop work in progress .....		2.7		1.8
Sundry stores .....		4.8		4.8
Short-term accounts receivable and prepayments .....		127.5		123.0
Cash and bank balances, including short-term cash investments .....		242.2		118.6
		<u>867.8</u>		<u>814.8</u>

“Notes to Financial Statements” on page 21—22 refer to the above Balance Sheet.

# September 30, 1964

(Including wholly owned subsidiary companies)

LIABILITIES (in millions of Swedish Crowns)	Sept. 30, 1964	Sept. 30, 1963
Capital		
ABA (3/7) .....	81.6	72.6
DDL (2/7) .....	54.4	48.4
DNL (2/7) .....	<u>54.4</u>	<u>48.4</u>
Net profit .....	70.0	21.0
Subordinated debentures .....	157.5	157.5
Mortgage loans .....	29.0	30.1
Danish Government loan .....	6.3	7.1
Loans in USA .....	79.0	113.2
Manufacturer's credit on Caravelle equipment .....	8.7	25.0
Other long-term liabilities .....	7.0	6.4
Short-term liabilities .....	303.4	268.6
General valuation reserve .....	<u>16.5</u>	<u>16.5</u>
	<u>867.8</u>	<u>814.8</u>
Contingent liabilities and guarantees ..	<u>11.4</u>	<u>12.4</u>
<p>Furthermore, SAS has assumed certain liabilities in respect of pensions, and in connection with ticket sales according to pay-later plans.</p>		
Pledges		
Mortgages on real estate .....	33.9	33.9
Sundry pledges .....	<u>1.6</u>	<u>1.1</u>
	<u>35.5</u>	<u>35.0</u>

Copenhagen, Oslo and Stockholm, December 1964

Karl Nilsson  
President

/C E Lindh

M. Wallenberg

Jens Chr. Hauge

J. Chr. Aschengreen

Per Åsbrink

Per M. Backe

Palle Christensen

The above Profit and Loss Account and Balance Sheet are in accordance with the books of the Consortium, which have been examined by the undersigned Auditors, as set forth in our Auditor's Report dated December, 1964.

Stockholm, december, 1964

Viking Bergman

Centralanstalten for Revision

Christian Blom

Frans Bruun

Carl Johan Thorsen

Oscar Jelf

Hugo Engmann

Tor Storhaug

## SAS-Invest A/S Balance Sheet, September 30, 1964

(Included in Balance Sheet of SAS)

ASSETS (in millions of Swedish Crowns)	Sept. 30, 1964		Sept. 30, 1963	
Buildings				
At cost .....	37.1		37.1	
Depreciation .....	2.9	34.2	1.5	35.6
Equipment				
At cost .....	6.2		6.2	
Depreciation .....	2.3	3.9	1.8	4.4
Long-term accounts receivable .....		2.8		2.9
Sundry stores .....		0.4		0.4
Short-term accounts receivable and prepayments .....		0.8		1.0
Cash and bank balances .....		0.5		0.4
		<u>42.6</u>		<u>44.7</u>

LIABILITIES (in millions of Swedish Crowns)	Sept. 30, 1964		Sept. 30, 1963	
Share capital .....		3.7		0.7
Mortgage loans .....		24.9		25.8
Loan from SAS .....		12.3		15.8
Other long-term liabilities .....		0.4		0.7
Short-term liabilities				
SAS .....	0.1		0.5	
Other .....	1.2	1.3	1.2	1.7
		<u>42.6</u>		<u>44.7</u>
Contingent liabilities .....		—		—
Pledges				
Mortgages on real estate .....		28.4		28.4
Sundry pledges .....		0.1		0.1
		<u>28.5</u>		<u>28.5</u>

## Notes to Financial Statements

- 1) The SAS accounts cover all activities of the Consortium and its wholly owned subsidiaries, with-in as well as outside Scandinavia. The result of the financial year 1963/64, and the financial status of the Consortium as of September 30, 1964, are set forth in the Profit and Loss Account and Balance Sheet. Unless otherwise stated, all amounts are expressed in millions of Swedish Crowns (M.SKR), and last year's figures are quoted in brackets.
- 2) The traffic revenue, M.SKR 807.6 (M.SKR 726.4) stems from the following sources:

	1963/64	1962/63
Passenger	654.4	584.1
Air Freight	86.3	78.0
Air Mail	49.7	45.2
Charter	17.2	19.1
	807.6	726.4

- 3) "Other operating revenues", M.SKR 202.8 (M.SKR 197.2), represents gross revenues, from i.a. shop work for co-operating airlines and third parties, handling services, lease of equipment and external revenue earned by the wholly owned subsidiaries SAS Catering A/S and SAS-Invest A/S.
- 4) The item "Income from sale of flight equipment", M.SKR 5.9 (M.SKR 2.7), covers the proceeds, after deduction of book value, etc., from the sale of three DC-6B and one DC-3 aircraft and from the sale of spares, etc.
- 5) "Operating Expenses", M.SKR 816.5 (M.SKR 768.7), represents expenses for the transportation activity as well as for other activities. The estimated loss in THAI International 1963/64 is included in this item with M.SKR 2.8 (M.SKR 9.0).

- 6) The Danish charter company Nordair A/S in which SAS is shareholder, has terminated its flight operations. A provision for losses in this connection, M.SKR 2.3, is included in the item "Other expenses".
- 7) Depreciation, M.SKR 85.6 (M.SKR 90.9), has been apportioned with M.SKR 70.8 (M.SKR 76.2) to aircraft, spare engines, spare propellers and spare parts, M.SKR 2.7 (M.SKR 1.5) to buildings, and M.SKR 12.1 (M.SKR 13.2) to equipment and vehicles.
- 8) The expenses for the transportation activity are related to airline functions as follows:

	Percent of Total Traffic Revenue			Per available Ton-km (öre)		
	1963/64	1962/63	1961/62	1963/64	1962/63	1961/62
Flying Operations	21.9	24.0	26.3	28.4	29.5	31.7
Maintenance & Overhaul	14.4	14.8	15.3	18.7	18.3	18.4
Flight Equipment	10.3	10.9	11.6	13.3	13.4	14.0
Ground Operations	13.2	13.5	14.6	17.1	16.6	17.6
Passenger Service	7.5	7.6	7.9	9.7	9.4	9.5
Promotion & Sales	20.1	20.7	22.2	25.9	25.4	26.7
General & Administrative	5.6	6.0	6.3	7.3	7.4	7.6
Total Expenses	93.0	97.5	104.2	120.4	120.0	125.5
Total Traffic Revenue	100.0	100.0	100.0	129.5	123.1	120.5

- 9) The four Caravelles, placed at the disposal of Swissair under a sale/resale agreement, have been included in the SAS Balance Sheet as assets. The two Convair Coronados, placed at the disposal of SAS by Swissair, are accounted for in the same way by Swissair. The nine DC-7C and DC-7F aircraft with operating spares have been fully depreciated during the year.

- 10) The surplus spares included in the balance sheet item "Spare engines, spare propellers, spare parts" have been reduced during the year under review. The provision made during 1961/62 in the amount of M.SKR 10.0 to cover risks in connection with sale of surplus spares is retained in the general valuation reserve.
- 11) "Flight equipment on order", M.SKR 13.6, represents the advance payment of the cash part of the purchase price of a new Caravelle aircraft ordered for delivery in December, 1964. In addition a DC-7C aircraft will be delivered as a "trade-in" after September 30, 1964.
- 12) Flight equipment and other physical assets were, as of September 30, 1964, insured as follows:

	M.SKR	
	1964	1963
Aircraft	529.9	533.0
Spare engines, spare propellers, spare parts and technical stores	241.7	211.8
Buildings	61.0	62.5
Workshop and aircraft servicing equipment and tools	41.6	41.0
Other equipment, vehicles and sundry stores	75.1	72.6

- 13) The item "Short-term accounts receivable and prepayments", M.SKR 127.5, includes, i.a., the current account with THAI International in the amount of M.SKR 1.7. Last year the account, a liability amounting to M.SKR 1.5, was included in "Short-term liabilities".
- 14) For practical reasons, the various clearing accounts for traffic revenue are, as hitherto, included as a net balance in the item "Short-term liabilities".
- 15) The Board of Directors proposes that the principal part of the profit for the year 1963/64, M.SKR 70, will be used for consolidation of the Consortium. The Board proposes that an amount of M.SKR 14 will be paid to the Parent Companies during the financial year 1964/65. Remaining M.SKR 56 will be credited to the Parent Companies' accounts after September 30, 1964. The total capital of the Parent Companies in SAS will hereafter amount to M.SKR 246.4.
- 16) As of September 30, 1964, the loans raised in the United States amount to US\$15.3 million (US\$21.9 million) out of which US\$1.7 million will be paid by December 31, 1964. Remaining US\$13.6 million are repayable over a nine years' period starting December 31, 1966.
- 17) In addition to the risks connected with the sale of surplus stock, the general valuation reserve, M.SKR 16.5 (M.SKR 16.5), covers the risks of losses in connection with SAS engagements, including the guarantee rendered Thai Airways Co. Ltd. This guarantee amounted on September 30, 1964, to M.SKR 2.9 (M.SKR 6.1).
- 18) The item "Pledges" includes security for a mortgage loan raised by SAS-Invest A/S.
- 19) During the year M.DKR 4.0 out of SAS' loan to SAS-Invest A/S has been converted to share capital.

## Auditors' Report

We, the undersigned, appointed in accordance with Article 11 of the Consortium Agreement between AB Aerotransport (ABA), Det Danske Luftfartselskab A/S (DDL) and Det Norske Luftfartselskap A/S (DNL) as auditors of

### SCANDINAVIAN AIRLINES SYSTEM

Denmark — Norway — Sweden having completed our assignment, herewith submit to the Parent Companies our report for the financial year October 1, 1963—September 30, 1964.

We have examined the Annual Report and Accounts which include SAS Inc., New York, SAS-Invest A/S, Copenhagen, and other subsidiary companies. To the required extent we have studied the accounting records, minutes and other documents which give information about the economy and administration of the Consortium and have, moreover, taken those measures of inspection which we have considered necessary.

The Internal Auditing Department of SAS, acting in accordance with

instructions approved by us, has conducted a continuous check of the accounting records of the Consortium and we have, in the course of the financial year and in connection with the closing of the accounts, received reports on the examination thus conducted.

The accounting records are properly kept.

As is seen from the Report for the financial year there is declared, after depreciation and allocations, a net profit of 70 million Swedish Crowns, out of which 14 million Swedish Crowns are proposed to be paid out to the Parent Companies.

We recommend that the Annual Accounts as per September 30, 1964, which have been submitted and which have been signed by us, be adopted, and that the Members of the Board and the President be discharged from responsibility for their administration in respect of the financial year.

Stockholm, December, 1964

Viking Bergman	Centralanstalten for Revision	Christian Blom
	Frans Bruun	Carl Johan Thorsen
Oscar Jelf	Hugo Engmann	Tor Storhaug

## Board of Directors

### *Denmark*

J. Chr. Aschengreen  
*Second Vice Chairman*

Palle Christensen

#### *Deputies:*

Helge Bech-Bruun  
E. Dige

### *Norway*

Jens Chr. Hauge  
*First Vice Chairman*

Per M. Backe

#### *Deputies:*

E. F. Eckhoff  
Erik Waaler

### *Sweden*

M. Wallenberg  
*Chairman*

Per Åsbrink

#### *Deputies:*

Curt Nicolin  
Nils J. Hörjel

---

## Assembly of Representatives

### *Denmark*

Mogens Pagh  
*First Vice Chairman*  
Greve Flemming af Rosenberg  
J. Chr. Aschengreen  
Helge Bech-Bruun  
Vagn Bro  
Palle Christensen  
E. Dige  
Svend Horn  
Arne Krog  
Hans Muus

### *Norway*

Per M. Hansson  
*Chairman*  
Nils Astrup  
Per M. Backe  
Erik Brofoss  
E. F. Eckhoff  
Jens Chr. Hauge  
B. Hurlen  
Erik Waaler  
*Deputies:*  
Halvdan Björum  
Erling Lind  
Finn Moe

### *Sweden*

Per A. Norlin  
*Second Vice Chairman*  
Erik Boheman  
Erik G. Hj. Grafström  
Tryggve Holm  
Emanuel Högberg  
Nils J. Hörjel  
Sven Lönnqvist  
Oskar Malmberg  
Sven Mellqvist  
Gustaf V. Nilsson  
M. Wallenberg  
Sune Wetter  
Erik Wijk  
Per Åsbrink  
*Deputies:*  
Torgeir Christoffersen  
Folke Fessé  
A. Ax:son Johnson  
Helge Jäder  
Ragnar Sachs  
Olof Sahlin

---

## Management

Knut Hagrup  
*Executive Vice President —  
Technical and Operations*

Johs. Nielsen  
*Vice President and  
General Manager  
Region Denmark*

Karl Nilsson  
*President*

Johan Nerdrum  
*Vice President and  
General Manager  
Region Norway*

Tore Nilert  
*President, SAS Inc.*

Arne Wickberg  
*Executive Vice President —  
Marketing*

Sven-Erik Svanberg  
*Vice President and  
General Manager  
Region Sweden*

---

E. Palsgaard  
*President, SAS Catering A/S*

A. Kappenberger  
*President, SAS-Invest A/S*



**SCANDINAVIAN AIRLINES SYSTEM**