

AIR TRANSPORT

1971

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## 1970 AT A GLANCE

<b>TRAFFIC</b>	1970	1969	Per Cent Change	<b>FINANCIAL</b>	1970	1969	Per Cent Change
Passengers Enplaned (000).....	169,668	171,894	(1.3)	Passenger Revenues (\$000).....	7,611,709	7,119,990	6.9
Revenue Passenger Miles (000).....	131,719,194	125,414,212	5.0	Freight Revenues (\$000).....	715,798	648,029	10.5
Available Seat Miles (000) .....	264,903,858	250,845,906	5.6	Total Operating Revenues (\$000).....	9,273,426	8,792,317	5.5
Passenger Load Factor.....	49.7%	50.0%	(0.6)	Total Operating Expenses (\$000).....	9,213,475	8,400,387	10.0
Freight Ton Miles (000).....	3,407,650	3,246,326	5.0	Net Operating Income (\$000).....	59,951	391,931	(84.9)
U.S. Mail Ton Miles (000).....	1,470,176	1,334,535	10.2	Net Profit (Loss) (\$000).....	(178,930)	52,752	—
Express Ton Miles (000).....	106,521	109,465	(2.7)	Rate of Return on Investment.....	1.5%	3.2%	(53.1)
Cargo Ton Miles (000).....	4,984,347	4,690,326	6.3	Passenger Yield.....	5.78¢	5.68¢	1.8
Total Revenue Ton Miles (000).....	20,186,627	19,989,378	1.0	Freight Yield .....	21.01¢	19.96¢	5.3
Total Available Ton Miles (000).....	44,265,063	42,779,192	3.5				
Ton Mile Load Factor.....	45.6%	46.7%	(3.4)				
Average Daily Scheduled Flights.....	13,977	14,737	(5.2)				

## 1971—THE AIRLINES START THEIR TURNAROUND



STUART G. TIPTON  
President  
Air Transport Association  
of America

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The year 1970 was, for most airlines, a year of serious financial depression. This year's *Facts & Figures* will discuss in some detail the reasons for the airlines' dismal performance and describe steps being taken by the industry to help them return to profitability.

Last year concern was expressed that as airline profits dipped, deterioration of earnings would jeopardize the re-equipment program and with it "a large and significant portion of the nation's economy."

Earnings did deteriorate and with it came the first symptoms of the deterioration: \$120 million worth of aircraft were cancelled, delivery of other orders were stretched out and options on at least 16 new aircraft were not picked up.

What went wrong in 1970?

An economic recession hit the U.S. and just at the time the airlines brought in, on a schedule set up some years ago, additional capacity. Much of the capacity was accounted for by the new Boeing 747 along with a number of stretched versions of the workhorse B-727. At the same time that these trends bumped into each other, the cost of everything that the airlines buy went zooming up at a rate even faster than the inflation rate of the nation as a whole.

The most serious cost problem for the industry has been labor, which accounts for almost one-half of airline costs. Average wages shot up last year by about 15 per cent—among the highest increases in all industry. This fact, along with the rapidly rising costs of items such as fuel, landing fees and interest rates, resulted in an overall inflation rate for the airlines of about 9 per cent, almost twice the national average.

And while airline costs were going through the roof, the average price paid for an airline ticket was lower than it was 10 years earlier, having declined

steadily in the 1962-1968 period. Clearly this could not continue and, in 1969, a couple of small fare increases were approved by the Civil Aeronautics Board. Despite these increases, airline profits continued to fall. During 1970, however, the CAB was engaged in the Domestic Passenger Fare Investigation and denied additional general fare increases pending completion of the investigation in April, 1971. The result was that the industry recorded the largest losses in its history in 1970.

Mixed into this witches' brew of problems was the expanding role of the supplemental airlines whose loosely monitored competition for traffic which would have flown on the scheduled airlines resulted in unprofitable payloads for the scheduled carriers.

The scheduled system cannot stand erosion of prime markets. One cannot have it both ways. The nation's air transportation policy cannot permit diversion of substantial numbers of what otherwise would be individually ticketed passenger traffic from a scheduled system and still maintain a day-in-day-out system available when the traveler needs to fly.

Beset with these problems, the airlines took steps to cut costs by cutting back on service and with it thousands of airline jobs. By the end of the year, more than 12,000 airline employees had been furloughed.

It has been many years since the airlines have found it necessary to cut back on their schedules. The last time—for different reasons—was in the early years of the first jet age in the early sixties when larger jet aircraft replaced smaller piston and turboprop planes. But even in these days the overall available seat mile count was up. Not so today. Now the airlines have cut some 700 daily flights from their schedules and, for the first time, the number of available seat miles is actually

down. For the last six months—the last quarter of 1970 and the first quarter of 1971—available seat miles of the domestic trunks were down 0.5 per cent from the previous period.

*Facts & Figures* spells out in some detail what the airlines are doing to cut costs and restore themselves to profitability, and to continue to not only maintain, but expand, service to the public.

But that's for the airlines part. What is needed is for the government to do its part.

At the Senate Commerce Committee hearings earlier this year on the state of the air transportation industry, I proposed a program designed to clear the way to allow the airlines to fly their way out of their economic doldrums. The key points that will improve the industry's earnings position are:

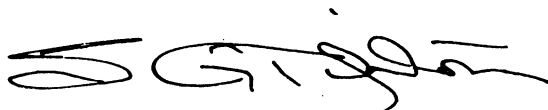
- Airline management should be given more flexibility in adjusting price.
- New machinery must be developed to settle labor/management disputes in basic transportation systems, at less cost to the parties and with less inconvenience to the public.
- Regulations designed to maintain the distinct roles between the scheduled airlines and the supplemental air carriers should be strictly enforced. In addition, rates for charter service should be investigated to determine whether they are at an appropriate level.
- Troublesome conflicts between federal and state regulation of common carrier air transportation should be eliminated through appropriate clarification, by the courts or Congress, of federal preemption to the extent necessary.

- The vast purchasing power of the federal Government should not be used to achieve special reduced-rate pricing for air transport services. The airlines should also be assured the opportunity to once again share in the transport of military cargo.

The short-term outlook for the airlines is not encouraging. Our best estimate is that the industry will again lose money in 1971. But 1972 should be the turnaround year and it is expected that profits will start to grow again for the airlines—though still far below the CAB's allowable rate of return.

With all of the gloomy news of 1970, it is easy to forget some of the positive aspects of air transportation today. The industry's plant—its multi-billion dollar fleet of new jet aircraft—is as new as tomorrow. No other major industry re-equips itself at the rate of the airlines and this re-equipment will continue with billions of dollars worth of new advanced technology aircraft to be delivered over the next three years. Another positive aspect of 1970 was the airlines' outstanding safety record—by far the best in the history of the industry.

The airlines have come out of the doldrums in 1970 a lot leaner than they went in. The 747 introductory costs are largely behind them, and the aircraft has surpassed every expectation. As the economy begins to rise and as the full effect of the 1971 fare increases begin to be felt, the airlines will be in an excellent position to turn their added revenues into profits and to continue to expand and improve air transport service.



# 1970 IN REVIEW

*Inflationary pressures, combined with poor traffic growth, resulted in the heaviest losses ever for the airlines.*

Powerful economic forces both within and without the industry combined in 1970 to give the scheduled airlines the worst financial results in their history. But the sting of their heavy losses was lessened, at least in part, by some bright spots—most notably an outstanding safety record and the very successful introduction of the Boeing 747, the first of the new wide-bodied, advanced technology jets.

Total scheduled airline traffic, as measured by overall revenue ton miles flown in all services, gained only 1.0 per cent in 1970, compared with an average growth rate in the sixties of 16.6 per cent, and airline financial statements this year show in 1970 the largest losses ever for the industry—\$179 million. These losses caused the rate of return on investment to fall to its lowest level in history—1.5 per cent—certainly nowhere near the 12.0 per cent the Civil Aeronautics Board (CAB) has said to be fair and reasonable. And, so far in 1971, these trends seem to be deepening: traffic on domestic routes is declining and the 12 major carriers have reported losses of over \$100 million for the first quarter of 1971.

There are a number of significant trends that went into these results. These include:

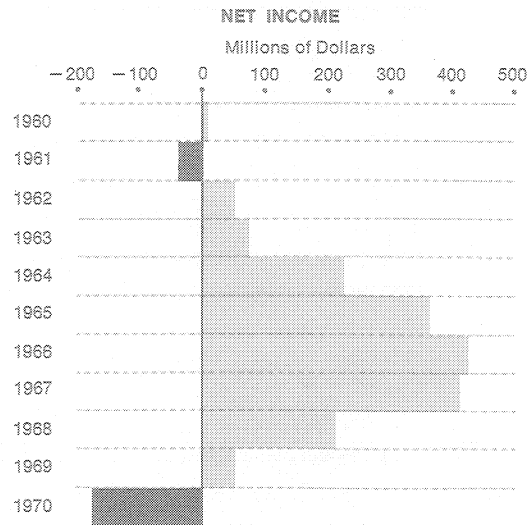
- **Traffic Decline.** The national economic recession that began last year and is continuing into this year slowed domestic passenger traffic growth almost to a halt in 1970. In fact, beginning in August, passenger traffic on the domestic trunk carriers has actually declined each month from the level of the same month in the previous year. This trend has continued throughout the first quarter of this year, with domestic trunk traffic showing a decline of 2.4 per cent from the first quarter of 1970.

- **Inflationary Pressures.** Inflation continued to plague the airline industry at a rate of about 9 per cent in 1970 over 1969, almost double the national rate of inflation. The major portion of this inflationary pressure came from labor settlements which increased airline wages by some 15 per cent in 1970.

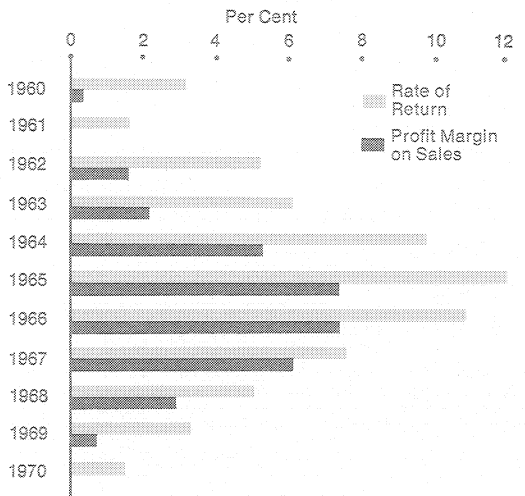
- **Inadequate Fares.** Airline fares have not kept pace with the rising cost of offering service to the public. The average yield, or revenue per revenue passenger mile, in 1970 increased only 1.8 per cent over 1969 and was 5.9 per cent lower than it was 10 years earlier in 1960. In the fourth quarter of 1970, the yield was lower than in the fourth quarter of 1969 despite some selective fare increases.

On April 12, 1971, the CAB released its decision in the passenger fare phase of the Domestic Passenger Fare Investigation, granting an immediate across-the-board 6.0 per cent increase in domestic fares and a possible additional 3.0 per cent rise to come later. This increase, while welcome, is still well below the increases sought by the carriers.

Measures of Profitability U.S. Scheduled Airlines



RATE OF RETURN and PROFIT MARGIN ON SALES



- **Competition.** Increased competition from other classes of carriers has eroded the traffic of the scheduled carriers to the point where they are no longer able to make a profit on many of their most lucrative routes to support service on losing routes that must be served in the public interest. This is especially true in international service where the supplemental airlines have taken the lion's share of the peak season traffic on a number of peak routes with no obligation to provide regular, dependable service.

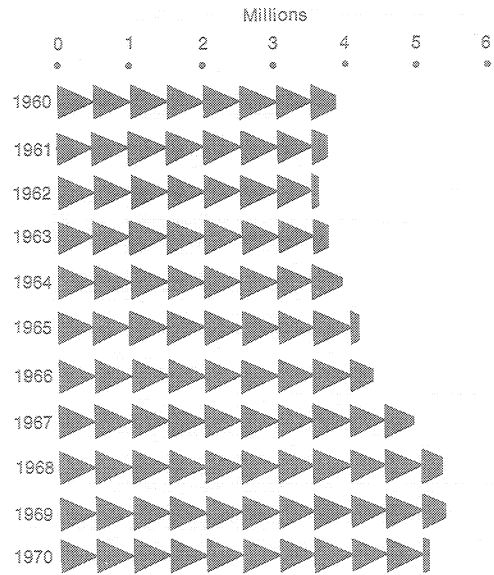
**Extensive Cost Cutting Measures**

In response to these adverse forces, the industry initiated early last year, and is still continuing, a number of steps to improve its economic situation. Some of the most important ones include:

- **Schedule Reductions.** Many carriers are cutting flight schedules to eliminate unprofitable flights and reduce uneconomic competition. This began in the second half of 1970 on a unilateral basis and by May, 1971, there were 5.2 per cent fewer domestic flights scheduled than there were in May, 1970, meaning that some 700 daily flights have been eliminated. In March of this year, the CAB agreed to permit the carriers to meet and discuss reducing flights on mutually acceptable routes. The first meeting was held in late March and 21 routes were agreed upon and submitted to the CAB for approval. If the CAB approves the discussion of these routes, the carriers serving them will meet to plan actual capacity reductions on them.

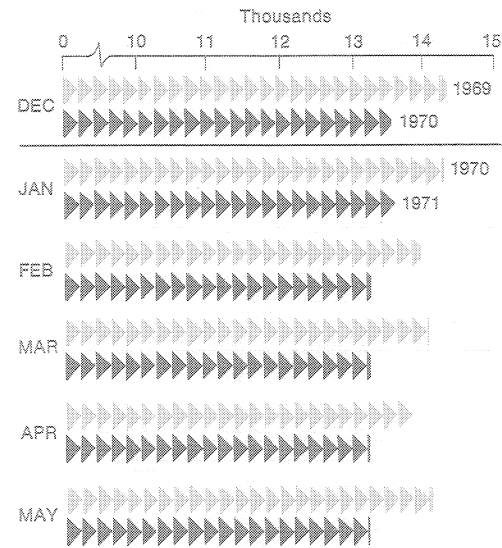
**Revenue Aircraft Departures**

U.S. Scheduled Airlines



**Daily Scheduled Departures in U.S. (50 States)**

U.S. Scheduled Airlines



SOURCE: Official Airline Guide

- **Equipment Order Reductions and Delays.** Another step towards curbing capacity has been the cancelling and stretching out of orders for new flight equipment by some carriers. These airlines have found that it is more economical to forfeit some penalty payments and cancel a new aircraft than to take delivery of and operate one that current traffic trends indicate will not be needed.

- **Employee Layoffs.** Extensive layoffs of airline employees have resulted in industry employment actually being reduced in 1970 from 1969 levels for the first time in 10 years. So far, 12,000 employees have been furloughed and more cuts are expected.

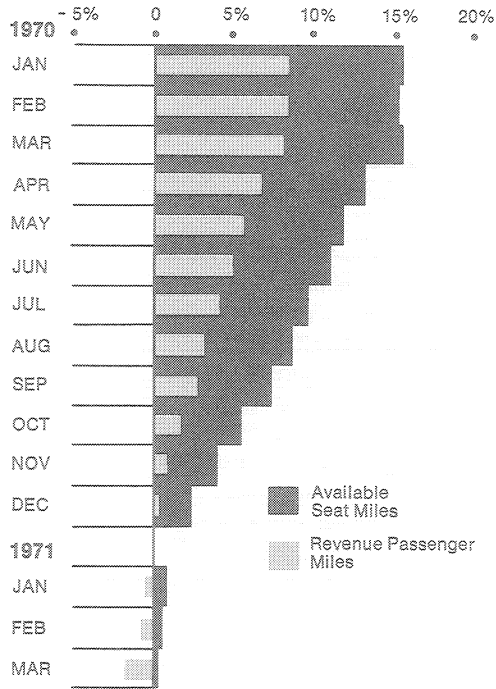
- **Elimination of "Frills".** Many carriers are now cutting down on some of the "extras" to which airline passengers have become accustomed. Gone now on many flights are such amenities as cocktail snacks, meals at off-mealtime hours and movies on morning flights.

**Best Year Ever in Safety**

Early this year, the Chairman of the National Transportation Safety Board, John H. Reed, said: "By almost any statistical yardstick, 1970 was a truly remarkable year in aviation safety." The scheduled airlines in 1970 had a safety rate of .001, marking the first time that the rate was below .01. In scheduled domestic service, there were no passenger fatalities and in all operations there was only one fatal passenger accident and two passenger fatalities.

**Per Cent Change in Revenue Passenger Miles and Available Seat Miles**

Domestic Trunk Airlines—12 Months to Date



There are a number of reasons for this outstanding safety performance by the carriers. One of the most important is the sustained major effort the airlines have made over the years to improve the quality of flight crew training, especially the use of simulators with visual attachments for most hazardous maneuvers. Also, the latest in educational practices and theories have been applied to airline training techniques and the ground school for 747 training, in particular, incorporated the most sophisticated refinements in training.

Another important contribution to airline safety has been the effort to measure, improve and control runway friction to reduce aircraft skidding and hydroplaning. Runway grooving has been the most visible of these efforts but other improvements have included the setting up of snow and ice committees at airports to measure accumulation on the runway and decide if it should be shut down, experimentation with urea to prevent ice formation and the use of devices on runways that can collect data on braking action.

Also contributing to the excellent airline safety record is the engine reliability program—a process whereby measurements are made, in flight, on the temperature, speed and other performance characteristics of an engine. This enables a constant monitoring of the health of the engine and gives airline engineers the ability to predict where problems are going to occur and stop them before they happen, even before the flight crew is aware of them.

It is notable that this outstanding safety year coincided with the year of the introduction of the Boeing 747 into passenger service. This aircraft turned in such an excellent performance in its first year of service that the National Aeronautics Association awarded its manufacturer and the airline that first put it into service the coveted Collier Trophy. This trophy is the single award of the aviation and aerospace community for “the great achievement in aeronautics or astronautics in America with respect to improving the performance, efficiency or safety of air or space vehicles, the value of which has been thoroughly demonstrated by actual use during the preceding year.”

**Progress in Reducing Jet Pollution**

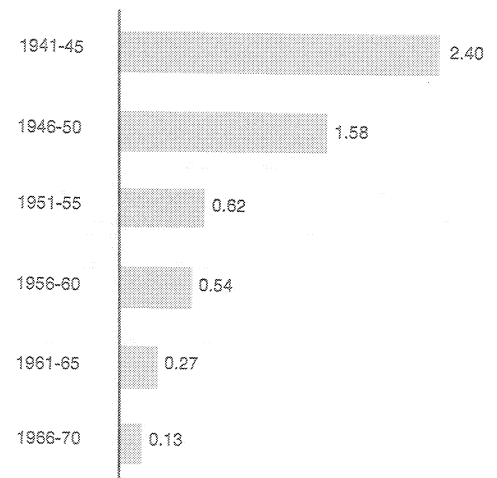
Although the airline contribution to air pollution is relatively small, about 1.2 per cent of all emissions nationwide, the industry initiated, in 1965, a program to reduce and eliminate even that small amount. There are two different approaches to the problem. The first is the phasing into airlines fleets of the virtually smoke-free advanced technology jets—the 747, DC-10 and L-1011. The reduction of smoke was designed right into the engines of these aircraft and the airline investment of \$5.5 billion in this kind of aircraft is an investment in a cleaner environment.

The other approach has been to retrofit the engines on aircraft already in the fleet. Presently, the program is focused on the JT8D engine which

**Airline Safety**

Passenger Fatalities Per 100 Million Passenger Miles—5 Year Averages

U.S. Scheduled Airlines





powers the DC-9, B-727 and B-737 aircraft. These aircraft account for more than one-half of the airline fleet and, because they are short- and medium-range aircraft, make many more takeoffs and landings than do the long-range B-707 and DC-8. Due to these factors, the JT8D engine accounts for about 70 per cent of all jet engine smoke, according to an estimate by the National Air Pollution Control Administration.

A modified combustion chamber for the engine was developed by its manufacturer, Pratt and Whitney, and after extensive testing by the Federal Aviation Administration and the airlines for safety and efficiency was certificated for scheduled service. In January, 1970, the airlines agreed to begin retrofitting their JT8D engines with the combustors and to have the program "substantially complete" by late 1972. At the end of the first quarter of 1971, the airlines had already retrofitted approximately one-third of the JT8D engines in their fleets.

**Fuel Venting**

*I think I would have omitted this*

Another pollution problem the industry confronted during the year was that of fuel venting. This involves a small amount of unburned fuel that collects in reservoirs inside the engine cowling when an engine is shut down. The fuel remains there until takeoff when it is automatically expelled at about 2,000 feet and 200 knots airspeed. The amount of fuel for each engine varies from one to three pints

and studies have shown that fuel dumped in flight at speeds above 100 knots will be fully evaporated within 200 feet below the aircraft.

In order to eliminate this small amount of pollution, the carriers are now evaluating a system whereby a drain valve is capped and the fuel remains in the engine instead of draining into the reservoir. The program began in February, 1971, and evaluation should be finished in September of this year. In the meantime, the airlines have instructed the manufacturers to continue research on other ways of disposing of the fuel in the reservoir in case the fuel drain method does not work out in testing.

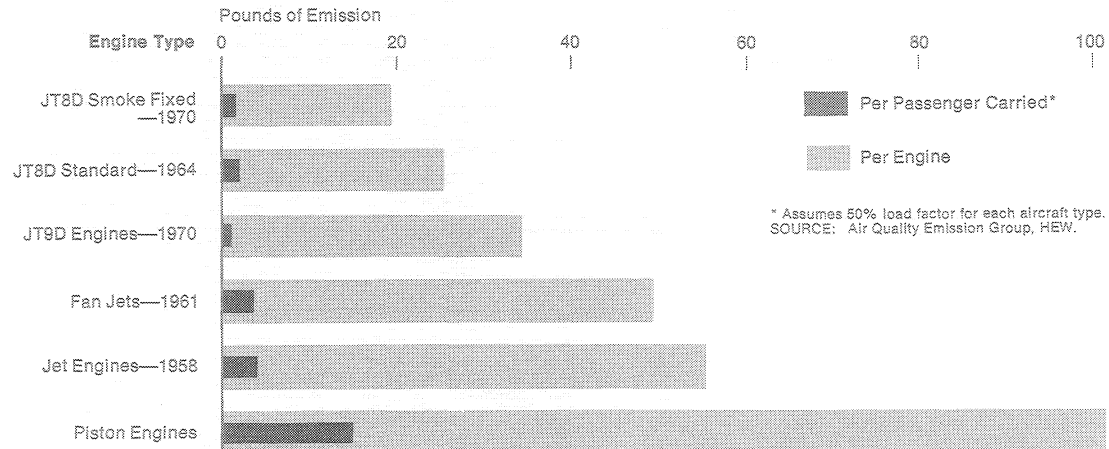
**Airports and Airways**

Another significant event for the industry in 1970 was the passage of the

Airports and Airways Development Act of 1970 which was signed into law last May. The act created the Airports/Airways Trust Fund which collects taxes from the users of the aviation system— primarily airline passengers and shippers—through ticket and waybill taxes. The fund is expected to generate \$600 million in its first year—funds which are to be spent for "catch-up" airports and airways facilities.

Now, however, this fund is being threatened from two different sides. First, the \$280 million that the Congress, in passing the bill, had intended would be spent for airport development, has not been appropriated. Instead only \$124 million has been appropriated for that purpose so far this fiscal year. But, an even more serious threat to the needed development of an adequate aviation system is the Administration's

Aircraft Engine Emissions by Engine Type (During Takeoff and Landing)



transportation revenue sharing proposal that would distribute to the states and localities all of the money in the Aviation Trust Fund and all other transportation trust funds, except those for the completion of the Interstate Highway System. This money would be earmarked for transportation facilities but with no provision that any of it be used for aviation facilities.

**Airline Re-equipment Program**

In January, 1970, the age of the wide-bodied jet began when the airlines introduced the Boeing 747 into scheduled service. By the end of the year, the airlines had taken delivery of 78 of these aircraft. 1971 will see the delivery of most of the remainder of the airlines' orders of 747s—17 more will come into service later this year, leaving only 6 to be delivered in later years.

Just as 1970 was the year of the 747, 1971 will be the year of the McDonnell Douglas DC-10. This new trijet will join its wide-bodied companion in scheduled service sometime in the fourth quarter of this year with 12 expected for delivery. The other entry in the wide-bodied jet market, the Lockheed L-1011, is expected to begin service sometime in 1972, somewhat later than originally expected, due to the bankruptcy in February, 1971, of Rolls Royce, the manufacturer of the engines for the aircraft.

All of these new aircraft represent an investment of \$3.5 billion in the years 1971 through 1974 in flight and ground equipment. It is interesting that of a total of 202 aircraft on order by the carriers, 97 per cent of them are for the wide-bodied jets and after the end of this year, the airlines will have no smaller, first generation jets on order.

Aircraft delivered during 1970 totaled 128, including 74 747s and in the first 5 months of 1971, the airlines have taken delivery of 29 more new aircraft. The total value of these aircraft delivered in the past 17 months was \$2.0 billion.

In addition to these subsonic aircraft on firm order, the airlines also have placed orders for 38 British-French supersonic Concorde which have an approximate value of \$760 million. Thus, the airline industry investment in subsonic and supersonic aircraft totals more than \$4.0 billion.

An interesting aspect of the airline re-equipment program is the dwindling of the number of different types of aircraft, both on order and in the fleet. This means that the airlines are gradually standardizing their fleets to just a few types of aircraft. This standardization allows an airline far greater efficiency in almost all areas of its operation—crew training, supplies of spare parts, ground facilities and maintenance. □

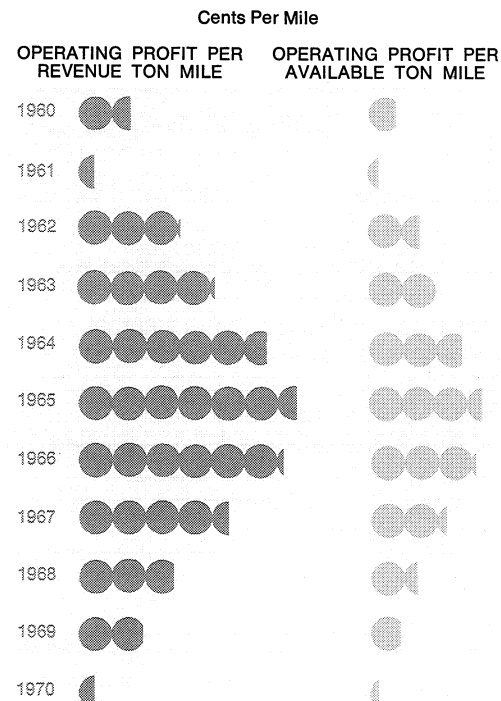
## AIRLINE COSTS — A MOUNTING PROBLEM

*The inflation rate for airline costs in 1970 was 9.0 per cent, almost twice the overall national rate.*

In 1970, the scheduled airline industry lost a total of \$179 million, marking only the third year since the end of World War II that the industry did not turn a profit. The rate of return on total investment fell to its lowest

**Unit Operating Profits**

**U.S. Scheduled Airlines**



level ever—1.5 per cent which is nowhere near the 12 per cent rate of return that the CAB has said is “fair and reasonable.”

This year’s poor financial results represent the coming together of a number of trends in airline economics that began as far back as 1967 when industry profits began to drop off from their 1966 all-time high of \$427 million. The basic problem is that airline costs have, despite stringent cost-cutting, continued to be very difficult to control. These costs, and the industry’s poor traffic growth, were primarily responsible for such heavy losses.

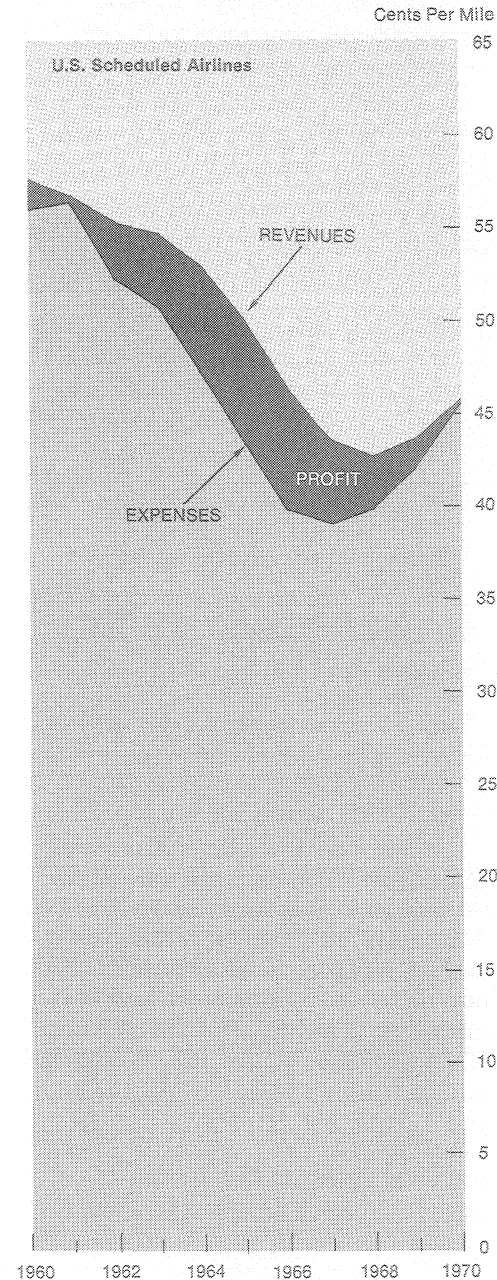
An indication of the extent and severity of the industry’s financial problems is contained in a survey in the April, 1971 issue of the First National City Bank’s Monthly Economic Letter. In it, the earnings of 64 industries were listed and the airline industry was the only one, out of all 64, to show a net loss for the year as an industry group.

#### Unit Costs

One measure of an industry’s financial health is the trend of profits per unit of production—in the airlines’ case, per available ton mile (ATM) flown. In 1970, the airline industry posted a profit margin per available ton mile of less than two-tenths of a cent—the lowest ever.

This came about because operating revenues per ATM, despite some modest increases in passenger and freight rates, have stayed at a level that is far below that of 5 and even 10 years

Unit Revenues, Expenses and Operating Profit Per Revenue Ton Mile



ago. This drop in revenue per ATM had been steady until 1969 when it reached its lowest level in over 20 years. In 1970, it rose only slightly.

At the same time, the expense per revenue ton mile dropped sharply from 1959 to 1967 when it bottomed out and for the next few years stayed at approximately the same level. In 1969, it began for the first time in 10 years to rise. The reason for this bottoming out and then rise in unit costs was that the carriers, by 1967 were almost fully jet equipped with aircraft in a range of sizes, each best suited to the needs of the route it served. This substitution of less efficient piston and jetprop aircraft with the more efficient jet aircraft had, throughout the sixties allowed the carriers to reduce unit operating costs substantially. However, once this re-equipment program was pretty well completed, the carriers could no longer enjoy the same rate of savings and cost reductions to offset inflationary pressures. Consequently expenses per ATM flattened out and then began to rise.

These increasing unit costs have now come so close to unit revenues that the industry’s operating profit is now only a very small fraction of a cent.

#### Labor Costs

Just about one-half of the airline expense dollar goes for wages, salaries and employee benefits. Not only are these costs increasing faster than most other airlines costs, they are increasing faster than the average national growth rate in employee costs.

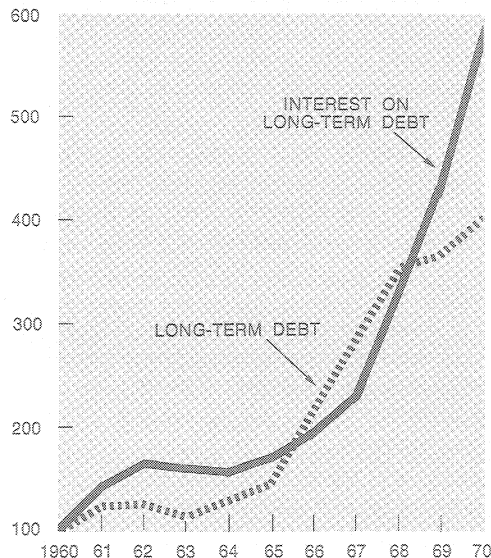
In 1970, the average rate of inflation of all costs for the 12 major airlines was about 9 per cent. This 9 per cent represents an average between a 15 per cent rate of increase in wages and salaries, including fringe benefits, and a 5 per cent rate of increase in all other cash operating expenses.

The average annual wage of an airline employee in 1970 was \$12,300 some \$4,800 above the average annual wage of employees in all private industry. Even taking out management and pilots, the average airline employee last year earned more than \$9,500, still over \$2,000 per year more than the national average for all employees.

**Rise in Long-Term Debt and Interest on Long-Term Debt**

U.S. Scheduled Airlines

INDEX: 1960 = 100



Not only are airline employees paid more than those in private industry, but their wages have been increasing and still are increasing at a faster rate. Between 1965 and 1970, airline employees' salaries increased at an annual rate of 8.1 per cent, while their counterparts in private industry got annual increases of 5.6 per cent. And these kinds of wage pressures on the airlines are going to accelerate in the future, rather than lessen, if the major contracts negotiated in 1970 with some of the most important unions representing airline employees can serve as any kind of indicator. These settlements looked like this:

**Average Annual Wage Increase Over Life of Agreement Major Contracts Negotiated in 1970**

Classification	Number of Carriers	Annual Average Increase-Weighted Average
Clerical/Agent	5	12.5%
Dispatcher	4	8.7
Mechanic	7	11.4
Stewardess	8	8.8

**Other Airline Costs**

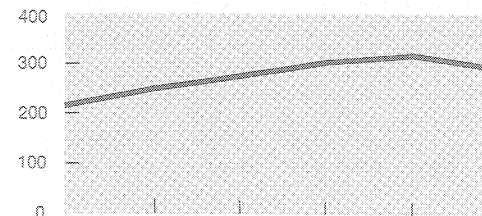
There are other factors along with labor costs which have had an adverse effect on airline cost trends. While these are often difficult to measure, it is possible to get some indication of how rapidly these other costs have been rising.

- *Jet Fuel.* Fuel is, of course, a very basic cost to the airline industry and accounts for one of the largest single operating cost items after labor costs. In late 1970, the price of jet fuel was raised by 6.2 per cent per gallon, an

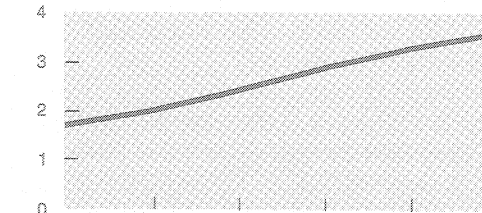
**Airline Employment and Payroll**

U.S. Scheduled Airlines

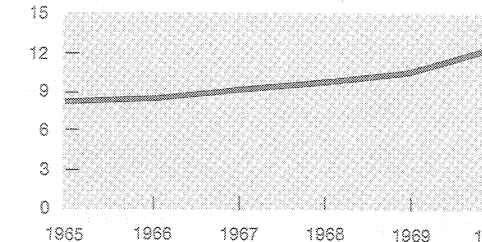
Total Employment (Thousands)



Total Payroll (Billions of Dollars)



Annual Average Wage (Thousands of Dollars)



increase that will add about \$50 million per year to the airlines' fuel costs. And this latest increase has come on top of earlier increases that have raised the price of jet fuel by as much as 12.0 per cent, depending on the type of aircraft.

- **Cost of Capital.** As the airlines are constantly re-equipping themselves with new and more advanced technology aircraft, a very important expense item for them is the cost of obtaining capital to finance these new equipment purchases. Because of this, interest expense has been one of the industry's fastest growing expenses. In 1970, it totaled \$384 million, a 35.5 per cent increase from 1969 and almost five times the level of 1960.

Another way of raising capital, of course, is equity financing. It has been, however, over the past couple of years, for most large airlines, very difficult for them to raise money in the equity market because of the low prices of airline stocks which would make a stock issue not very attractive or profitable and at the same time dilute the value of stock already held by the company's stockholders.

#### Historical Cost of Capital

##### Representative Interest Rates Paid by Airlines

	Year	Type of Obligation	Annual Rate of Interest
<b>Carrier A</b>	1963	Promissory Notes .....	4.15%
	1970	Convertible Debentures ..	8.00
<b>Carrier B</b>	1967	Convertible Debentures ..	4.00
	1970	Installment Payment Agreement .....	9.50
<b>Carrier C</b>	1955	Loan Agreement .....	4.37
	1970	Credit Agreement .....	7.00
	1971	Guaranteed Loan Certificate .....	11.25

Because of this, the airlines have been almost forced to borrow money to finance new equipment purchases. The only other alternative has been to lease aircraft from financing companies; this has become more and more prevalent and now some \$1.5 billion worth of aircraft are actually owned by and leased from another company. However, with the elimination of the Investment Tax Credit, this form of investment is becoming less and less attractive to the financing companies.

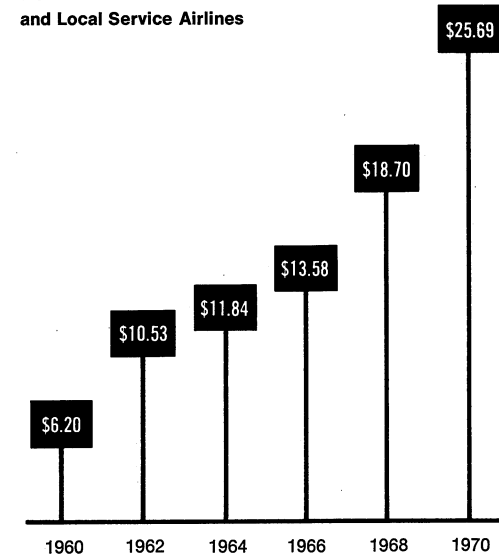
The airlines, over the past five years, have spent about \$11 billion for flight and ground support equipment and much of this has been raised by borrowing at higher and higher interest rates. A sampling of the interest rates that some carriers have paid for capital gives some idea of just how much this expense has been rising for the industry.

This high level of borrowing has had an additional effect, besides causing heavy interest payments, of raising the industry's debt/equity ratio to 66/34 in 1970. This compares to 54/46 in 1965 and is the highest ever.

- **Airport Costs.** The use of airport space for landings and for passenger handling has also become a more and more expensive item for the airlines. Landing fees paid by the carriers have more than quadrupled over the past 10 years and in 1970 totaled almost \$185 million. This increase has not been due entirely to the use of heavier aircraft and a higher volume of traffic. The cost per landing has gone up rapidly also, even in years when the type of jets used by the carriers stayed basically the

#### Average Landing Fee Per Landing

Domestic Trunk and Local Service Airlines



same. In 1960, the domestic trunk and local service carriers paid an average landing fee per landing of \$6.20. By 1965 this had more than doubled to \$12.54 per landing. And in 1970, when the number of scheduled airline operations showed a net decline, the average landing fee was \$25.69, up 19.5 per cent from 1969 and 104.9 per cent from 1965.

On top of landing fees the carriers also pay for rental of space on the airport for passenger terminals, maintenance and overhaul facilities and cargo handling areas. At many airports these rentals are imposed on top of the cost incurred by the carriers themselves for the actual construction of the facilities. □

## AIRLINE COST CUTTING

*To trim their budgets airlines have been cutting flights, laying off employees and taking many other steps aimed at more efficient operations.*

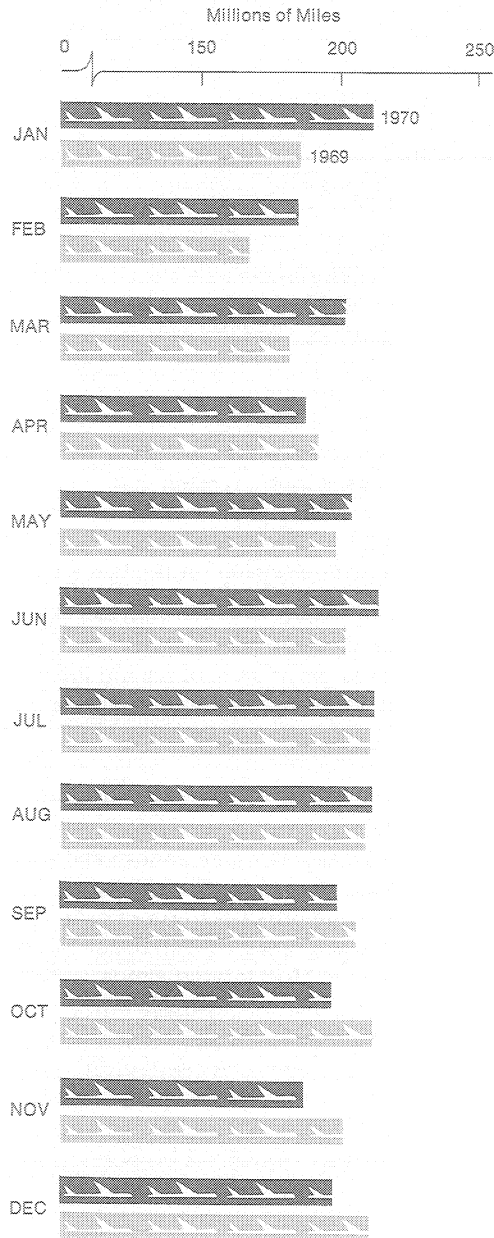
Any company or industry that finds itself with heavy losses, continually rising expenses and almost no growth in sales has to take drastic steps to cut everywhere it can to keep costs down. The airlines have been for the past year or so looking more and more closely for ways to cut unnecessary expenses without seriously reducing their level and quality of service to the traveling public. The major steps have been employee layoffs, flight schedule reductions, and the delaying and cancelling of flight equipment orders. Some less visible steps have taken the form of not quite so many services to their passengers and other behind-the-scenes cost cutting.

### Equipment Cuts

While the airlines are bringing the new generation of advanced technology aircraft into service, they are offering for sale many of their older, first generation jets. This has come about because of the depressed passenger traffic market brought on by the national economic recession which could not have been foreseen three or four years ago when the carriers were making their plans for the seventies. At that time, traffic was growing at annual rates up to and above 20 per cent per year and the national economy was in a seemingly endless boom.

### Overall Aircraft Miles

U.S. Scheduled Airlines



To handle the growth that everyone was sure was on the way with rising incomes, increasing business activity and more leisure time, the carriers ordered many new and more efficient aircraft that would be able to carry this new traffic without causing any more congestion at airports and in the airways. But, in 1970, this traffic simply did not materialize. Declining corporate profits made businessmen cut back on their out-of-town trips and fears of unemployment and inflation made pleasure and personal travelers put off their flying vacation to another, more prosperous year.

Because of this, airline managements found they had flight equipment on order and flights scheduled that would not be needed in light of current passenger and freight loads. Thus, some carriers have found it more expedient to cancel or "stretch-out" their equipment orders rather than take delivery of unneeded aircraft, as well as to sell their older jets.

### Schedule Cutbacks

But most carriers are taking delivery of their new flight equipment and reducing flight frequencies to cut capacity. This has resulted in an unprecedented spate of schedule cutting and a request to the CAB for multi-lateral talks among the carriers to cut competition on key routes.

A close monitoring of flight schedules in the Official Airline Guide gives a clear picture of the impact these cutbacks have had on airline service. Comparing each month from January through May, 1971 with the schedules for the same month of the previous year shows that in each of those five months fewer flights are being offered than were being offered a year earlier.

As table A shows, these cuts have been building until the months of April and May showed decreases of 5.2 per cent in total flights. This trend can be expected to continue, as many carriers have announced that they will not build up their schedules for the summer season as they have in the past. This

is because traffic trends so far in 1971 show domestic traffic declines to be deepening and the growth in international traffic to be lessening from last year. Also, advance bookings for 1971 summer travel indicate that traffic could continue this decline throughout the summer.

#### Employment Reductions

Another cost cutting step taken by the airline industry in 1970 was the large-scale furloughing of employees. In all, a total of 12,000 employees were laid off during the year and more have had to be furloughed in 1971. Due to the fact that some carriers were still hiring in some areas, while others were affected by strikes, the actual net decline in total employment was

from 312,000 in 1969 to 297,374 in 1970. This figure is low and does not reflect actual total employment because one local service carrier was on strike at the end of the year and one trunk carrier was still in the process of recalling employees after a lengthy strike. However, the remaining carriers showed a net decline in employment of 1.4 per cent.

In addition to furloughing, the carriers have found a number of other ways to keep their employment costs down. Some are hiring part-time or temporary extra help to handle increased summer traffic rather than take on full-time people. Bonuses have been eliminated and merit raises for

Table A  
DECLINE IN DAILY SCHEDULED DEPARTURES  
(1971 vs. 1970)

Number of Airports <sup>a</sup>	January		February		March		April		May	
	Decrease	% Change	Decrease	% Change	Decrease	% Change	Decrease	% Change	Decrease	% Change
474 Airports in the 48 Contiguous States.....	567	-4.1%	614	-4.5%	726	-5.3%	711	-5.2%	698	-5.2%
114 Airports in Alaska and Hawaii.....	88	-18.0	58	-13.3	70	-15.7	36	-8.5	0	—
588 Airports in U.S.—50 States.....	655	-4.6	672	-4.8	796	-5.7	747	-5.3	698	-5.0
621 Airports in North America <sup>b</sup> .....	646	-4.5	663	-4.7	757	-5.3	735	-5.2	691	-4.9
<hr/>										
23 Large Hub Airports <sup>c</sup> .....	209	-3.2	300	-4.6	356	-5.5	353	-5.5	366	-5.6
38 Medium Hub Airports <sup>d</sup> .....	179	-6.0	166	-5.7	192	-6.5	184	-6.3	201	-6.8
415 Other Airports in 48 Contiguous States <sup>e</sup> .....	179	-4.3	148	-3.6	178	-4.3	174	-4.2	131	-3.6

<sup>a</sup> As of December, 1970.

<sup>b</sup> Includes 33 airports in Canada, Mexico, and Caribbean points.

<sup>c</sup> Accounted for 48% of departures scheduled in March, 1971.

<sup>d</sup> Accounted for 21% of departures scheduled in March, 1971.

<sup>e</sup> Accounted for 31% of departures scheduled in March, 1971.

Source: Official Airline Guide.

management personnel sharply curtailed at some airlines. At least one carrier has cut top executives' salaries by as much as 15 per cent. Several airlines have taken the rather novel step of giving any employee who will take leave without pay a free ticket to anywhere on its system.

But these employment cuts have not affected the quality of airline service and the main reason for this has been the airline employees themselves. Most of them have pitched in and helped out—by working a little bit of extra overtime, by putting out a bit extra on the job and in many other small but very important ways.

**Other Cost Savings**

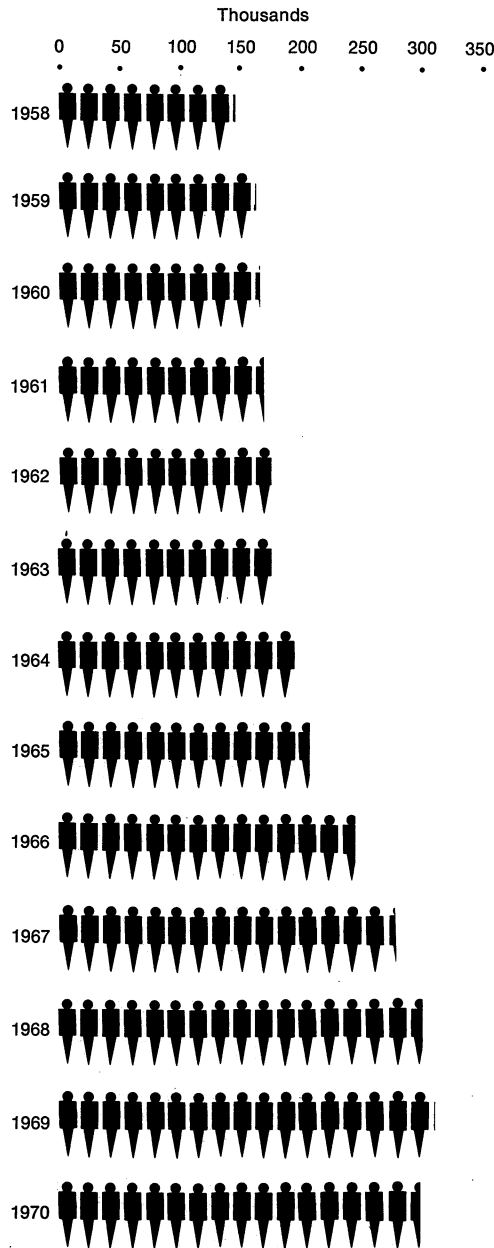
The airline industry is, of course, an extremely competitive one, and because of this the airlines have always been reluctant to cut costs in the area of service to their passengers. But, in looking over their budgets they have found ways in which they could make savings that would not substantially affect the overall quality of the service to the passenger.

Some of these service cuts have included such items as no more fresh flowers on aircraft, fewer snacks with cocktails, reduction in the number of flights receiving meal service, taking movies off morning flights and many other minor changes in passenger and other services.

Cost cutting is also showing up in such areas as advertising, more austere annual reports and employee publications and the consolidation of sales offices and other facilities for greater efficiency. □

**Total Employment**

U.S. Scheduled Airlines



**THE SCHEDULED AIR SYSTEM — A VALUABLE NATIONAL ASSET THREATENED**

*“Scheduled services are of vital importance to air transportation and offer services to the public which are not provided by charter services. Only scheduled services are expected to offer regular and dependably frequent schedules, provide extensive flexibility in length of stay, and maintain worldwide routes, including routes to areas of low traffic volume. Substantial impairment of scheduled services could result in travelers and shippers losing the ability to obtain these benefits. Accordingly, in any instances where a substantial impairment of scheduled services appears likely, it would be appropriate, where necessary to avoid prejudice to the public interest, to take steps to prevent such impairment.”*

*Statement of International Transportation Policy of the United States, June 22, 1970.*

Despite the importance placed on the preservation of the scheduled air transport system by this policy statement, recent experience has shown that the scheduled system is being substantially impaired by the inroads of the supplemental airlines into the pleasure travel market to Europe and other parts of the world. These carriers, who have no obligation to provide regular service are supposed, by their very definition, to supplement the scheduled air system.



However, in a growing number of the peak travel markets, especially during the high summer season, these airlines have done much more than supplement the scheduled system. For example, during the 1969 summer season, the supplementals' penetration of some peak markets looked like this:

New York-Rome	39.7%
California-Europe	63.7
New York-Amsterdam	67.4
New York-Frankfurt	68.2

One expert has predicted that in the California-Europe market, the supplementals will carry 90 per cent of the 1971 summer traffic.

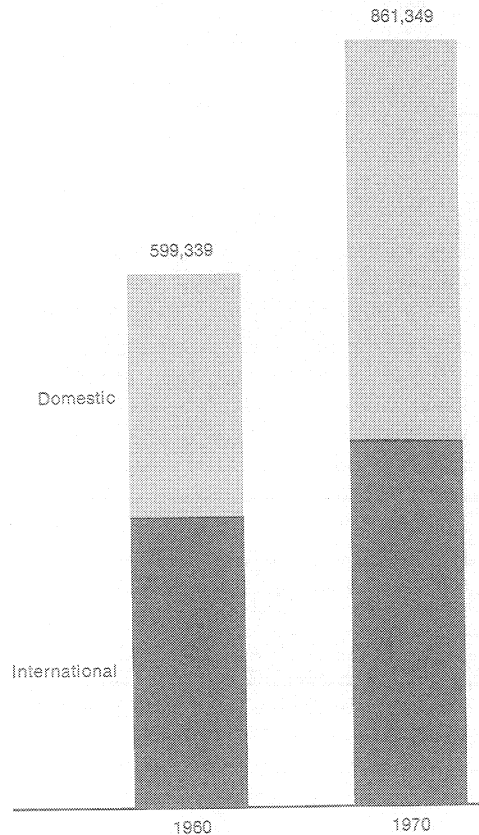
A survey of charter flight passengers by Louis Harris in the summer of 1969 demonstrates that the supplementals are carrying many passengers that would otherwise be on a scheduled airline, not adding to the air travel market.

- The demographics of these passengers were almost identical to those on scheduled flights in terms of income, education and profession.
- They were relatively experienced air travelers. Almost all had flown before, more than half had used the scheduled airlines for their previous foreign trips.
- 35 per cent of them would have "certainly" and another 22 per cent would have "probably" taken a scheduled flight if they had not been able to get a charter flight.

- Over 80 per cent planned to travel individually in Europe rather than with a group.

These results are quite contrary to the supplementals' assertion that they are developing a whole new market of travelers who like to travel in groups with their friends and who cannot afford the scheduled airlines. They are actually

Route Miles Served  
U.S. Scheduled Airlines



raiding passenger markets developed over many years by the scheduled carriers with low promotional and discount fares.

An estimate of the diversion of passenger traffic was made based on the assumption that at least one-half of the passengers carried by the airlines would have used the scheduled airlines if a charter flight had not been available—a fairly safe assumption in light of the Louis Harris survey results. Based on that figure, the two U.S. scheduled trans-Atlantic carriers lost more than \$50 million in revenues in the 12 months ended June 30, 1970, due to diversion by the supplementals.

The fact is that the supplementals are skimming the cream off of the scheduled systems' traffic. The scheduled airlines must have good loads and heavy traffic on the peak routes in peak seasons to support their low season and low volume services which, as the policy statement made clear, they are expected to provide. The effect of the erosion of the scheduled system by the supplementals is to take away the profit from these routes that make possible the provision of the unprofitable services, throwing off the balance of the whole scheduled system built up through the years. □

# AIR FARES — STILL A CONSUMER BARGAIN

*Despite some recent increases, airline rates still lag far behind other consumer prices and have helped hold down the cost of travel.*

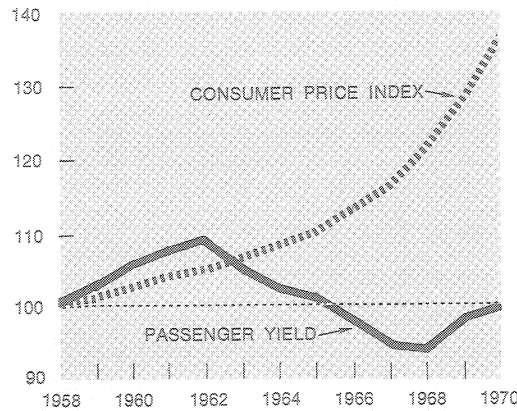
As the cost of just about everything the consumer buys goes up and up, air travel remains one of the best bargains in the consumer's market basket. And because it is such a bargain, it has helped keep down the cost of travel by counterbalancing the rising costs of all other elements in the travel market—hotel costs, restaurant costs, local transportation fares and many tourist attraction admissions.

In 1970, the average fare paid by a passenger on a U.S. scheduled airline per mile, or the average revenue per revenue passenger mile, was actually 5.9 per cent lower than it was in 1960. This happened because, although the basic fare for a coach or first class ticket has gone up, more and more people have been taking advantage of the many discount fares offered by the airlines—such fares as Discover America, Family, Excursion, Youth and Military Standby and Visit USA (for foreigners) fares. The use of these fares has become so widespread that, during peak travel seasons, almost one-half of all airline passengers are flying on some kind of discount

U.S. Scheduled Airlines

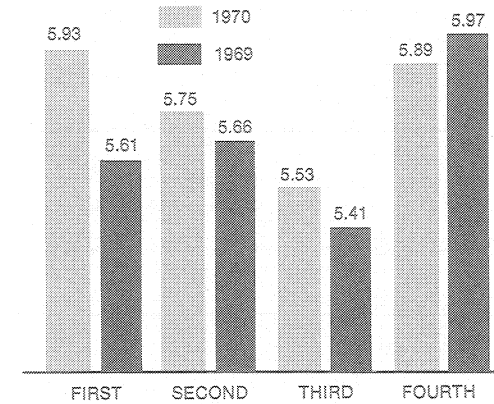
Airline Fares and Consumer Prices

INDEX: 1957-59 = 100



Quarterly Passenger Yield

Cents Per Mile



fare, and paying, on the average, 35 per cent less than the full-fare passengers.

Another way of showing what a bargain air travel is, is to compare the trend of air fares with the Consumer Price Index. Using the average passenger yield for the 1957-1959 period, exactly as the CPI is constructed, shows that while consumer prices have risen 35.8 per cent since then, the average passenger yield is at just about exactly the same level as it was in 1957-1959.

While it is too early to gauge the effects of the recent selective fare increases in congested markets and the

overall 6.0 per cent increase granted recently by the CAB, it is known that the effect on passenger yield is not as great as the amount of the fare increase. This is because, as fares increase, people often tend to change to a less expensive class of travel. For example, a first class passenger might decide to switch to coach or a coach passenger might decide to stay a few extra (or fewer) days in order to take advantage of some kind of discount or excursion fare. Factors such as these tend to change the "mix" of the air travel market and, therefore, dilute the yield that would have been realized if everyone retained their former travel habits after a fare increase takes effect.

An example of this effect is the fact that, despite some selective fare increases that were already in effect in the fourth quarter of 1970 and, therefore, basic fares were slightly higher than they were in 1969, the passenger yield in the fourth quarter of 1970 actually was lower than in the fourth quarter of 1969. For October through December, 1970, the average yield was 5.89 cents per mile; in the same period of 1969 it was 5.97 cents—1.3 per cent higher.

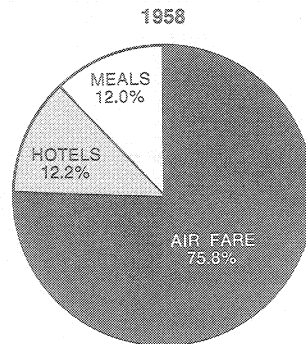
Because of this fact—that airline passengers are paying less for an airline ticket, on the average, than they were 10 years ago—the cost of taking a trip by air has been held down to a level far below what it would have been had air fares gone up at the same rate as everything else in the travel package. For example, the average trip to Europe by a U.S. citizen in 1970 cost about \$836. But if air fares had gone up at the same rate as hotel rooms and restaurant meals in Europe, that same trip would have cost, instead of \$836, almost \$1700, or twice the actual cost.

Another measure of the role of air fares in holding down the cost of trips by air is the fact that between 1958 and 1970, the per cent of air fare as part of the total cost of a trip to Europe declined from just over three-quarters to just under one-half. Within the U.S. the story is the same—air fares have decreased as a per cent of the total travel package. Since 1958, the air fare has declined from 31.6 per cent of the total package to 18.7 per cent. □

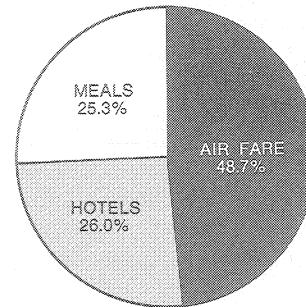
### Cost of Travel

#### DISTRIBUTION OF EXPENSES FOR ...

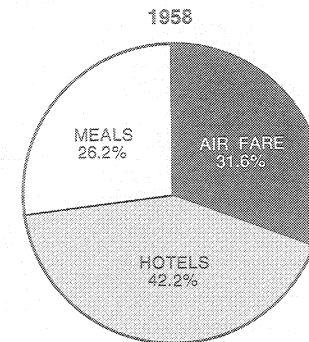
10 DAYS IN EUROPE



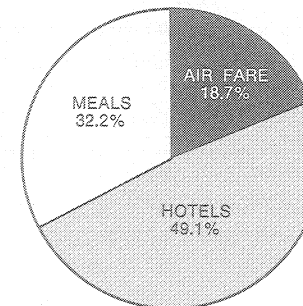
1970



10 DAYS IN A LARGE U.S. CITY



1970



# AIRPORTS – AN URGENT PRIORITY FOR THE SEVENTIES

*Development of the nation's airport system is not being given the top priority that is urgently needed if it is to meet the needs of the seventies.*

The dramatic slowdown in the rate of airline traffic growth in 1970, along with airline efforts to reduce costs by eliminating unprofitable flights, provided a brief breathing spell from the problems of airport congestion which have been characteristic of previous years.

However, normal traffic growth— just now showing early signs of resumption—underlines the urgency for reducing the tremendous backlog of airport development projects which has been accumulating for many years. Certainly, a return to the growth levels of the sixties could result in unprecedented congestion problems at many of the major airports.

Financing airport development on the local level has become extremely difficult as hard-pressed cities and municipalities are faced with requirements for financing a growing number of public projects. This comes at a time when virtually all of the 23 large hub cities and many of the medium and small hub cities have a demonstrated need for new or expanded airport facilities. Yet despite these needs, there is only one new major airport under construction in the United States at this time—at Dallas-Ft. Worth.

Enactment of the Airports and Airways Development Act of 1970 is an important step towards allowing airport development to keep pace with aviation technology and growth. It is expected that the new user charges imposed by this legislation will make possible considerably higher levels of federal financing for airport modernization and expansion than have been available at any time in the past. However, even this hope

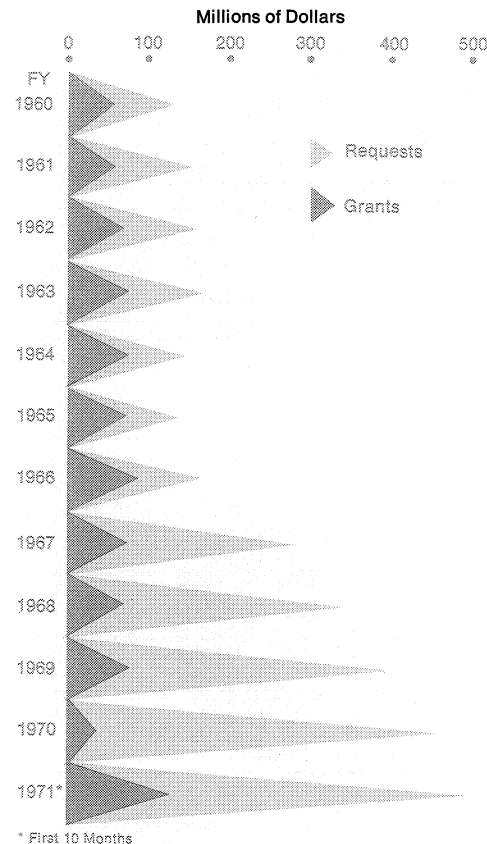
is threatened by the Administration's transportation revenue sharing proposal which would give this and other transportation funds back to the states and localities but with no provision that they be used for aviation facilities.

Historically, federal assistance for airport development has been far from adequate; no more than \$75 million has been appropriated in any single year while requests from communities for airport assistance have been growing rapidly each year. Thus, by the end of the decade of the 1960's a backlog of many millions of dollars of urgently required airport development projects was on the books and resulted in a 1969 Congressional finding that the nation's system of airports and airways was inadequate to meet the current and projected growth of aviation. Enactment of the new legislation by Congress in 1970 was widely heralded as a solution to the "airport crisis."

Despite implementation of the Airport Development Aid Program in July, 1970, the backlog of vitally needed airport improvements and expansion has continued to grow. In the first 10 months of the new program, for example, more than 600 requests totalling nearly \$500 million were submitted by communities in need of airport assistance funds while only about 200 requests amounting to about \$125 million were granted.

Continued failure to grant the needed funds for airport development can only result in a congestion crisis in the seventies that will make that of the sixties pale. □

**Comparison of Requests for Funds for Airport Development with Funds Actually Granted**



# AIRPORTS AND AIRWAYS

## Active Aircraft in the Civil Aviation Fleet

	1970	1969	1965	1960
<b>Air Carrier</b>				
Piston.....	64	120	875	1,413
Turbine.....	2,357	2,283	1,000	429
Rotorcraft.....	16	18	21	25
Total.....	2,437	2,421	1,896	1,867
% of Total.....	1.8	1.8	1.9	2.4
<b>General Aviation</b>				
Piston.....	127,400	124,586	92,556	75,544
Turbine.....	2,400	2,229	574	—
Rotorcraft.....	2,700	2,557	1,503	634
Other.....	1,500	1,434	809	371
Total.....	134,000	130,806	95,442	76,549
% of Total.....	98.2	98.2	98.1	97.6
<b>Total.....</b>	<b>136,437</b>	<b>133,227</b>	<b>97,338</b>	<b>78,416</b>

## Aircraft Hours Flown in Civil Aviation

<b>Scheduled Air Carrier</b>				
Domestic Service.....	5,770,664	4,918,028	3,500,115	3,532,876
International and Territorial Service.....	811,013	977,686	571,828	555,529
Total.....	6,581,677	5,895,714	4,071,943	4,088,405
% of Total.....	20.5	18.9	19.6	25.1
<b>General Aviation.....</b>	<b>25,500,000<sup>B</sup></b>	<b>25,351,000</b>	<b>16,733,000</b>	<b>12,203,000</b>
% of Total.....	79.5	81.1	80.4	74.9
<b>Total.....</b>	<b>32,081,677</b>	<b>31,246,714</b>	<b>20,804,943</b>	<b>16,291,405</b>

<sup>B</sup> Estimated

## Total U.S. Airports, FAA Control Towers and Points Receiving Scheduled Airline Service

Total Airports on Record with FAA.....	11,340	11,050	9,566	6,881
Total FAA Control Towers.....	335	328	292	229
Points Receiving Scheduled Airline Service.....	518	524	532	575

## Aircraft Operations at Airports With FAA Control Towers

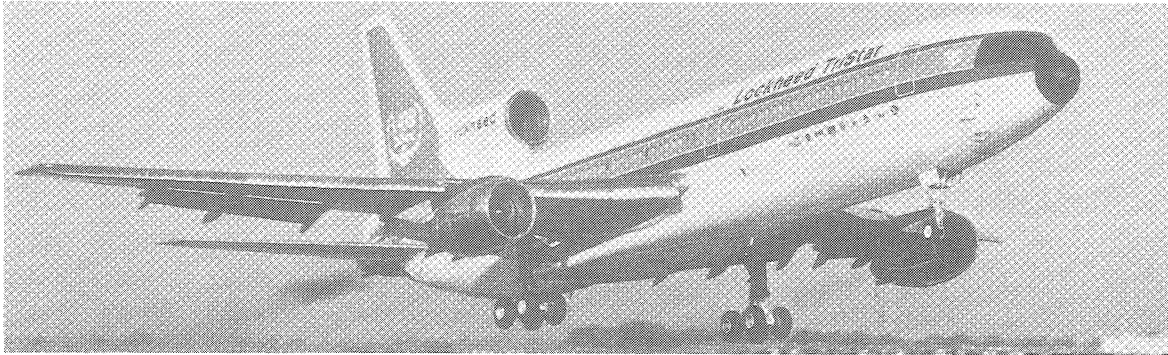
	1970	1969	1965	1960
<b>Air Carrier</b> .....	<b>10,393,294</b>	<b>10,929,013</b>	<b>7,819,114</b>	<b>7,164,394</b>
% of Total.....	18.8	19.4	20.6	27.8
<b>General Aviation</b> .....	<b>41,384,006</b>	<b>41,956,677</b>	<b>26,572,650</b>	<b>14,826,063</b>
% of Total.....	74.9	74.6	70.2	57.5
<b>Military</b> .....	<b>3,503,198</b>	<b>3,346,131</b>	<b>3,478,771</b>	<b>3,783,533</b>
% of Total.....	6.3	6.0	9.2	14.7
<b>Total.....</b>	<b>55,280,498</b>	<b>56,231,821</b>	<b>37,870,535</b>	<b>25,773,990</b>

## Distribution of Aircraft Operations at Large Hub Airports

(in order of enplaned passengers)

	1970*			1960		
	Air Carrier	General Aviation	Military	Air Carrier	General Aviation	Military
Chicago O'Hare.....	94.5%	5.1%	0.4%	66.8%	24.2%	9.0%
Los Angeles.....	76.2	22.2	1.6	74.8	17.6	7.5
Atlanta.....	85.6	14.1	0.3	72.8	23.5	3.7
John F. Kennedy.....	86.0	13.8	0.2	87.3	11.8	0.9
San Francisco.....	77.7	20.8	1.5	61.9	32.0	6.1
LaGuardia.....	79.7	20.1	0.2	71.5	28.0	0.5
Dallas.....	69.6	29.8	0.6	56.9	40.9	2.3
Washington National.....	65.8	33.3	0.9	71.6	24.2	4.3
Miami.....	66.3	30.8	2.9	52.1	42.2	5.7
Boston.....	65.9	33.8	0.2	61.6	28.1	10.3
Detroit.....	70.9	27.1	2.0	69.9	28.0	2.2
Newark.....	76.1	23.9	0.1	74.7	23.9	1.4
Denver.....	47.6	52.1	0.3	34.3	61.3	4.5
Philadelphia.....	69.5	29.5	1.0	59.3	31.4	9.3
St. Louis.....	57.6	37.7	4.8	45.9	52.8	1.3
Pittsburgh.....	63.7	28.5	7.8	66.4	16.3	17.3
Minneapolis.....	54.5	36.7	8.8	42.8	33.2	24.0
Cleveland.....	44.8	54.9	0.3	59.2	39.0	1.8
Seattle/Tacoma.....	67.7	31.5	0.7	69.8	26.8	3.4
Houston.....	73.0	26.9	0.1	35.5	58.2	6.2
Kansas City.....	57.8	41.8	0.4	45.9	52.8	1.3
New Orleans.....	69.0	29.0	2.0	75.8	18.9	5.3
Las Vegas.....	38.7	56.6	4.6	29.6	66.2	4.2
<b>Total 23 Large Hubs.....</b>	<b>70.1</b>	<b>28.3</b>	<b>1.7</b>	<b>60.5</b>	<b>33.8</b>	<b>5.7</b>

\* 12 months ended June 30, 1970

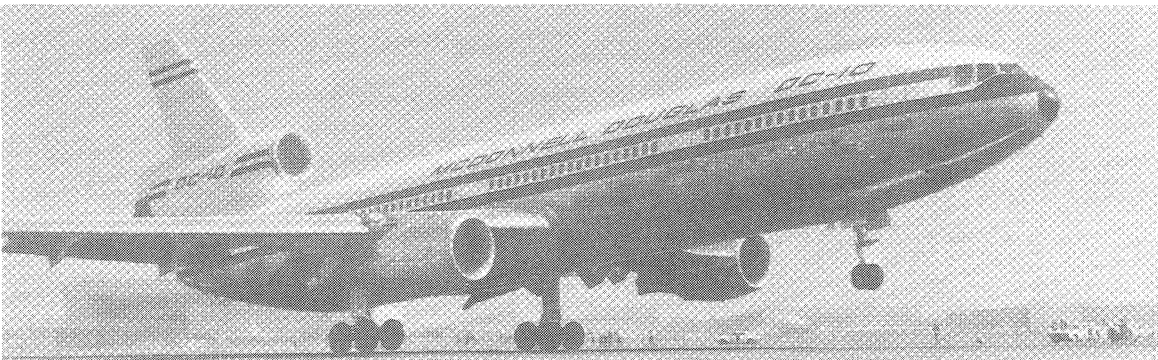


## AIRCRAFT ON ORDER U.S. Scheduled Airlines (As of June 1, 1971)

Manufacturer	Model	Total on Order	For Delivery In			1974 & beyond
			1971	1972	1973	
Boeing	B-727	3	3	—	—	—
	B-747	23	17	2	4	—
Douglas	DC-9	3	3	—	—	—
	DC-10	85	12	47	22	4
Lockheed	TriStar 1011	88*	—	—	—	—
<b>Total</b>		<b>202</b>				

\*Because of the bankruptcy of Rolls Royce, the manufacturer of the engines for the L-1011, in February, 1971, the delivery schedules for these aircraft are not now certain and airline contracts for these aircraft are being renegotiated.

The carriers also have on order 38 of the British-French Concorde supersonic airliner valued at approximately \$760 million. This brings the total airline re-equipment program for subsonic and supersonic aircraft to about \$4.0 billion.



# AIRCRAFT IN SERVICE U.S. Scheduled Airlines

Manufacturer	Model	1970	1969	1965	1960	Manufacturer	Model	1970	1969	1965	1960	
<b>Boeing:</b>	377	---	---	---	3	<b>Martin:</b>	202	---	---	13	15	
	B707 (Jet)	399	417	187	91		404	18	37	71	80	
	B720 (Jet)	115	127	121	22	<b>Nihon:</b>	YS-11 (Turboprop)	21	17	---	---	
	B727 (Jet)	631	605	168	---			<b>Nord Aviation:</b>	262 (Turboprop)	---	---	5
	B737 (Jet)	133	132	---	---	<b>Sud Aviation:</b>	Caravelle (Jet)			---	20	20
	B747 (Jet)	79	1	---	---			<b>Vickers:</b>	Viscount (Turboprop)	3	3	59
<b>British Aircraft Corp.:</b>	BAC 111 (Jet)	59	60	17	---	<b>Other:</b>				45	46	75
		<b>Canadair:</b>	CL 44 (Turboprop)	8	9			24	---	<b>Totals:</b>		
<b>Convair:</b>	240			---	1	55	51	Jet	2,041	1,973	712	202
				340/440	6	7	145	148	Turboprop	300	310	288
540 (Turboprop)	---			---	---	4	Piston	80	120	875	1,413	
580/600 (Turboprop)	142			143	20	---	<b>Total Fixed Wing:</b>	<b>2,421</b>	<b>2,403</b>	<b>1,875</b>	<b>1,842</b>	
880 (Jet)	41			41	47	14	<b>Helicopters:</b>	<b>Bell:</b>	B47	---	---	---
990 (Jet)	---	---	18	---	206 (Turbine)	3				3	---	---
<b>Curtiss:</b>	C-46	6	6	24	42	<b>Sikorsky:</b>		S51	---	---	---	2
		<b>Douglas:</b>	DC-3	---	5				140	276	S55	---
DC-4	---			---	5	52		S58	3	3	4	7
DC-6	3			7	177	301		S61 (Turbine)	6	8	7	---
DC-7	2			10	64	217	S62 (Turbine)	---	---	1	1	
DC-8 (Jet)	257			254	130	75	<b>Boeing Vertol:</b>	V107 (Turbine)	4	4	7	---
DC-9 (Jet)	327	316	4	---	V-44B	---			---	---	5	
<b>Fairchild Hiller:</b>	F-27 (Turboprop)	35	36	63	42	<b>Total Helicopters:</b>	<b>16</b>	<b>18</b>	<b>21</b>	<b>25</b>		
		FH-227 (Turboprop)	47	53	---	---						
<b>Lockheed:</b>	Constellation	---	---	36	75							
		Super Constellation	---	1	70	129						
		Electra (Turboprop)	36	40	117	107						
		L-382B/100 (Turboprop)	8	9	---	---						

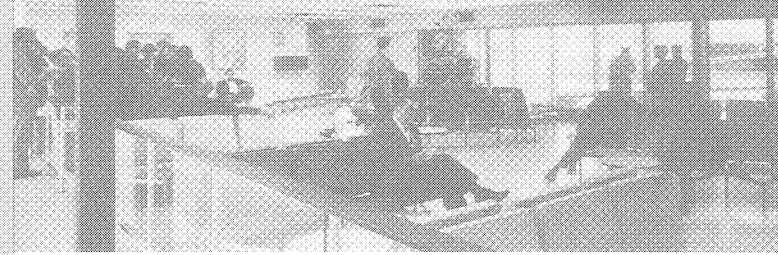
# HOW THE AIRLINES RANK — 1970

Numbers in parentheses show carrier rank in 1969.

## PASSENGERS ENPLANED

System Operations (000)

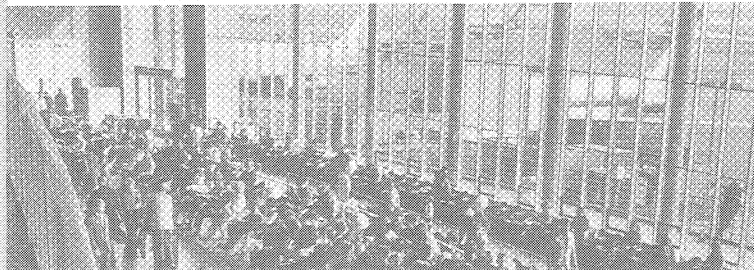
1. United (1)	28,104
2. Eastern (2)	22,289
3. American (3)	19,182
4. Delta (4)	16,182
5. Trans World (5)	13,852
6. Pan American (6)	10,128
7. Western (9)	6,508
8. Braniff (8)	6,247
9. Allegheny (11)	5,917
10. Continental (12)	5,070
11. Northwest (7)	4,683
12. North Central (13)	3,706
13. National (10)	3,370
14. Hughes Air West (15)	3,154
15. Piedmont (19)	2,696
16. Northeast (14)	2,507
17. Frontier (17)	2,449
18. Ozark (18)	2,413
19. Mohawk (16)	2,330
20. Texas International (20)	2,218
21. Hawaiian (21)	1,657
22. Southern (22)	1,589
23. Aloha (23)	986
24. Trans Caribbean (25)	523
25. Caribbean-Atlantic (24)	481
26. Alaska (26)	453
27. Wien Consolidated (28)	299
28. New York Airways (29)	268
29. San Francisco & Oakland Hel. (27)	230
30. Los Angeles Airways (30)	62
31. Aspen (31)	40
32. Reeve Aleutian (32)	28
33. Kodiak (34)	13
Chicago Helicopter (36)	13
34. Western Alaska (33)	11
35. Tag (35)	10



## TOTAL OPERATING REVENUES

System Operations (000)

1. United (1)	\$1,501,659
2. Trans World (2)	1,150,277
3. American (4)	1,125,632
4. Pan American (3)	1,123,591
5. Eastern (5)	971,050
6. Delta (6)	648,376
7. Northwest (7)	379,106
8. Braniff (8)	323,465
9. Western (11)	298,110
10. Continental (10)	289,366
11. National (9)	197,370
12. Allegheny (13)	154,635
13. Flying Tiger (14)	123,372
14. Northeast (12)	122,836
15. North Central (18)	91,952
16. Frontier (16)	91,776
17. Seaboard (15)	72,937
18. Piedmont (22)	70,661
19. Ozark (21)	68,110
20. Hughes Air West (17)	65,719
21. Mohawk (19)	63,243
22. Texas International (23)	62,123
23. Southern (26)	49,734
24. Airlift (20)	49,040
25. Trans Caribbean (24)	47,251
26. Alaska (25)	38,372
27. Hawaiian (27)	28,191
28. Wien Consolidated (28)	21,846
29. Aloha (29)	16,208
30. Caribbean-Atlantic (30)	10,518
31. Reeve Aleutian (31)	5,378
32. New York Airways (32)	4,130
33. San Francisco & Oakland Hel. (33)	2,877
34. Los Angeles Airways (34)	1,322
35. Aspen (35)	929
36. Kodiak (36)	921
37. Chicago Helicopter (37)	659
38. Western Alaska (38)	455
39. Tag (39)	228



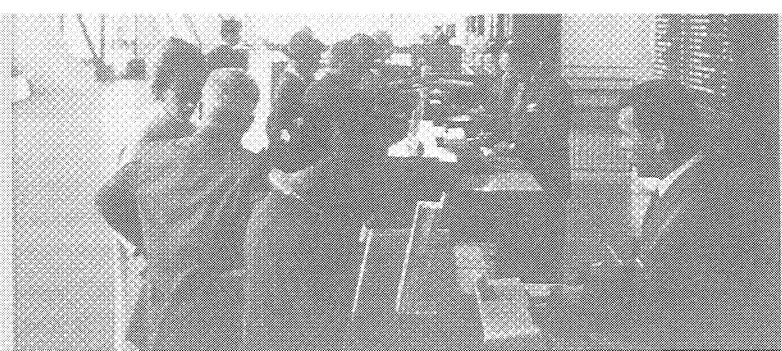
Source: Civil Aeronautics Board, *Air Carrier Traffic Statistics*, December, 1970 and Form 41 data submitted to the CAB.



## OVERALL REVENUE TON MILES—ALL SERVICES

System Operations (000)

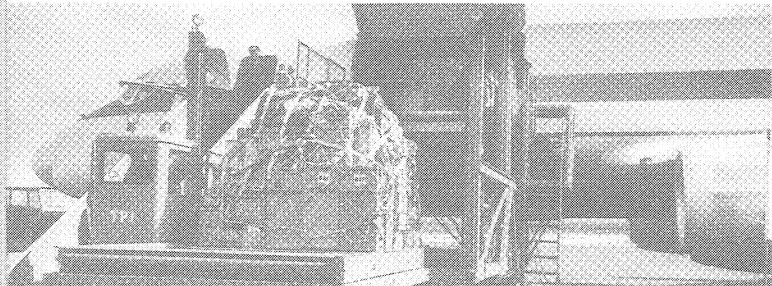
1. United (1)	3,284,987
2. Pan American (2)	3,100,805
3. Trans World (3)	2,635,645
4. American (4)	2,405,376
5. Eastern (5)	1,763,014
6. Delta (7)	1,183,705
7. Northwest (6)	754,106
8. Flying Tiger (10)	737,376
9. Braniff (8)	690,569
10. Continental (9)	689,839
11. Western (13)	584,554
12. Seaboard (11)	421,324
13. National (12)	312,676
14. Airlift (14)	265,627
15. Northeast (15)	209,138
16. Allegheny (17)	190,264
17. Trans Caribbean (16)	148,574
18. Frontier (18)	119,621
19. Hughes Air West (19)	95,889
20. North Central (21)	91,551
21. Piedmont (23)	83,114
22. Ozark (24)	77,347
23. Texas International (25)	72,853
24. Alaska (22)	67,988
25. Mohawk (20)	65,655
26. Southern (26)	55,253
27. Hawaiian (27)	25,876
28. Wien Consolidated (28)	19,057
29. Aloha (30)	13,990
30. Caribbean-Atlantic (29)	11,891
31. Reeve Aleutian (21)	6,692
32. Aspen (32)	665
33. New York Airways (35)	508
34. San Francisco & Oakland Hel. (34)	396
35. Los Angeles Airways (33)	245
36. Kodiak (36)	186
37. Western Alaska (37)	138
38. Tag (38)	111
39. Chicago Helicopter (39)	22



## REVENUE PASSENGER MILES

System Operations (000)

1. United (1)	23,767,905
2. Trans World (2)	18,599,086
3. American (3)	16,623,324
4. Pan American (4)	16,389,435
5. Eastern (5)	14,670,973
6. Delta (6)	9,712,707
7. Western (9)	5,072,279
8. Northwest (7)	4,506,252
9. Continental (11)	4,433,901
10. Braniff (10)	4,262,342
11. National (8)	2,642,692
12. Northeast (12)	1,856,050
13. Allegheny (13)	1,682,840
14. Frontier (14)	1,022,128
15. Hughes Air West (15)	892,610
16. Trans Caribbean (16)	818,573
17. North Central (18)	778,375
18. Piedmont (19)	744,911
19. Texas International (21)	659,214
20. Ozark (20)	652,579
21. Mohawk (17)	576,448
22. Southern (22)	430,736
23. Alaska (23)	332,078
24. Hawaiian (24)	224,094
25. Aloha (25)	130,940
26. Caribbean-Atlantic (26)	107,436
27. Wien Consolidated (27)	89,984
28. Reeve Aleutian (28)	21,452
29. New York Airways (31)	4,983
30. Aspen (32)	4,539
31. San Francisco & Oakland Hel. (30)	3,798
32. Los Angeles Airways (29)	2,336
33. Tag (33)	873
34. Kodiak (34)	612
35. Western Alaska (35)	484
36. Chicago Helicopter (36)	224



## TRAFFIC AND SERVICE U.S. Scheduled Airlines

TOTAL INDUSTRY	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
<b>Passenger Traffic</b>											
Revenue passengers enplaned (000).....	169,668	171,894	162,181	142,499	118,061	102,920	88,520	77,403	67,817	63,012	62,256
Revenue passenger miles (000).....	131,719,194	125,414,212	113,958,321	98,746,641	79,889,246	68,676,459	58,493,654	50,362,042	43,760,413	39,830,846	38,862,964
Available seat miles (000).....	264,903,858	250,845,906	216,445,750	174,818,524	137,844,486	124,319,945	106,315,777	94,844,743	82,611,938	71,856,741	65,567,308
Revenue passenger load factor (%).....	49.7	50.0	52.6	56.5	58.0	55.2	55.0	53.1	53.0	55.4	59.3
Average length of haul (miles).....	776	730	703	693	677	667	661	651	645	632	624
<b>Cargo Traffic (Ton Miles)—total (000).....</b>											
Freight (000).....	3,407,650	3,246,326	2,804,878	2,351,108	2,050,735	1,730,295	1,301,487	1,026,533	898,187	732,950	643,468
Express (000).....	106,521	109,465	105,153	98,883	99,690	89,859	78,310	70,832	69,924	61,165	59,469
Priority U.S. Mail (000).....	606,506	577,029	581,883	567,301	542,771	372,294	289,913	266,402	251,349	223,125	202,007
Nonpriority U.S. Mail (000).....	863,670	757,506	675,168	408,825	207,745	110,683	81,396	90,200	88,563	76,103	38,565
<b>Overall Traffic and Service</b>											
Nonscheduled traffic—total ton miles (000).....	2,019,836	3,091,192	2,865,022	2,648,005	1,754,930	909,401	582,369	514,169	668,135	423,931	295,606
Total revenue ton miles—all services (000).....	20,186,627	19,989,378	18,114,334	15,684,289	12,440,854	9,894,985	8,015,941	6,860,302	6,238,261	5,394,631	5,024,283
Total available ton miles—all services (000).....	44,265,063	42,779,192	37,223,333	30,785,135	23,505,292	19,660,993	16,302,481	13,930,752	12,325,910	10,578,367	9,383,531
Ton mile load factor (%).....	45.6	46.7	48.7	46.4	52.9	50.3	49.2	49.2	50.6	51.0	53.5
Scheduled revenue aircraft departures.....	5,101,462	5,379,125	5,348,110	4,945,947	4,373,318	4,197,584	3,954,083	3,788,362	3,660,147	3,750,482	3,852,907
Scheduled revenue aircraft miles (000).....	2,415,333	2,384,888	2,145,972	1,833,563	1,482,486	1,353,503	1,189,135	1,095,058	1,009,784	969,556	997,975
Scheduled revenue aircraft hours.....	6,581,677	5,895,714	5,521,311	4,924,613	4,233,467	4,071,943	3,774,772	3,606,638	3,491,051	3,654,519	4,088,405

For notes to statistical tables see page 45.

# TRAFFIC AND SERVICE U.S. Scheduled Airlines

## DOMESTIC TRUNK AIRLINES

	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
<b>Passenger Traffic</b>											
Revenue passengers enplaned (000).....	122,866	126,310	118,810	105,854	86,423	76,677	65,963	58,222	51,032	48,352	48,678
Revenue passenger miles (000).....	95,899,744	89,184,622	81,611,832	70,990,141	56,802,788	48,986,972	41,658,368	36,383,756	31,827,840	29,534,792	29,233,199
Available seat miles (000).....	194,461,931	178,646,708	153,864,640	124,141,624	97,174,719	88,731,152	75,242,408	67,601,302	59,736,760	52,525,014	49,153,645
Revenue passenger load factor (%).....	49.3	49.9	53.0	57.2	58.5	55.2	55.4	53.8	53.3	56.2	59.5
Average length of haul (miles).....	781	706	687	671	657	639	632	625	624	611	601
<b>Cargo Traffic (Ton Miles)—total (000).....</b>											
Freight (000).....	2,555,646	2,286,847	2,072,466	1,666,721	1,353,051	1,131,081	902,733	752,609	699,046	585,595	507,296
Express (000).....	1,789,701	1,606,225	1,439,161	1,190,067	988,485	835,118	650,732	520,632	473,955	384,161	320,950
Priority U.S. Mail (000).....	95,445	98,454	94,874	89,343	87,128	80,424	70,530	64,914	64,879	56,746	55,440
Nonpriority U.S. Mail (000).....	344,491	296,792	285,988	266,730	236,018	182,673	151,763	138,661	131,711	117,928	108,061
	326,009	285,376	252,443	120,581	41,420	32,866	29,708	28,402	28,501	26,760	22,845
<b>Overall Traffic and Service</b>											
Nonscheduled traffic—total ton miles (000).....	443,083	492,009	425,942	498,919	287,753	165,401	45,251	24,230	22,665	16,272	18,968
Total revenue ton miles—all services (000).....	12,589,056	11,327,847	10,321,322	8,969,988	7,083,014	5,983,537	4,928,807	4,257,567	3,771,029	3,435,219	3,332,483
Total available ton miles—all services (000).....	29,622,140	26,918,535	23,097,750	18,769,379	14,403,764	12,850,594	10,752,433	9,222,953	8,114,187	7,176,178	6,582,820
Ton mile load factor (%).....	42.5	42.1	44.7	47.8	49.2	46.6	45.8	46.2	46.5	47.9	50.6
Scheduled revenue aircraft departures.....	2,979,044	3,136,543	3,005,352	2,749,451	2,290,949	2,252,205	2,105,980	2,075,499	1,991,680	2,105,370	2,298,663
Scheduled revenue aircraft miles (000).....	1,748,729	1,662,883	1,486,460	1,258,265	995,729	926,369	808,419	752,716	699,900	676,781	712,786
Scheduled revenue aircraft hours.....	4,008,837	3,903,262	3,597,467	3,134,676	2,589,592	2,541,328	2,354,069	2,288,840	2,229,780	2,386,985	2,784,941

## LOCAL SERVICE AIRLINES

### Passenger Traffic

Revenue passengers enplaned (000).....	26,472	24,548	23,389	19,032	16,295	12,911	11,022	9,322	8,055	6,853	5,949
Revenue passenger miles (000).....	7,439,842	6,310,630	5,489,224	4,114,304	3,467,510	2,621,201	2,244,488	1,868,988	1,607,673	1,343,761	1,141,593
Available seat miles (000).....	16,808,389	14,722,390	12,153,585	8,862,400	6,908,077	5,545,691	4,836,305	4,266,886	3,797,465	3,228,491	2,724,666
Revenue passenger load factor (%).....	44.3	42.9	45.2	46.4	50.2	47.3	46.4	43.8	42.3	41.6	41.9
Average length of haul (miles).....	281	257	235	216	213	203	204	200	200	196	192

### Cargo Traffic (Ton Miles)—total (000).....

Freight (000).....	86,414	70,435	59,036	41,277	35,701	27,801	22,008	17,687	14,822	11,866	8,961
Express (000).....	53,647	40,051	31,415	22,054	19,782	15,485	11,923	9,024	7,218	5,491	3,845
Priority U.S. Mail (000).....	8,713	7,998	7,482	6,417	7,099	5,983	5,080	4,311	3,772	3,019	2,419
Nonpriority U.S. Mail (000).....	11,223	10,039	9,720	7,794	7,770	5,520	4,350	3,765	3,303	2,773	2,110
	12,831	12,347	10,419	5,012	1,050	813	655	587	529	583	587

### Overall Traffic and Service

Nonscheduled traffic—total ton miles (000).....	21,077	15,315	11,062	8,622	4,443	2,872	3,047	2,099	1,837	2,084	2,744
Total revenue ton miles—all services (000).....	851,547	694,550	593,665	442,406	371,072	280,986	239,481	198,347	170,327	142,428	121,155
Total available ton miles—all services (000).....	2,115,384	1,859,434	1,469,783	1,024,078	761,028	585,229	503,972	440,716	388,594	329,384	282,328
Ton mile load factor (%).....	40.3	37.4	40.4	43.2	48.8	48.0	47.5	45.0	43.8	43.2	42.9
Scheduled revenue aircraft departures.....	1,536,494	1,585,283	1,620,940	1,561,417	1,479,063	1,376,203	1,304,837	1,238,138	1,199,407	1,125,100	1,023,727
Scheduled revenue aircraft miles (000).....	239,634	227,604	211,203	185,041	165,281	145,175	133,532	121,292	112,987	103,209	93,288
Scheduled revenue aircraft hours.....	1,630,788	895,966	908,525	888,417	863,581	808,244	764,737	711,679	680,899	644,540	597,164

# TRAFFIC AND SERVICE U.S. Scheduled Airlines

	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
<b>INTRA-HAWAIIAN AIRLINES</b>											
<b>Passenger Traffic</b>											
Revenue passengers enplaned (000).....	2,643	2,442	2,243	2,024	1,692	1,453	1,252	1,074	954	917	934
Revenue passenger miles (000).....	355,034	327,017	301,429	274,143	226,674	195,186	166,607	143,982	128,846	125,586	127,500
Available seat miles (000).....	768,693	772,192	580,391	463,719	387,127	319,733	276,375	239,520	212,398	202,290	217,055
Revenue passenger load factor (%).....	46.2	42.3	51.9	59.1	58.6	61.0	60.3	60.1	60.7	62.1	58.7
Average length of haul (miles).....	134	134	134	135	134	134	133	134	135	137	137
<b>Cargo Traffic (Ton Miles)—total (000).....</b>											
Freight (000).....	4,352	3,665	3,167	3,749	3,318	2,766	2,597	2,266	2,209	1,942	1,893
Express (000).....	3,314	2,745	2,272	2,823	2,454	2,431	2,472	2,152	2,100	1,846	1,806
Priority U.S. Mail (000).....	—	—	—	—	—	—	—	—	—	—	—
Nonpriority U.S. Mail (000).....	143	120	107	119	114	106	99	93	90	82	82
	895	800	788	807	750	229	26	21	19	14	5
<b>Overall Traffic and Service</b>											
Nonscheduled traffic—total ton miles (000).....	5	18	8	35	12	285	433	284	9	494	5,605
Total revenue ton miles—all services (000).....	39,866	32,361	29,630	27,827	23,224	20,189	17,665	14,109	12,578	12,515	17,685
Total available ton miles—all services (000).....	85,535	83,662	60,634	49,169	40,373	34,151	30,833	25,773	21,514	21,618	30,659
Ton mile load factor (%).....	46.6	38.7	48.9	56.6	57.5	59.1	57.3	54.7	58.5	57.9	57.7
Scheduled revenue aircraft departures.....	72,380	76,003	69,359	64,631	62,034	58,439	52,491	49,993	47,742	46,183	49,158
Scheduled revenue aircraft miles (000).....	8,147	8,697	8,131	7,665	7,221	6,661	5,930	5,718	5,461	5,231	5,614
Scheduled revenue aircraft hours.....	28,414	30,916	31,595	32,396	33,733	34,417	30,624	30,565	29,779	28,380	31,693
<b>INTRA-ALASKAN AIRLINES</b>											
<b>Passenger Traffic</b>											
Revenue passengers enplaned (000).....	351	315	253	336	304	298	276	246	255	236	213
Revenue passenger miles (000).....	112,532	101,333	76,790	78,147	68,434	65,245	55,795	46,551	47,640	46,038	43,000
Available seat miles (000).....	258,622	253,389	204,431	168,052	146,924	149,124	135,151	117,988	116,548	105,901	102,852
Revenue passenger load factor (%).....	43.5	40.0	37.6	46.5	46.6	43.8	41.3	39.5	40.9	43.5	41.8
Average length of haul (miles).....	321	322	304	233	225	219	202	189	187	195	202
<b>Cargo Traffic (Ton Miles)—total (000).....</b>											
Freight (000).....	12,468	11,247	8,477	7,876	7,759	7,318	6,265	5,472	5,196	5,036	4,220
Express (000).....	6,385	5,972	3,825	3,630	3,664	3,617	3,176	2,640	2,620	2,828	2,424
Priority U.S. Mail (000).....	—	—	—	—	—	—	—	—	—	—	—
Nonpriority U.S. Mail (000).....	5,270	5,275	4,652	4,246	4,095	3,701	3,089	2,832	2,576	2,208	1,796
	813	—	—	—	—	—	—	—	—	—	—
<b>Overall Traffic and Service</b>											
Nonscheduled traffic—total ton miles (000).....	2,224	2,679	3,432	3,662	4,252	4,271	5,754	6,025	3,211	1,930	1,844
Total revenue ton miles—all services (000).....	26,073	24,457	19,920	19,675	19,166	18,457	17,910	16,449	13,428	11,844	10,625
Total available ton miles—all services (000).....	49,285	47,052	35,688	33,204	31,417	31,465	32,270	30,562	25,182	20,468	18,872
Ton mile load factor (%).....	52.9	52.0	55.8	59.3	61.0	58.7	55.5	53.8	53.3	57.9	56.3
Scheduled revenue aircraft departures.....	65,223	61,885	66,389	96,529	99,357	103,086	103,429	104,068	102,438	99,391	82,571
Scheduled revenue aircraft miles (000).....	7,603	7,438	7,155	8,542	7,985	7,923	7,718	7,503	7,545	7,403	6,630
Scheduled revenue aircraft hours.....	38,485	38,371	40,831	55,332	54,498	55,604	55,215	54,952	55,008	54,508	47,595

# TRAFFIC AND SERVICE U.S. Scheduled Airlines

	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
<b>HELICOPTER AIRLINES</b>											
<b>Passenger Traffic</b>											
Revenue passengers enplaned (000).....	573	744	1,048	1,225	1,075	732	626	477	376	462	522
Revenue passenger miles (000).....	11,341	17,074	24,856	29,670	25,420	18,811	16,003	12,510	8,191	8,603	9,475
Available seat miles (000).....	31,780	43,079	59,923	62,041	51,992	41,413	34,165	27,657	20,125	18,276	18,764
Revenue passenger load factor (%).....	35.7	39.6	41.5	47.8	48.9	45.4	46.8	45.2	40.7	47.1	50.5
Average length of haul (miles).....	20	23	24	24	24	26	26	26	22	19	18
<b>Cargo Traffic (Ton Miles)—total (000).....</b>	34	77	113	134	140	154	143	124	115	140	138
Freight (000).....	4	7	8	9	10	10	6	6	6	7	7
Express (000).....	25	36	48	64	70	60	45	44	44	39	40
Priority U.S. Mail (000).....	5	34	57	61	60	84	92	74	65	94	91
Nonpriority U.S. Mail (000).....	—	—	—	—	—	—	—	—	—	—	—
<b>Overall Traffic and Service</b>											
Nonscheduled traffic—total ton miles (000).....	4	4	10	9	13	20	24	15	10	7	10
Total revenue ton miles—all services (000).....	1,171	1,708	2,492	2,970	2,574	1,968	1,692	1,332	907	970	1,053
Total available ton miles—all services (000).....	3,240	4,398	6,146	6,345	5,157	4,338	3,717	3,071	2,329	2,183	2,228
Ton mile load factor (%).....	36.1	38.8	40.5	46.8	49.9	45.4	45.5	43.4	38.9	44.4	47.3
Scheduled revenue aircraft departures.....	84,519	111,986	191,631	151,421	139,568	126,683	125,629	85,989	96,768	147,064	157,734
Scheduled revenue aircraft miles (000).....	1,427	1,909	2,547	2,660	2,241	1,984	1,976	1,462	1,518	2,156	2,219
Scheduled revenue aircraft hours.....	12,707	17,899	23,346	25,066	22,652	20,286	20,435	15,222	18,554	29,676	30,872
<b>ALL-CARGO AIRLINES (Domestic)</b>											
<b>Cargo Traffic (Ton Miles)—total (000).....</b>	258,726	215,123	198,768	186,116	195,486	171,097	151,659	111,853	82,554	79,708	90,473
Freight (000).....	247,877	208,058	194,005	181,876	189,714	166,362	147,994	110,096	81,816	78,287	88,516
Express (000).....	1,713	1,530	1,576	1,943	3,071	2,475	1,818	748	417	753	1,050
Priority U.S. Mail (000).....	1,863	861	701	624	1,639	1,173	896	504	175	407	674
Nonpriority U.S. Mail (000).....	7,273	4,674	2,486	1,673	1,062	1,087	951	505	146	261	233
<b>Overall Traffic and Service</b>											
Nonscheduled traffic—total ton miles (000).....	42,727	259,540	295,406	333,365	359,331	298,111	243,350	231,409	389,536	215,996	159,224
Total revenue ton miles—all services (000).....	301,453	474,663	494,181	519,480	554,817	469,208	395,008	343,262	472,090	295,705	249,697
Total available ton miles—all services (000).....	543,375	726,583	704,824	729,323	705,242	618,309	549,955	475,602	615,110	385,224	325,119
Ton mile load factor (%).....	55.5	65.3	70.1	71.2	78.7	75.9	71.8	72.2	76.7	76.8	76.8
Scheduled revenue aircraft departures.....	11,724	13,400	15,016	15,633	16,009	17,439	16,520	11,743	7,664	12,745	14,010
Scheduled revenue aircraft miles (000).....	11,219	10,455	11,552	11,174	11,021	10,804	10,654	7,929	5,611	7,213	8,727
Scheduled revenue aircraft hours.....	24,606	27,064	34,433	37,052	38,833	40,236	41,284	29,894	21,967	31,942	38,947

# TRAFFIC AND SERVICE U.S. Scheduled Airlines

## INTERNATIONAL and TERRITORIAL AIRLINES

	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
<b>Passenger Traffic</b>											
Revenue passengers enplaned (000).....	16,713	17,488	16,407	14,020	12,272	10,847	9,381	8,037	7,079	6,112	5,904
Revenue passenger miles (000).....	27,895,289	29,468,315	26,450,644	23,259,314	19,298,420	16,789,044	14,352,393	11,905,430	10,137,777	8,768,501	8,306,348
Available seat miles (000).....	52,561,674	56,398,252	49,575,001	41,118,729	33,175,647	29,532,832	25,791,373	22,590,210	18,724,360	15,769,527	13,347,126
Revenue passenger load factor (%).....	53.1	52.2	53.4	56.6	58.2	56.8	55.6	52.7	54.1	55.6	62.2
Average length of haul (miles).....	1,669	1,685	1,612	1,659	1,573	1,548	1,530	1,481	1,432	1,435	1,407
<b>Cargo Traffic (Ton Miles)—total (000).....</b>											
Freight (000).....	1,493,495	1,734,685	1,596,029	1,347,763	1,164,014	841,061	564,862	466,692	426,476	352,878	286,444
Express (000).....	950,196	1,090,055	926,091	795,858	720,627	596,416	393,858	295,610	263,931	216,560	191,065
Priority U.S. Mail (000).....	561	1,437	1,159	1,106	982	908	823	794	798	604	520
Nonpriority U.S. Mail (000).....	203,578	248,446	273,239	277,909	283,742	173,158	124,768	115,810	108,987	93,205	82,626
.....	339,160	394,747	395,540	272,890	158,663	70,579	45,413	54,478	52,760	42,509	12,233
<b>Overall Traffic and Service</b>											
Nonscheduled traffic—total ton miles (000).....	960,882	1,596,457	1,684,105	1,387,435	737,520	296,471	198,323	174,411	150,848	110,299	78,350
Total revenue ton miles—all services (000).....	5,253,811	6,339,791	5,978,604	5,113,306	3,883,836	2,856,655	2,228,175	1,855,950	1,619,903	1,362,479	1,218,245
Total available ton miles—all services (000).....	10,330,658	11,599,835	10,779,326	9,030,981	6,653,990	5,139,006	4,162,677	3,488,240	2,925,899	2,468,843	2,038,988
Ton mile load factor (%).....	50.9	54.7	55.5	56.6	58.4	55.6	53.5	53.2	55.4	55.2	59.8
Scheduled revenue aircraft departures.....	332,829	376,594	367,960	298,573	280,481	257,377	238,886	213,508	201,209	197,895	212,342
Scheduled revenue aircraft miles (000).....	377,236	450,549	408,136	350,719	285,711	247,766	214,375	192,140	171,500	161,297	162,634
Scheduled revenue aircraft hours.....	790,582	944,880	858,123	727,445	610,954	549,964	486,101	454,244	435,269	452,319	530,264
<b>ALL-CARGO AIRLINES (International)</b>											
<b>Cargo Traffic (Ton Miles)—total (000).....</b>											
Freight (000).....	573,186	368,235	229,021	172,478	141,475	121,853	100,840	97,259	77,594	56,161	44,078
Express (000).....	356,502	293,203	208,097	154,790	126,000	110,856	91,327	86,370	66,537	43,764	34,853
Priority U.S. Mail (000).....	62	8	12	9	1,340	10	14	21	14	4	*
Nonpriority U.S. Mail (000).....	39,933	15,463	7,419	9,818	9,334	5,878	4,856	4,663	4,441	6,425	6,567
.....	176,689	59,561	13,493	7,861	4,801	5,109	4,643	6,205	6,602	5,968	2,658
<b>Overall Traffic and Service</b>											
Nonscheduled traffic—total ton miles (000).....	549,624	724,940	445,016	415,957	361,606	141,969	86,188	75,615	99,759	76,823	28,796
Total revenue ton miles—all services (000).....	1,122,874	1,093,261	674,127	588,545	503,149	263,986	187,202	173,121	177,497	133,094	73,091
Total available ton miles—all services (000).....	1,513,626	1,538,391	1,068,341	1,142,444	904,322	397,901	266,624	243,578	232,186	173,731	102,082
Ton mile load factor (%).....	74.2	71.1	63.1	51.5	55.6	66.3	70.2	71.1	76.4	76.6	71.6
Scheduled revenue aircraft departures.....	13,625	11,083	8,393	7,704	5,857	6,152	6,311	6,411	5,554	7,394	7,994
Scheduled revenue aircraft miles (000).....	20,760	14,665	10,428	9,429	7,297	6,821	6,532	6,196	4,980	5,878	5,858
Scheduled revenue aircraft hours.....	43,573	32,806	24,595	23,769	19,624	21,864	22,307	20,496	17,694	23,310	25,265

\* less than 500.

## OPERATING REVENUES AND EXPENSES U.S. Scheduled Airlines (In Thousands of Dollars)

<b>TOTAL INDUSTRY</b>	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
<b>Operating Revenues—Total</b> .....	9,273,426	8,792,317	7,753,211	6,864,726	5,745,038	4,957,851	4,250,838	3,759,051	3,438,731	3,063,555	2,884,277
Passenger.....	7,611,709	7,119,990	6,221,852	5,425,862	4,529,520	4,029,383	3,482,760	3,067,193	2,762,697	2,484,650	2,387,937
Freight.....	715,798	648,029	547,094	465,281	412,039	356,113	285,657	234,653	203,759	176,802	162,777
Priority U.S. Mail.....	175,164	168,360	162,763	184,232	189,252	138,238	122,746	117,916	111,178	98,587	89,914
Nonpriority U.S. Mail.....	123,032	120,015	104,466	76,082	43,481	25,234	19,050	21,086	20,520	16,844	7,098
Express.....	36,409	38,088	38,174	35,471	36,800	34,118	31,114	28,421	26,968	23,765	23,862
Charter.....	412,422	525,760	517,074	520,612	381,890	214,145	152,608	140,234	163,132	115,803	78,487
Public Service Revenue.....	44,320	41,180	46,745	59,912	65,619	80,622	82,806	82,222	82,393	78,952	68,164
Other *.....	154,572	130,895	115,044	97,273	86,439	79,997	74,098	67,327	68,084	68,152	66,038
<b>Operating Expenses—Total</b> .....	9,213,475	8,400,387	7,248,323	6,156,532	4,969,541	4,285,923	3,780,741	3,479,264	3,248,732	3,043,496	2,806,686
Flying Operations.....	2,696,544	2,468,714	2,080,537	1,733,888	1,368,532	1,157,945	1,029,893	949,417	896,319	858,328	812,152
Maintenance.....	1,395,942	1,301,995	1,193,639	1,087,177	900,306	815,958	749,367	665,006	639,273	576,235	557,180
General Services and Administration											
Passenger Service.....	938,368	830,680	716,056	578,639	458,887	381,860	309,389	263,185	234,323	220,671	207,670
Aircraft and Traffic Servicing.....	1,671,007	1,489,892	1,262,945	1,070,670	863,279	735,447	646,328	586,086	538,741	487,861	452,103
Promotion and Sales.....	1,110,530	1,035,402	900,940	776,304	645,574	551,134	479,203	419,978	380,796	352,256	333,701
Administrative.....	457,216	408,805	351,965	297,560	241,386	212,351	185,016	167,212	158,450	143,437	129,687
Total.....	4,177,121	3,764,780	3,231,906	2,723,173	2,209,126	1,880,793	1,619,936	1,436,462	1,312,310	1,204,225	1,123,161
Depreciation and Amortization.....	943,868	864,898	742,240	612,294	491,578	431,228	381,543	428,379	400,829	404,708	314,193
<b>Net Operating Income</b> .....	59,951	391,931	504,888	708,194	775,497	671,928	470,097	279,787	189,999	20,059	77,591

\* Includes excess baggage, foreign mail, incidental revenues and other transport.  
For notes to statistical tables see page 45.

# OPERATING REVENUES AND EXPENSES U.S. Scheduled Airlines (In Thousands of Dollars)

<b>DOMESTIC TRUNK AIRLINES</b>	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
<b>Operating Revenues—Total</b> .....	6,272,775	5,754,222	5,039,441	4,419,436	3,660,900	3,263,556	2,790,877	2,451,915	2,250,094	2,026,368	1,942,635
Passenger.....	5,536,144	5,087,549	4,451,341	3,901,528	3,233,095	2,908,045	2,504,861	2,208,430	2,020,975	1,826,821	1,756,439
Freight.....	387,120	335,413	284,707	235,774	201,289	174,150	140,962	116,466	102,364	85,288	74,792
Priority U.S. Mail.....	93,952	83,837	80,739	76,100	78,870	64,181	56,262	51,247	49,002	43,958	41,087
Nonpriority U.S. Mail.....	44,156	49,150	43,131	23,139	7,988	6,354	5,838	5,471	5,486	5,073	3,686
Express.....	31,257	33,052	33,146	30,752	31,601	29,703	27,247	25,246	24,332	21,447	21,785
Charter.....	100,323	96,766	87,475	104,962	70,429	44,375	17,629	12,420	12,700	8,985	10,414
Public Service Revenue.....	—	—	—	2,822	2,110	3,508	3,408	988	—	—	—
Other.....	79,824	68,454	58,902	44,360	35,518	33,240	34,668	31,648	35,235	34,796	34,432
<b>Operating Expenses—Total</b> .....	6,256,039	5,449,860	4,719,364	4,009,331	3,207,198	2,847,308	2,494,035	2,322,682	2,175,166	2,037,485	1,907,785
Flying Operations.....	1,830,972	1,588,192	1,341,342	1,101,480	869,925	767,902	676,974	626,708	593,816	574,519	548,125
Maintenance.....	974,254	864,215	802,853	735,445	596,269	566,413	514,552	464,803	444,047	399,810	397,032
General Services and Administration											
Passenger Service.....	653,762	558,364	488,635	396,449	311,564	266,279	213,988	179,890	164,546	156,810	150,356
Aircraft and Traffic Servicing.....	1,117,235	964,172	825,578	704,944	560,004	484,859	425,197	394,180	362,912	328,302	305,674
Promotion and Sales.....	728,402	654,422	579,244	501,987	410,282	348,223	299,629	261,691	241,895	225,554	215,093
Administrative.....	279,813	235,404	202,465	167,023	131,568	116,378	100,945	93,187	89,255	82,374	74,360
Total.....	2,779,212	2,412,363	2,095,921	1,770,403	1,413,418	1,215,739	1,039,759	928,949	858,608	793,039	745,483
Depreciation and Amortization.....	671,602	585,091	479,249	402,005	327,586	297,253	262,750	302,221	278,694	270,117	217,145
<b>Net Operating Income</b> .....	16,736	304,362	320,077	410,106	453,703	416,249	296,841	129,233	74,928	(11,118)	34,850
<b>LOCAL SERVICE AIRLINES</b>											
<b>Operating Revenues—Total</b> .....	717,952	612,457	501,308	399,716	348,332	291,374	253,728	225,975	206,099	177,056	146,481
Passenger.....	611,591	521,006	414,732	313,833	264,949	203,423	169,244	143,171	125,467	103,623	83,602
Freight.....	29,428	22,630	17,477	13,053	10,961	8,764	6,698	5,031	4,070	3,089	2,108
Priority U.S. Mail.....	6,297	5,892	5,900	5,138	5,316	4,103	3,327	2,950	2,674	2,229	1,754
Nonpriority U.S. Mail.....	4,551	3,474	2,971	1,352	301	261	220	203	188	216	169
Express.....	4,244	3,957	3,967	3,545	3,729	3,196	2,781	2,508	2,061	1,682	1,353
Charter.....	11,938	9,252	6,837	5,565	3,516	2,115	2,294	1,531	1,421	1,460	1,832
Public Service Revenue.....	38,802	35,981	40,950	50,961	54,924	66,012	65,779	67,882	67,948	62,937	54,126
Other.....	11,101	10,265	8,476	6,266	4,637	3,499	3,385	2,698	2,270	1,821	1,537
<b>Operating Expenses—Total</b> .....	711,693	628,517	510,518	399,025	324,866	267,283	236,762	214,015	192,724	167,697	144,309
Flying Operations.....	218,220	189,916	146,193	109,656	88,985	74,233	66,787	60,846	55,082	48,664	42,031
Maintenance.....	121,656	108,266	91,971	79,323	69,475	59,837	52,735	47,256	42,309	35,990	30,967
General Services and Administration											
Passenger Service.....	46,657	38,751	30,613	21,995	17,307	13,426	11,739	10,660	9,726	8,389	7,183
Aircraft and Traffic Servicing.....	159,963	144,378	120,179	95,933	80,353	66,346	59,053	53,143	48,095	42,368	36,492
Promotion and Sales.....	67,624	58,329	46,467	36,107	29,472	23,469	20,639	18,617	16,298	13,515	11,605
Administrative.....	40,501	34,344	28,136	22,813	18,472	14,874	13,051	11,585	10,611	9,186	8,247
Total.....	314,744	275,801	225,396	176,849	145,604	118,114	104,482	94,004	84,730	73,457	63,527
Depreciation and Amortization.....	57,073	54,533	46,958	33,196	20,802	15,098	12,758	11,909	10,604	9,586	7,784
<b>Net Operating Income</b> .....	6,259	(16,060)	(9,210)	691	23,467	24,091	16,966	11,959	13,374	9,359	2,172



# OPERATING REVENUES AND EXPENSES U.S. Scheduled Airlines (In Thousands of Dollars)

	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
<b>INTRA-HAWAIIAN AIRLINES</b>											
<b>Operating Revenues—Total</b> .....	44,399	35,744	29,746	26,287	23,318	20,439	17,898	15,499	13,780	14,085	15,217
Passenger.....	39,972	33,075	27,538	24,344	19,716	17,074	14,924	13,129	11,824	11,642	11,184
Freight.....	2,321	1,943	1,577	1,540	1,375	1,378	1,410	1,179	1,161	984	956
Priority U.S. Mail.....	108	92	84	92	90	86	80	77	73	68	65
Nonpriority U.S. Mail.....	178	166	152	145	139	46	8	6	5	4	2
Express.....	—	—	—	—	—	—	—	—	—	—	—
Charter.....	7	23	13	—	12	228	299	206	12	260	2,615
Public Service Revenue.....	789	—	—	—	1,124	1,124	878	716	355	697	109
Other.....	1,024	444	382	166	860	503	300	187	350	430	286
<b>Operating Expenses—Total</b> .....	43,923	38,514	30,453	26,528	22,145	18,527	16,523	14,690	13,229	13,456	15,468
Flying Operations.....	13,257	13,097	8,674	8,548	6,478	4,514	3,851	3,219	2,933	3,063	4,266
Maintenance.....	7,194	6,793	6,069	4,909	4,369	4,002	3,574	2,923	2,677	2,867	3,273
General Services and Administration											
Passenger Service.....	1,858	1,604	1,047	859	712	646	576	512	409	392	695
Aircraft and Traffic Servicing.....	8,338	6,397	5,474	4,404	3,778	3,301	2,996	2,706	2,430	2,321	2,373
Promotion and Sales.....	6,065	4,805	4,205	3,761	2,925	2,722	2,439	2,337	2,074	2,181	2,059
Administrative.....	3,679	2,660	2,515	2,214	2,051	1,812	1,726	1,866	1,599	1,540	1,391
Total.....	19,941	15,466	13,241	11,239	9,465	8,482	7,737	7,420	6,512	6,434	6,518
Depreciation and Amortization.....	3,531	3,158	2,470	1,831	1,832	1,528	1,360	1,129	1,106	1,091	1,411
<b>Net Operating Income</b> .....	476	(2,771)	(707)	(241)	1,173	1,911	1,375	809	551	629	(251)
<b>INTRA-ALASKAN AIRLINES</b>											
<b>Operating Revenues—Total</b> .....	28,600	25,704	21,967	24,407	22,357	22,002	21,950	20,225	18,735	18,867	16,031
Passenger.....	13,237	11,869	8,867	9,707	7,972	7,860	7,267	6,244	6,326	6,181	5,784
Freight.....	3,531	3,307	2,132	2,191	1,996	2,119	2,031	1,723	1,691	1,775	1,513
Priority U.S. Mail.....	6,733	5,267	4,717	4,392	3,926	3,650	3,192	3,077	2,873	2,529	2,089
Nonpriority U.S. Mail.....	131	—	—	—	—	—	—	—	—	—	—
Express.....	—	—	—	—	—	—	—	—	—	—	—
Charter.....	1,803	2,064	2,310	2,363	2,458	2,345	3,237	3,327	2,110	1,617	1,346
Public Service Revenue.....	2,374	2,494	3,190	4,729	5,124	5,266	5,590	5,317	5,139	6,352	4,852
Other.....	791	703	751	1,022	881	761	631	538	595	413	447
<b>Operating Expenses—Total</b> .....	26,633	23,802	20,719	23,241	20,306	20,587	20,310	19,353	17,421	16,192	15,055
Flying Operations.....	7,748	6,633	6,042	6,372	5,566	5,751	6,293	6,112	5,334	4,847	4,369
Maintenance.....	6,476	5,977	5,142	6,449	5,297	5,919	5,690	5,274	4,812	4,444	4,309
General Services and Administration*											
Total.....	10,081	8,928	7,775	8,686	7,756	7,534	7,138	6,746	6,191	5,895	5,328
Depreciation & Amortization.....	2,328	2,263	1,759	1,733	1,687	1,383	1,189	1,221	1,084	1,006	1,049
<b>Net Operating Income</b> .....	1,967	1,902	1,248	1,166	2,051	1,415	1,640	872	1,314	2,675	976

\* Breakdown waived in reporting required of these carriers.

# OPERATING REVENUES AND EXPENSES U.S. Scheduled Airlines (In Thousands of Dollars)

	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
<b>HELICOPTER AIRLINES</b>											
<b>Operating Revenues—Total</b> .....	8,988	9,175	12,870	16,506	14,232	11,135	10,174	8,637	8,583	8,603	8,601
Passenger.....	7,632	7,374	9,470	10,377	8,603	5,645	4,814	3,284	2,501	2,773	3,088
Freight.....	72	67	93	102	98	85	54	41	39	39	41
Priority U.S. Mail.....	70	130	209	325	158	221	240	193	174	253	246
Nonpriority U.S. Mail.....	—	—	—	—	—	—	—	—	—	—	—
Express.....	212	243	259	289	295	216	213	217	215	189	210
Charter.....	441	419	513	481	509	525	344	210	109	64	46
Public Service Revenue.....	—	—	—	—	584	2,712	4,300	4,641	5,518	5,258	4,931
Other.....	561	942	2,326	4,932	3,985	1,732	210	51	26	27	39
<b>Operating Expenses—Total</b> .....	12,754	14,330	16,177	17,249	14,929	11,369	10,295	8,839	8,835	8,808	8,382
Flying Operations.....	3,240	2,928	2,885	3,375	3,195	2,250	1,941	1,744	1,791	1,946	1,934
Maintenance.....	3,663	4,169	5,278	5,521	5,002	3,770	3,541	2,789	2,454	2,633	2,546
General Services and Administration*											
Total.....	4,976	5,819	6,306	6,379	5,563	4,354	3,817	3,305	3,378	3,086	2,710
Depreciation and Amortization.....	875	1,413	1,707	1,972	1,169	995	996	1,000	1,212	1,143	1,192
<b>Net Operating Income</b> .....	(3,766)	(5,155)	(3,307)	(743)	(697)	(233)	(121)	(202)	(252)	(205)	219
<b>ALL-CARGO AIRLINES (DOMESTIC)</b>											
<b>Operating Revenues—Total</b> .....	49,445	78,642	85,303	94,279	102,360	82,279	74,158	67,586	90,702	59,380	49,028
Passenger.....	—	—	—	—	—	—	—	—	—	—	—
Freight.....	37,073	29,469	27,564	25,960	27,635	22,817	20,006	15,562	11,662	13,166	15,770
Priority U.S. Mail.....	540	283	194	208	631	447	358	182	81	154	237
Nonpriority U.S. Mail.....	1,006	653	387	326	201	207	185	83	25	49	42
Express.....	536	379	407	538	858	681	563	237	120	246	337
Charter.....	5,665	41,191	54,414	63,345	68,776	57,046	52,745	51,444	78,371	44,884	31,643
Public Service Revenue.....	—	—	—	—	—	—	—	—	—	—	—
Other.....	4,624	6,668	2,337	3,902	4,259	1,082	302	79	442	882	999
<b>Operating Expenses—Total</b> .....	53,283	80,211	98,712	83,973	80,414	73,706	70,838	66,308	80,401	62,685	49,603
Flying Operations.....	20,975	30,147	35,170	34,139	30,774	24,270	24,237	23,112	31,061	23,117	20,349
Maintenance.....	8,611	16,420	19,354	21,339	19,887	19,350	16,476	16,518	20,849	12,395	11,442
General Services and Administration											
Passenger Service.....	15	1,783	2,579	423	1,512	1,266	2,921	1,744	1,847	1,444	1,165
Aircraft and Traffic Servicing.....	13,374	16,097	13,908	12,650	12,845	12,178	11,070	8,478	8,411	6,776	5,380
Promotion and Sales.....	2,434	3,251	3,448	3,160	2,837	3,107	3,245	2,342	2,169	2,100	1,874
Administrative.....	2,833	3,901	4,374	4,308	4,338	3,826	3,724	3,784	4,033	3,728	3,460
Total.....	18,657	25,032	24,310	20,541	21,533	20,378	20,960	16,348	16,461	14,048	11,879
Depreciation and Amortization.....	5,039	8,611	19,878	7,955	8,220	9,709	9,165	10,330	12,029	13,125	5,933
<b>Net Operating Income</b> .....	(3,838)	(1,569)	(13,408)	10,305	21,946	8,573	3,319	1,279	10,301	(3,305)	(575)

\* Breakdown waived in reporting required of these carriers.

# OPERATING REVENUES AND EXPENSES U.S. Scheduled Airlines (In Thousands of Dollars)

## INTERNATIONAL and TERRITORIAL AIRLINES

	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
<b>Operating Revenues—Total</b> .....	1,954,206	2,109,183	1,949,766	1,769,682	1,474,480	1,210,875	1,040,020	931,452	810,446	722,390	684,621
Passenger.....	1,402,219	1,458,104	1,309,173	1,165,862	995,185	887,335	781,649	692,801	595,221	533,159	527,568
Freight.....	198,677	216,692	185,465	163,216	149,215	130,800	99,990	80,175	71,017	63,066	58,625
Priority U.S. Mail.....	56,352	68,363	68,815	94,055	96,683	63,170	56,943	57,697	53,905	45,361	40,199
Nonpriority U.S. Mail.....	49,191	57,172	55,922	49,596	33,373	16,989	11,527	13,613	13,030	10,457	3,199
Express.....	139	455	391	342	314	319	306	203	235	199	177
Charter.....	196,015	264,625	287,202	259,918	163,350	75,737	55,355	53,221	44,931	36,802	22,771
Public Service Revenue.....	2,354	2,705	2,606	1,400	1,753	1,999	2,851	2,679	3,433	3,709	4,146
Other.....	49,257	41,067	40,193	35,293	34,606	34,526	31,398	31,065	28,672	29,637	27,936
<b>Operating Expenses—Total</b> .....	1,936,371	2,012,046	1,747,946	1,496,540	1,220,894	1,001,362	896,187	799,462	723,853	698,685	639,328
Flying Operations.....	531,032	572,910	495,025	424,135	329,427	262,597	238,427	216,834	193,422	186,561	179,707
Maintenance.....	248,506	270,744	244,316	211,874	181,475	146,043	145,186	117,729	113,602	109,493	101,516
General Services and Administration											
Passenger Service.....	225,869	222,048	187,756	156,837	126,367	98,205	78,371	68,904	56,045	52,220	47,737
Aircraft and Traffic Servicing.....	339,216	332,126	281,377	238,244	194,943	161,691	142,773	122,803	111,892	103,275	98,216
Promotion and Sales.....	297,587	309,011	263,692	228,135	197,265	171,559	151,550	133,299	116,745	107,327	101,778
Administrative.....	104,653	110,148	94,899	81,298	67,894	61,198	51,729	44,383	40,790	35,326	32,325
Total.....	967,326	973,333	827,723	704,514	586,470	492,653	424,423	369,389	325,472	298,148	280,056
Depreciation and Amortization.....	189,507	195,059	180,881	156,017	123,521	100,070	88,151	95,510	91,356	104,483	78,049
<b>Net Operating Income</b> .....	17,833	97,137	201,820	273,142	253,586	209,513	143,833	131,991	86,593	23,706	45,293

## ALL-CARGO AIRLINES (INTERNATIONAL)

<b>Operating Revenues—Total</b> .....	195,905	165,958	111,998	114,193	99,059	56,191	42,032	37,548	39,683	36,291	21,317
Passenger.....	—	—	—	—	—	—	—	—	—	—	—
Freight.....	57,494	38,474	28,067	23,440	19,471	15,999	14,506	14,472	11,747	9,388	8,964
Priority U.S. Mail.....	11,111	4,496	2,105	3,922	3,578	2,380	2,344	2,486	2,380	4,018	4,230
Nonpriority U.S. Mail.....	23,818	9,401	1,903	1,524	1,479	1,377	1,273	1,710	1,785	1,046	—
Express.....	20	2	4	3	3	3	4	9	4	1	— <sup>1</sup>
Charter.....	96,108	111,260	78,273	83,957	72,839	31,777	20,704	17,807	23,275	21,694	7,761
Public Service Revenue.....	—	—	—	—	—	—	—	—	—	—	—
Other.....	7,354	2,323	1,645	1,347	1,690	4,654	3,203	1,063	492	144	362
<b>Operating Expenses—Total</b> .....	171,207	151,797	103,632	100,425	78,791	45,782	35,790	33,674	36,543	37,890	26,332
Flying Operations.....	70,699	64,544	44,968	46,136	34,182	16,428	11,384	10,775	12,700	15,464	11,256
Maintenance.....	25,159	25,031	18,441	22,250	18,532	10,623	7,613	7,650	8,413	8,488	5,998
General Services and Administration											
Passenger Service.....	10,208	8,131	5,425	2,076	1,424	2,038	1,794	1,476	1,749	1,417	534
Aircraft and Traffic Servicing.....	32,881	26,722	16,429	14,493	11,356	7,072	5,239	4,777	5,001	4,819	3,968
Promotion and Sales.....	8,417	5,582	3,885	3,154	2,792	2,055	1,700	1,693	1,615	1,579	1,292
Administrative.....	10,016	7,122	5,196	4,750	3,744	2,375	2,887	2,261	2,367	2,034	1,697
Total.....	61,522	47,558	30,935	24,473	19,316	13,540	11,621	10,206	10,732	9,849	7,491
Depreciation and Amortization.....	13,828	14,664	9,288	7,565	6,761	5,190	5,173	5,043	4,699	4,089	1,587
<b>Net Operating Income</b> .....	24,698	14,161	8,366	13,768	20,269	10,409	6,242	3,874	3,139	(1,599)	(5,015)

<sup>1</sup> Less than \$500.

# INCOME STATEMENT U.S. SCHEDULED AIRLINES

<b>TOTAL INDUSTRY</b>	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
Total Operating Revenues (\$000).....	9,273,426	8,792,317	7,753,211	6,864,726	5,745,038	4,957,851	4,250,838	3,759,051	3,438,731	3,063,555	2,884,277
Total Operating Expenses (\$000).....	9,213,475	8,400,387	7,248,323	6,156,532	4,969,541	4,285,923	3,780,741	3,479,264	3,248,732	3,043,496	2,806,686
Net Operating Income (\$000).....	59,951	391,931	504,888	708,194	775,497	671,928	470,097	279,787	189,999	20,059	77,591
Interest on Long Term Debt (\$000).....	383,982	283,357	221,915	149,793	126,588	112,127	104,258	106,497	111,036	93,982	66,232
Income Taxes (\$000).....	(48,292)	95,568	135,240	236,231	279,570	234,740	174,088	114,105	64,984	(3,375)	37,794
Net Profit or (Loss) (\$000).....	(178,930)	52,752	209,952	415,388	427,633	367,119	223,172	78,480	52,319	(37,881)	9,140
Profit Margin on Sales (%).....	—	0.6	2.8	6.1	7.4	7.4	5.3	2.1	1.5	—	0.3
Rate of Return on Investment (%).....	1.5	3.2	4.9	7.6	11.0	12.0	9.8	6.1	5.2	1.6	3.0
<b>DOMESTIC TRUNK AIRLINES</b>											
Total Operating Revenues (\$000).....	6,272,775	5,754,222	5,039,441	4,419,436	3,660,900	3,263,556	2,790,877	2,451,915	2,250,094	2,026,368	1,942,635
Total Operating Expenses (\$000).....	6,256,039	5,449,860	4,719,364	4,009,331	3,207,198	2,847,308	2,494,035	2,322,682	2,175,166	2,037,485	1,907,785
Net Operating Income (\$000).....	16,736	304,362	320,077	410,106	453,703	416,249	296,841	129,233	74,928	(11,118)	34,850
Interest on Long Term Debt (\$000).....	222,224	163,295	131,174	88,475	81,065	73,222	69,260	70,103	72,364	61,569	43,950
Income Taxes (\$000).....	(41,130)	73,337	88,435	145,250	165,500	148,101	110,250	59,640	22,360	(12,865)	18,212
Net Profit or (Loss) (\$000).....	(100,414)	90,592	126,521	244,475	238,636	221,889	134,362	13,117	8,196	(34,568)	68
Profit Margin on Sales (%).....	—	1.6	2.5	5.5	6.5	6.8	4.8	0.5	0.4	—	—
Rate of Return on Investment (%).....	1.5	4.2	4.9	6.9	9.7	11.2	9.1	3.9	3.7	1.0	2.6
<b>LOCAL SERVICE AIRLINES</b>											
Total Operating Revenues (\$000).....	717,952	612,457	501,308	399,716	348,332	291,374	253,728	225,975	206,099	177,056	146,481
Total Operating Expenses (\$000).....	711,693	628,517	510,518	399,025	324,866	267,283	236,762	214,015	192,724	167,697	144,309
Net Operating Income (\$000).....	6,259	(16,060)	(9,210)	691	23,467	24,091	16,966	11,959	13,374	9,359	2,172
Interest on Long Term Debt (\$000).....	41,102	41,495	31,151	17,697	7,796	5,189	4,160	3,905	3,748	3,277	2,872
Income Taxes (\$000).....	(1,572)	(5,707)	(9,091)	(3,289)	6,558	8,353	5,948	4,374	5,263	3,147	294
Net Profit or (Loss) (\$000).....	(37,448)	(62,858)	(29,800)	(4,472)	10,376	12,722	7,776	4,872	5,962	4,841	1,940
Profit Margin on Sales (%).....	—	—	—	—	3.0	4.4	3.1	2.2	2.9	2.7	1.3
Rate of Return on Investment (%).....	(3.5)	(4.2)	(0.4)	2.4	7.2	10.4	9.4	8.8	11.0	11.1	8.2
<b>INTRA-HAWAIIAN AIRLINES</b>											
Total Operating Revenues (\$000).....	44,399	35,744	29,746	26,287	23,318	20,439	17,898	15,499	13,780	14,085	15,217
Total Operating Expenses (\$000).....	43,923	38,514	30,453	26,528	22,145	18,527	16,523	14,690	13,229	13,456	15,468
Net Operating Income (\$000).....	476	(2,771)	(707)	(241)	1,173	1,911	1,375	809	551	629	(251)
Interest on Long Term Debt (\$000).....	2,586	1,553	1,013	772	527	468	417	485	445	516	494
Income Taxes (\$000).....	—	—	(482)	(385)	206	568	139	—	28	—	—
Net Profit or (Loss) (\$000).....	(3,115)	(4,228)	(1,533)	(1,039)	479	980	868	(213)	(50)	133	(512)
Profit Margin on Sales (%).....	—	—	—	—	2.1	4.8	4.8	—	—	0.9	—
Rate of Return on Investment (%).....	(3.8)	(10.5)	(1.4)	2.8	6.4	11.1	13.3	2.0	3.4	5.7	0.4
<b>INTRA-ALASKAN AIRLINES</b>											
Total Operating Revenues (\$000).....	28,600	25,704	21,967	24,407	22,357	22,002	21,950	20,225	18,735	18,867	16,031
Total Operating Expenses (\$000).....	26,633	23,802	20,719	23,241	20,306	20,587	20,310	19,353	17,421	16,192	15,055
Net Operating Income (\$000).....	1,967	1,902	1,248	1,166	2,051	1,415	1,640	872	1,314	2,675	976
Interest on Long Term Debt (\$000).....	1,258	1,255	279	333	336	299	260	290	288	296	318
Income Taxes (\$000).....	271	335	293	587	933	701	613	457	563	1,417	196
Net Profit or (Loss) (\$000).....	424	488	1,429	160	1,032	470	1,171	221	531	914	430
Profit Margin on Sales (%).....	1.5	1.9	6.5	0.7	4.6	2.1	5.3	1.1	2.8	4.8	2.7
Rate of Return on Investment (%).....	4.4	6.0	8.2	2.9	12.5	6.5	14.7	4.7	8.4	13.8	9.1

For notes to statistical tables see page 45.

# INCOME STATEMENT U.S. SCHEDULED AIRLINES

<b>HELICOPTER AIRLINES</b>	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
Total Operating Revenues (\$000).....	8,988	9,175	12,870	16,506	14,232	11,135	10,174	8,637	8,583	8,603	8,601
Total Operating Expenses (\$000).....	12,754	14,330	16,177	17,249	14,929	11,369	10,295	8,839	8,835	8,808	8,382
Net Operating Income (\$000).....	(3,766)	(5,155)	(3,307)	(743)	(697)	(233)	(121)	(202)	(252)	(205)	219
Interest on Long Term Debt (\$000).....	519	654	404	512	375	388	318	303	233	49	59
Income Taxes (\$000).....	(2)	(34)	(11)	(56)	(256)	166	85	(107)	(223)	(78)	92
Net Profit or (Loss) (\$000).....	(4,051)	(6,853)	(3,100)	(888)	(561)	(438)	(197)	(154)	89	(46)	150
Profit Margin on Sales (%).....	—	—	—	—	—	—	—	—	1.0	—	1.7
Rate of Return on Investment (%).....	n.a.	(85.5)	(24.8)	(2.7)	(2.7)	(1.5)	0.7	1.1	3.1	(0.7)	3.9

## **ALL-CARGO AIRLINES (DOMESTIC)**

Total Operating Revenues (\$000).....	49,445	78,642	85,303	94,279	102,360	82,279	74,158	67,586	90,702	59,380	49,028
Total Operating Expenses (\$000).....	53,283	80,211	98,712	83,973	80,414	73,706	70,838	66,308	80,401	62,685	49,603
Net Operating Income (\$000).....	(3,838)	(1,569)	(13,408)	10,305	21,946	8,573	3,319	1,279	10,301	(3,305)	(575)
Interest on Long Term Debt (\$000).....	4,260	7,734	3,946	2,188	3,002	3,789	3,824	4,302	4,775	2,366	1,240
Income Taxes (\$000).....	296	264	(7,243)	3,205	8,467	3,280	636	(545)	4,108	(540)	187
Net Profit or (Loss) (\$000).....	(9,108)	(7,906)	(10,838)	4,851	12,245	2,720	(1)	(1,290)	4,355	(4,577)	(1,128)
Profit Margin on Sales (%).....	—	—	—	5.1	12.0	3.3	—	—	4.8	—	—
Rate of Return on Investment (%).....	(6.5)	(0.9)	(4.9)	5.3	17.1	7.2	4.0	2.8	9.8	(4.9)	0.1

## **INTERNATIONAL AND TERRITORIAL**

Total Operating Revenues (\$000).....	1,954,206	2,109,183	1,949,766	1,769,682	1,474,480	1,210,875	1,040,020	931,452	810,446	722,390	684,621
Total Operating Expenses (\$000).....	1,936,371	2,012,046	1,747,946	1,496,540	1,220,894	1,001,362	896,187	799,462	723,853	698,685	639,328
Net Operating Income (\$000).....	17,833	97,137	201,820	273,142	253,586	209,513	143,833	131,991	86,593	23,706	45,293
Interest on Long Term Debt (\$000).....	95,201	56,632	50,366	36,941	30,641	25,896	22,980	24,234	26,337	24,275	16,715
Income Taxes (\$000).....	(12,333)	26,247	62,512	88,620	94,945	73,572	56,418	50,287	32,885	5,558	18,818
Net Profit or (Loss) (\$000).....	(36,210)	40,604	122,957	163,108	149,890	121,883	76,731	63,012	33,073	(2,263)	16,216
Profit Margin on Sales (%).....	—	1.9	6.3	9.2	10.2	10.1	7.4	6.8	4.1	—	2.4
Rate of Return on Investment (%).....	2.6	3.3	7.5	11.1	14.6	15.0	12.2	12.1	8.1	2.6	5.2

## **ALL-CARGO AIRLINES (INTERNATIONAL)**

Total Operating Revenues (\$000).....	195,905	165,958	111,998	114,193	99,059	56,191	42,032	37,548	39,683	36,291	21,317
Total Operating Expenses (\$000).....	171,207	151,797	103,632	100,425	78,791	45,782	35,790	33,674	36,543	37,890	26,332
Net Operating Income (\$000).....	24,698	14,161	8,366	13,768	20,269	10,409	6,242	3,874	3,139	(1,599)	(5,015)
Interest on Long Term Debt (\$000).....	16,783	10,684	3,526	2,846	2,801	2,876	3,039	2,874	2,841	1,628	583
Income Taxes (\$000).....	5,595	1,128	816	2,278	3,216	—	—	—	—	—	(5)
Net Profit or (Loss) (\$000).....	1,244	2,949	4,274	9,213	15,536	6,892	2,462	(1,072)	118	(2,240)	(7,945)
Profit Margin on Sales (%).....	0.6	1.8	3.8	8.1	15.6	12.3	5.9	—	0.3	—	—
Rate of Return on Investment (%).....	7.0	6.2	6.2	13.6	33.0	21.7	11.6	3.1	6.0	(3.0)	(72.3)

# BALANCE SHEET U.S. Scheduled Airlines (In Thousands of Dollars)

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TOTAL INDUSTRY	At December 31				DOMESTIC TRUNK AIRLINES	At December 31			
	1970	1969	1965	1960		1970	1969	1965	1960
<b>Assets</b>					<b>Assets</b>				
Current Assets .....	2,448,135	2,403,876	1,528,691	929,117	Current Assets .....	1,782,773	1,762,759	1,155,376	681,196
Investments and Special Funds .....	1,282,724	1,475,942	469,755	210,788	Investments and Special Funds .....	998,265	1,074,408	325,334	130,063
Flight Equipment .....	10,949,592	9,943,369	5,024,466	3,089,137	Flight Equipment .....	8,465,213	7,679,955	3,864,965	2,327,772
Reserve for Depreciation and Airworthiness .....	(3,487,102)	(3,024,983)	(1,920,203)	(1,208,641)	Reserve for Depreciation and Airworthiness .....	(2,846,775)	(2,458,250)	(1,509,256)	(926,748)
Ground Property and Equipment .....	1,598,758	1,227,124	620,525	395,349	Ground Property and Equipment .....	1,271,156	962,063	479,091	318,308
Reserve for Depreciation .....	(632,221)	(534,908)	(320,740)	(193,642)	Reserve for Depreciation .....	(486,060)	(410,698)	(250,723)	(153,437)
Other Property .....	427,657	348,209	101,094	117,289	Other Property .....	251,616	231,076	65,734	104,311
Deferred Charges .....	324,878	232,833	77,741	108,814	Deferred Charges .....	142,923	129,396	35,347	67,632
Total Assets .....	12,912,421	12,071,464	5,581,330	3,448,211	Total Assets .....	9,579,112	8,970,709	4,165,869	2,549,097
<b>Liabilities</b>					<b>Liabilities</b>				
Current Liabilities .....	2,348,595	2,161,368	1,125,262	707,362	Current Liabilities .....	1,652,418	1,514,186	789,602	499,245
Long-Term Debt .....	6,096,967	5,430,788	2,149,837	1,507,543	Long-Term Debt .....	4,280,487	3,755,808	1,569,918	1,069,651
Other Non-Current Liabilities .....	314,603	251,921	20,933	106,658	Other Non-Current Liabilities .....	260,873	246,226	15,454	103,438
Deferred Credit .....	1,063,536	986,791	449,456	116,008	Deferred Credit .....	900,192	843,072	377,687	137,751
Stockholders' Equity—Net of Treasury Stock .....	3,088,720	3,240,595	1,835,841	960,640	Stockholders' Equity—Net of Treasury Stock .....	2,485,143	2,611,418	1,386,207	739,012
Preferred Stock .....	36,153	36,330	19,135	21,973	Preferred Stock .....	24,199	24,172	16,134	18,864
Common Stock .....	259,840	264,688	264,199	170,618	Common Stock .....	197,001	195,352	191,742	119,911
Other Paid-In Capital .....	1,407,801	1,318,310	623,975	389,920	Other Paid-In Capital .....	994,378	985,496	470,160	278,465
Retained Earnings .....	1,386,847	1,623,191	931,108	380,398	Retained Earnings .....	1,270,504	1,407,338	709,203	322,391
Less: Treasury Stock .....	1,922	1,922	2,575	2,270	Less: Treasury Stock .....	939	939	1,031	619
Total Liabilities and Equity .....	12,912,421	12,071,464	5,581,330	3,448,211	Total Liabilities and Equity .....	9,579,112	8,970,709	4,165,869	2,549,097

For notes to statistical tables see page 45.

## BALANCE SHEET U.S. Scheduled Airlines (In Thousands of Dollars)

LOCAL SERVICE AIRLINES	At December 31				INTRA-HAWAIIAN AIRLINES	At December 31			
	1970	1969	1965	1960		1970	1969	1965	1960
<b>Assets</b>					<b>Assets</b>				
Current Assets .....	193,057	166,344	85,449	38,131	Current Assets .....	9,245	8,116	6,465	4,309
Investments and Special Funds .....	19,813	20,984	19,553	2,487	Investments and Special Funds .....	85	1,527	1,963	56
Flight Equipment .....	666,478	654,960	191,980	82,394	Flight Equipment .....	31,416	30,729	13,330	12,980
Reserve for Depreciation and Airworthiness..	(153,636)	(114,246)	(59,423)	(29,867)	Reserve for Depreciation and Airworthiness....	(11,123)	(8,246)	(6,174)	(4,261)
Ground Property and Equipment .....	65,199	51,808	22,779	11,472	Ground Property and Equipment .....	6,459	6,116	3,446	2,231
Reserve for Depreciation .....	(29,545)	(25,121)	(12,385)	(5,779)	Reserve for Depreciation .....	(3,209)	(2,760)	(1,616)	(1,273)
Other Property .....	20,711	21,786	8,343	1,147	Other Property .....	2,813	3,069	638	96
Deferred Charges .....	118,895	46,819	6,233	4,514	Deferred Charges .....	2,693	2,643	760	1,086
Total Assets .....	900,973	823,333	262,531	104,499	Total Assets .....	38,378	41,195	18,812	15,224
<b>Liabilities</b>					<b>Liabilities</b>				
Current Liabilities .....	234,143	230,440	68,766	43,031	Current Liabilities .....	14,677	14,242	4,897	4,709
Long-Term Debt .....	516,592	521,040	112,039	43,781	Long-Term Debt .....	18,900	19,368	8,240	7,393
Other Non-Current Liabilities .....	18,524	447	57	159	Other Non-Current Liabilities .....	946	747	120	---
Deferred Credit .....	9,433	2,052	4,297	441	Deferred Credit .....	146	13	335	41
Stockholders' Equity—Net of Treasury Stock ....	122,281	69,354	77,372	17,087	Stockholders' Equity—Net of Treasury Stock .....	3,709	6,824	5,221	3,081
Preferred Stock .....	11,641	11,832	952	163	Preferred Stock .....	70	83	573	1,613
Common Stock .....	21,017	23,476	17,505	8,434	Common Stock .....	6,265	6,252	2,852	1,317
Other Paid-In Capital .....	169,561	102,553	27,628	7,474	Other Paid-In Capital .....	6,592	6,591	1,405	1,792
Retained Earnings .....	(79,931)	(68,500)	31,323	1,089	Retained Earnings .....	(9,217)	(6,102)	391	(1,641)
Less: Treasury Stock .....	7	7	35	73	Less: Treasury Stock .....	---	---	---	---
Total Liabilities and Equity .....	900,973	823,333	262,531	104,499	Total Liabilities and Equity .....	38,378	41,195	18,812	15,224

## BALANCE SHEET U.S. Scheduled Airlines (In Thousands of Dollars)

INTRA-ALASKAN AIRLINES	At December 31				HELICOPTER AIRLINES	At December 31			
	1970	1969	1965	1960		1970	1969	1965	1960
<b>Assets</b>					<b>Assets</b>				
Current Assets .....	9,922	9,150	6,623	4,272	Current Assets .....	3,267	3,574	5,856	3,236
Investments and Special Funds .....	1,090	1,694	682	564	Investments and Special Funds .....	373	372	736	471
Flight Equipment .....	27,788	27,083	12,203	8,294	Flight Equipment .....	8,383	9,417	10,363	5,612
Reserve for Depreciation and Airworthiness...	(8,863)	(7,719)	(6,945)	(3,594)	Reserve for Depreciation and Airworthiness...	(3,965)	(4,328)	(3,995)	(3,021)
Ground Property and Equipment .....	8,664	7,887	5,842	3,725	Ground Property and Equipment .....	1,799	1,777	1,919	986
Reserve for Depreciation .....	(3,847)	(3,317)	(2,816)	(1,631)	Reserve for Depreciation .....	(1,169)	(1,078)	(1,160)	(588)
Other Property .....	136	211	1,059	137	Other Property .....	815	574	241	50
Deferred Charges .....	1,836	1,870	635	346	Deferred Charges .....	583	525	1,205	580
Total Assets .....	36,725	36,859	17,285	12,113	Total Assets .....	10,086	10,832	15,165	7,326
<b>Liabilities</b>					<b>Liabilities</b>				
Current Liabilities .....	5,721	5,464	5,437	3,905	Current Liabilities .....	11,710	6,613	5,015	1,762
Long-Term Debt .....	16,973	17,588	4,085	4,081	Long-Term Debt .....	6,503	9,007	4,352	300
Other Non-Current Liabilities .....	60	70	173	59	Other Non-Current Liabilities .....	625	316	5	55
Deferred Credit .....	302	303	242	22	Deferred Credit .....	348	70	403	199
Stockholders' Equity—Net of Treasury Stock ...	13,669	13,435	7,348	4,046	Stockholders' Equity—Net of Treasury Stock ...	(9,100)	(5,173)	5,390	5,010
Preferred Stock .....	—	—	485	—	Preferred Stock .....	—	—	—	—
Common Stock .....	3,382	3,381	2,552	2,346	Common Stock .....	3,790	3,855	2,963	957
Other Paid-In Capital .....	3,088	3,131	487	184	Other Paid-In Capital .....	3,955	3,764	2,648	2,672
Retained Earnings .....	7,200	6,923	3,824	1,516	Retained Earnings .....	(16,845)	(12,793)	(221)	1,381
Less: Treasury Stock .....	—	—	—	—	Less: Treasury Stock .....	—	—	—	—
Total Liabilities and Equity .....	36,725	36,859	17,285	12,113	Total Liabilities and Equity .....	10,086	10,832	15,165	7,326



# BALANCE SHEET U.S. Scheduled Airlines (In Thousands of Dollars)

ALL-CARGO AIRLINES	At December 31				INTERNATIONAL AND TERRITORIAL AIRLINES	At December 31			
	1970	1969	1965	1960		1970	1969	1965	1960
<b>Assets</b>					<b>Assets</b>				
Current Assets .....	76,826	91,734	38,903	18,677	Current Assets .....	373,044	361,606	230,019	179,258
Investments and Special Funds .....	48,404	25,688	8,827	28,394	Investments and Special Funds .....	214,694	351,267	112,659	48,752
Flight Equipment .....	259,575	312,916	192,603	54,884	Flight Equipment .....	1,490,739	1,227,268	739,019	596,836
Reserve for Depreciation and Airworthiness....	(43,926)	(51,630)	(71,827)	(25,425)	Reserve for Depreciation and Airworthiness..	(418,814)	(379,920)	(262,583)	(215,519)
Ground Property and Equipment .....	28,169	24,996	7,547	4,050	Ground Property and Equipment .....	217,312	172,176	99,902	54,502
Reserve for Depreciation .....	(9,904)	(7,935)	(4,135)	(2,438)	Reserve for Depreciation .....	(98,487)	(83,893)	(47,905)	(28,475)
Other Property .....	30,498	21,490	4,548	6,231	Other Property .....	121,068	69,138	20,534	5,317
Deferred Charges .....	17,864	21,777	7,202	3,532	Deferred Charges .....	40,085	29,795	26,355	31,117
Total Assets .....	407,505	439,035	183,667	87,905	Total Assets .....	1,939,641	1,747,438	918,000	671,788
<b>Liabilities</b>					<b>Liabilities</b>				
Current Liabilities .....	58,553	64,232	41,718	17,340	Current Liabilities .....	371,372	324,940	209,828	137,215
Long-Term Debt .....	210,108	261,161	85,707	46,797	Long-Term Debt .....	1,047,404	846,159	338,496	335,540
Other Non-Current Liabilities .....	27,876	1,325	2,555	379	Other Non-Current Liabilities .....	5,700	2,717	2,569	2,568
Deferred Credit .....	35,579	29,343	9,777	2,615	Deferred Credit .....	117,536	111,906	56,714	24,924
Stockholders' Equity—Net of Treasury Stock....	75,388	82,975	43,910	20,774	Stockholders' Equity—Net of Treasury Stock ..	397,629	461,716	310,392	171,541
Preferred Stock .....	244	244	991	1,192	Preferred Stock .....	—	—	—	141
Common Stock .....	15,893	20,436	26,522	15,325	Common Stock .....	12,493	11,917	20,064	22,293
Other Paid-In Capital .....	39,816	34,996	15,128	20,569	Other Paid-In Capital .....	190,413	181,535	106,519	78,764
Retained Earnings .....	19,680	27,545	1,269	(16,306)	Retained Earnings .....	195,456	268,997	185,319	71,915
Less: Treasury Stock .....	244	244	—	6	Less: Treasury Stock .....	733	733	1,509	1,572
Total Liabilities and Equity .....	407,505	439,035	183,667	87,905	Total Liabilities and Equity .....	1,939,641	1,747,438	918,000	671,788

# UNIT REVENUES AND COSTS

## PASSENGER REVENUES COMPARED

### Average Revenue Per Revenue Passenger Mile—Intercity Common Carriers

(In Cents Per Mile)

#### U.S. Scheduled Airlines

	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
Domestic—First Class.....	8.27	7.87	7.32	7.24	7.24	7.33	7.26	7.17	7.57	7.34	7.06
Coach.....	5.42	5.38	5.11	5.13	5.28	5.52	5.58	5.62	5.76	5.42	5.01
Total.....	5.96	5.90	5.61	5.64	5.83	6.06	6.12	6.17	6.45	6.28	6.09
International—First Class.....	8.01	7.50	7.42	7.59	7.60	7.62	8.16	8.56	8.42	8.44	8.59
Tourist.....	4.76	4.63	4.65	4.71	4.85	5.00	5.12	5.47	5.43	5.50	5.59
Total.....	5.09	4.95	4.95	5.01	5.16	5.29	5.45	5.82	5.87	6.08	6.35
Total.....	5.78	5.68	5.46	5.49	5.67	5.87	5.95	6.09	6.31	6.24	6.14

#### Railroads, Class I

First Class.....	4.27	4.08	3.88	3.76	3.84	3.87	3.91	4.00	3.97	3.94	3.83
Coach.....	3.98	3.56	3.24	3.02	2.99	3.00	3.00	3.00	2.89	2.84	2.77

#### Motor Buses, Class I.....

	3.60	3.39	3.18	2.98	2.89	2.88	2.74	2.72	2.71	2.70	2.70
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## FREIGHT REVENUES COMPARED

### Average Revenue Per Ton Mile—Intercity Common Carriers

(In Cents Per Mile)

#### Leading U.S. Scheduled Airlines

Domestic.....	21.88	21.09	19.97	19.89	20.21	20.46	20.97	21.72	21.31	22.08	22.80
International.....	19.60	18.45	18.83	19.63	19.92	20.76	23.60	24.78	25.04	27.83	29.92
Total.....	21.01	19.96	19.51	19.79	20.09	20.58	21.95	22.86	22.69	24.12	25.30

#### Railroads, Class I.....

	1.43	1.35	1.31	1.27	1.26	1.27	1.28	1.31	1.35	1.37	1.40
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#### Trucks, Class I and II.....

	7.30 <sup>E</sup>	6.90 <sup>P</sup>	6.90 <sup>P</sup>	6.60	6.60	6.10	6.50	6.30	6.40	6.30	6.20
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## AIRLINE REVENUE, COST AND PROFIT PER REVENUE TON MILE

(In Cents Per Mile)

#### Domestic Service

Unit Revenue.....	51.58	51.90	49.66	49.90	51.79	54.48	56.58	57.75	58.29	59.11	58.35
Unit Cost.....	51.45	49.67	47.00	45.67	45.57	47.81	50.87	54.77	56.03	59.17	57.35
Operating Profit Margin.....	00.13	2.23	2.66	4.23	6.22	6.67	5.71	2.98	2.26	(00.06)	1.00

#### International and Territorial Service

Unit Revenue.....	33.72	30.61	31.12	33.04	35.87	40.60	44.80	47.76	47.30	50.73	54.67
Unit Cost.....	33.05	29.11	27.82	28.01	29.63	33.56	38.59	41.06	42.31	49.25	51.55
Operating Profit Margin.....	00.67	1.50	3.30	5.03	6.24	7.04	6.21	6.70	4.99	1.48	3.12

#### Total Industry

Unit Revenue.....	45.94	43.98	42.86	43.77	46.18	50.10	53.03	54.79	55.12	56.79	57.41
Unit Cost.....	45.64	42.02	39.96	39.26	39.95	43.31	47.17	50.72	52.08	56.42	55.86
Operating Profit Margin.....	00.30	1.96	2.90	4.51	6.23	6.79	5.86	4.07	3.04	00.37	1.55

<sup>E</sup> Estimated

<sup>P</sup> Preliminary

## PASSENGER TRAFFIC

### PASSENGER TRAVEL BETWEEN THE U.S. AND FOREIGN COUNTRIES \*

(Thousands of Passengers)	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
Passengers via Air.....	18,960	16,605	14,160	12,456	10,589	8,996	7,657	6,356	5,752	5,055	4,902
Passengers via Sea.....	1,711	1,714	1,378	1,397	1,570	1,608	1,651	1,727	1,624	1,495	1,493
Total via Air and Sea.....	20,671	18,319	15,538	13,853	12,159	10,604	9,308	8,083	7,376	6,550	6,395
Air Share (%).....	91.7	90.6	91.1	89.9	87.1	84.8	82.3	78.6	78.0	77.2	76.7
Passengers via Foreign-Flag Airlines.....	8,490	7,481	6,259	5,792	5,109	4,509	3,897	3,155	2,901	2,541	2,369
Passengers via U.S.-Flag Airlines.....	10,470	9,124	7,901	6,664	5,480	4,487	3,760	3,201	2,851	2,514	2,532
U.S. Flag Airlines' Share (%).....	55.2	54.9	55.8	53.5	51.8	49.9	49.1	50.4	49.6	49.7	51.7

\* Figures are exclusive of travel over land borders (except Mexican air travel), crewmen, military personnel and travelers between continental United States and its possessions.

Source: U.S. Department of Justice, Immigration and Naturalization Service.

### INTERCITY PASSENGER TRAVEL IN THE UNITED STATES

(Passenger Miles in Millions)

#### Common Carriers

Airlines.....	103,824	95,946	87,508	75,487	60,591	51,888	44,141	38,457	33,623	31,062	30,557
Railroads.....	6,179	7,622	8,737	10,920	12,903	13,260	14,048	14,396	15,859	16,154	17,064
Motor Buses <sup>1</sup> .....	25,000	24,900	24,500	24,900	24,600	23,800	23,300	21,800	21,300	19,700	19,900
Total.....	135,003	128,446	120,693	111,306	98,094	88,948	81,489	74,653	70,782	66,916	67,521
Air Share (%).....	76.9	74.7	72.5	67.8	61.8	58.3	54.2	51.5	47.5	46.4	45.3
Private Automobile.....	1,120,000 <sup>2</sup>	1,070,600	1,016,000	967,000	902,000	859,000	802,000	766,000	720,000	692,000	680,600
Total Common Carrier and Auto.....	1,255,003	1,199,046	1,136,693	1,078,306	1,000,094	947,948	883,489	840,653	790,782	758,916	748,121
Common Carrier Share (%).....	10.8	10.7	10.6	10.3	9.8	9.4	9.2	8.9	9.0	8.8	9.0
Air Share (%).....	8.3	8.0	7.7	7.0	6.1	5.5	5.0	4.6	4.3	4.1	4.1

<sup>1</sup> Includes charter

<sup>2</sup> Estimated

# SAFETY AND EMPLOYMENT

## COMPARATIVE TRANSPORT SAFETY RECORD

Passenger Fatalities per 100 Million Passenger Miles	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
<b>U.S. Scheduled Airlines</b>											
<b>Domestic</b>											
Fatalities.....	0	132	258	226	59	205	65	48	121	124	306
Rate.....	0.00	0.14	0.30	0.30	0.09	0.38	0.14	0.12	0.34	0.38	0.96
<b>International and Territorial</b>											
Fatalities.....	2	0	47	0	0	21	94	73	0	0	1
Rate.....	0.007	0.00	0.18	0.00	0.00	0.12	0.63	0.59	0.00	0.00	0.01
<b>Total</b>											
Fatalities.....	2	132	305	226	59	226	159	121	121	124	307
Rate.....	0.001	0.11	0.27	0.22	0.07	0.31	0.26	0.23	0.26	0.30	0.76
<b>Motor Buses</b>											
Fatalities.....	n.a.	150	160	120	150	100	90	150	60	80	60
Rate.....		0.22	0.24	0.18	0.23	0.16	0.15	0.26	0.11	0.15	0.11
<b>Railroads</b>											
Fatalities.....	10	9	13	13	27	12	9	13	27	20	33
Rate.....	0.09 <sup>P</sup>	0.07	0.10	0.09	0.16	0.07	0.05	0.07	0.14	0.10	0.16
<b>Autos</b>											
Fatalities.....	36,500 <sup>B</sup>	37,000 <sup>B</sup>	36,500	34,800	34,800	32,500	31,500	28,900	26,800	24,700	24,600
Rate.....	2.2 <sup>B</sup>	2.3 <sup>B</sup>	2.4	2.4	2.5	2.4	2.4	2.3	2.2	2.2	2.2

<sup>B</sup> Estimated      <sup>P</sup> Preliminary

## FIVE-YEAR AVERAGES OF SELECTED SAFETY STATISTICS

	Passenger Fatalities Per 100 Million Passenger Miles	Passenger Fatalities per One Million Aircraft Miles	Revenue Plane Miles Per Fatal Accident (000)	Fatal Accidents per 100,000 Flights
1941-1945.....	2.40	0.35	32,272	n.a.
1946-1950.....	1.58	0.32	63,140	n.a.
1951-1955.....	0.62	0.19	92,992	0.23
1956-1960.....	0.54	0.19	125,081	0.21
1961-1965.....	0.27	0.14	205,349	0.14
1966-1970.....	0.13	0.07	378,641	0.11

## PERSONNEL EMPLOYED AND PAYROLL

U.S. Scheduled Airlines	1970*	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
Pilots and Copilots.....	25,807	26,262	24,554	23,425	21,019	16,881	15,136	14,262	13,820	13,936	13,535
Other Flight Personnel.....	7,029	8,387	7,953	7,531	6,788	5,091	4,415	4,048	4,151	4,162	3,811
Pursers, Stewards and Stewardesses.....	34,274	33,621	29,970	25,100	20,925	17,322	14,470	13,109	12,178	11,858	10,600
Communications Personnel.....	2,777	3,264	3,403	3,316	3,174	3,123	3,195	3,716	3,418	3,745	4,233
Mechanics.....	48,177	52,886	52,046	50,016	45,327	41,667	39,360	34,453	34,925	34,065	34,181
Aircraft and Traffic Servicing Personnel.....	83,637	86,462	82,950	74,943	66,641	57,532	51,944	49,056	46,696	44,617	43,334
Office Employees.....	59,992	63,743	63,158	59,257	50,961	44,162	40,325	37,867	36,952	36,642	35,440
All Others.....	35,681	37,297	36,417	32,435	29,193	25,017	22,973	22,376	20,687	20,916	21,101
Total Employment.....	297,374	311,922	300,451	276,023	244,028	210,795	191,818	178,887	172,827	169,941	166,235
Total Payroll (\$000).....	3,659,716	3,322,719	2,921,120	2,491,330	2,097,588	1,755,401	1,536,603	1,320,400	1,265,841	1,215,895	1,083,853

\* Figures for 1970 are understated due to the effects of a Brotherhood of Railway and Airline Clerks strike against Northwest Airlines and an Air Line Pilots Association strike against Mohawk Airlines.

## NOTES TO STATISTICAL TABLES

**Redefinition of Domestic Traffic.** Effective January, 1970, the Civil Aeronautics Board revised its definition of Domestic Traffic to include all traffic between the United States mainland and Hawaii and Alaska. This traffic had, in the past, been considered as International and Territorial.

Because of this redefinition, the Domestic and International and Territorial traffic and financial data for 1970 are not strictly comparable to 1969 and previous years. The 1970 traffic and financial data as shown in these tables include Alaskan and Hawaiian operations for all carriers. Alaskan and Hawaiian financial data for Pan American and Northwest for the first half of 1970 are CAB estimates.

Domestic 1969 financial and traffic figures include the Hawaiian and Alaskan operations of Braniff, American, Continental, Trans World and Western, while these data for Northwest, Pan American and United are included in International and Territorial for 1969 and previous years.

The new CAB definition of Domestic and International no longer includes Alaska Airlines in the International and Territorial category, putting it instead into a group called "Other" which also includes Aspen Airways and Tag Airlines. However, the data for all years in this publication do include Alaska Airlines in the International and Territorial statistics.

**Total Industry Data.** The total industry figures shown in this publication include Aspen Airways for the years 1967-1970 and Tag Airlines for 1969 and 1970.

**Passengers Enplaned.** Beginning in 1970, the carriers report enplanements, rather than passenger originations. In order to show consistent passenger traffic statistics, only passenger enplanements are shown.

**Net Profit or Loss.** This figure is after "special items" and other non-operating income and expenses which are not shown. Therefore, the data shown do not add to the net profit or loss shown.

**Rate of Return on Investment.** The rate of return on investment reflects net profit plus interest paid on the noncurrent portion of long-term debt as a per cent of total investment. Total investment is a five-quarter average of total net worth (stockholders' equity) plus long-term debt. Additionally, the rate of return reflects net profit before tax reductions resulting from the investment tax credit. The figures shown for 1970 are preliminary.

**Balance Sheet.** Balance Sheet data for the domestic trunk airlines include their international as well as domestic operations. The all-cargo category includes domestic and international all-cargo carriers.

## DEFINITION OF TERMS

**Revenue Passenger Mile.** One fare-paying passenger transported one mile. Revenue passenger miles are computed by multiplying the number of revenue passengers by the miles which they are flown.

**Available Seat Miles.** The total number of seats available for the transportation of revenue passengers multiplied by the number of miles which those seats are flown.

**Revenue Passenger Load Factor.** A percentage which represents the proportion of seating capacity which is actually sold and utilized. Computed by dividing revenue passenger miles flown by available seat miles flown in scheduled revenue passenger service.

**Revenue Ton Mile.** One ton (2,000 pounds) of revenue traffic transported one statute mile. Revenue ton miles are computed by multiplying tons of revenue traffic (passengers, freight, mail and express) by the miles which this traffic is flown.

**Available Ton Miles.** The total number of tons available for the transportation of passengers, freight and mail multiplied by the number of miles which this capacity is flown.

**Revenue Ton Mile Load Factor.** A percentage which represents the proportion of total capacity available for passengers, freight and mail which is actually sold and utilized. Computed by dividing total revenue ton miles actually flown by total available ton miles.

**Air Cargo.** In the United States, this term refers to the total volume of freight, mail and express traffic which is transported by air. In other countries, this term refers only to air freight. U.S. air cargo consists of the following classes of service:

Priority Mail—Mail assured of airlift.

Includes air mail and air parcel post.

Non-Priority Mail—Airlift of first class mail on a space-available basis.

Air Express—An airline/REA Express partnership for the priority movement of packages generally under 50 pounds.

Air Freight—The airlift of commodities of all kinds.

**Yield.** The average amount of revenue received per revenue passenger mile or per revenue ton mile of freight, express, or mail. Computed by dividing total passenger revenue by the total number of revenue passenger miles flown. Yield for freight, express or mail is computed in the same manner.

**Public Service Revenues (Subsidy).** Payments by the federal Government which provide for air service to communities in the United States where traffic levels are such that air service could not otherwise be supported.

**Revenue Passenger Enplanements.** The total number of revenue passengers boarding aircraft in scheduled service, including originating, stop-over or on-line connecting passengers.

**Revenue Plane Miles.** Number of miles flown for which remuneration is received by an air carrier.

# AIR TRANSPORT ASSOCIATION OF AMERICA

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**Charles H. Dolson**, Delta Air Lines

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**John H. Magoon, Jr.**, Hawaiian Airlines

**Najeeb E. Halaby**, Pan American World Airways

**Thomas H. Davis**, Piedmont Airlines

**Charles C. Tillinghast, Jr.**, Trans World Airlines

**Edward E. Carlson**, United Air Lines

## MEMBER AIRLINES

### \*Air Canada

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Montreal 2, P. Q., Canada

### Alaska Airlines

L. Preston Blatter  
President and General Manager  
Seattle-Tacoma International Airport  
Seattle, Washington 98158

### Allegheny Airlines

Leslie O. Barnes  
President  
Washington National Airport  
Washington, D. C. 20001

### Aloha Airlines

Kenneth F. C. Char  
President  
Honolulu International Airport  
P. O. Box 9038, Honolulu, Hawaii 96820

### American Airlines

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Chairman of the Board, President  
and Chief Executive Officer  
633 Third Avenue  
New York, New York 10017

### Braniff International

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Chairman of the Board and  
Chief Executive Officer  
P. O. Box 35001, Exchange Park  
Dallas, Texas 75235

### \*C. P. Air

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1281 West Georgia Street  
Vancouver 5, B. C., Canada

### Continental Air Lines

Robert F. Six  
President  
Los Angeles International Airport  
Los Angeles, California 90009

### Delta Air Lines

Charles H. Dolson  
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Chief Executive Officer  
Atlanta Airport  
Atlanta, Georgia 30320

### \*Associate Member

### Eastern Air Lines

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Chairman of the Board and  
Chief Executive Officer  
10 Rockefeller Plaza  
New York, New York 10020

### The Flying Tiger Line

Robert W. Prescott  
President  
7401 World Way West  
Los Angeles International Airport  
Los Angeles, California 90009

### Frontier Airlines

E. Paul Burke  
Vice Chairman of the Board  
5900 East 39th Avenue  
Denver, Colorado 80207

### Hawaiian Airlines

John H. Magoon, Jr.  
Chairman of the Board and President  
P. O. Box 9008  
Honolulu, Hawaii 96820

### Hughes Air West

Irving T. Tague  
General Manager and Vice President—  
Corporate Services  
San Francisco International Airport  
San Francisco, California 94128

### Mohawk Airlines

Russell V. Stephenson  
President and Chief Executive Officer  
Oneida County Airport  
Utica, New York 13503

### National Airlines

L. B. Maytag, Jr.  
President  
Box 2055, Airport Mail Facility  
Miami, Florida 33159

### North Central Airlines

Hal N. Carr  
Chairman of the Board  
and Chief Executive Officer  
7500 Northliner Drive  
Minneapolis, Minnesota 55450

### Northeast Airlines

Bill Michaels  
President  
Logan International Airport  
Boston, Massachusetts 02128

# CATEGORIES OF UNITED STATES SCHEDULED AIR CARRIERS

**Northwest Airlines**  
D. W. Nyrop  
President  
Minneapolis-St. Paul International Airport  
St. Paul, Minnesota 55111

**Ozark Air Lines**  
Thomas L. Grace  
President and Chairman of the Board  
Box 6007  
Lambert Field  
St. Louis, Missouri 63145

**Pan American World Airways**  
Najeeb E. Halaby  
President and Chief Executive Officer  
Pan Am Building  
New York, New York 10017

**Piedmont Airlines**  
T. H. Davis  
President and Treasurer  
Smith Reynolds Airport  
Winston-Salem, North Carolina 27102

**Reeve Aleutian Airways**  
Robert C. Reeve  
President and Chief Executive Officer  
Box 559, Anchorage, Alaska 99501

**Southern Airways**  
Frank W. Hulse  
President  
Atlanta Airport  
Atlanta, Georgia 30320

**Texas International Airlines**  
W. Lloyd Lane  
President  
P. O. Box 60188  
Houston International Airport  
Houston, Texas 77060

**Trans World Airlines**  
Charles C. Tillinghast, Jr.  
Chairman of the Board  
and Chief Executive Officer  
605 Third Avenue  
New York, New York 10016

**United Air Lines**  
Edward E. Carlson  
President and Chief Executive Officer  
P. O. Box 66100  
O'Hare International Airport  
Chicago, Illinois 60666

**Western Air Lines**  
J. Judson Taylor  
President  
World Way Postal Center  
Box 92005  
Los Angeles, California 90009

**Wien Consolidated Airlines**  
Raymond I. Peterson  
President  
4100 International Airport Road  
Anchorage, Alaska 99502

The following is a list of the generally recognized categories of air carriers which are included in this report.

## DOMESTIC TRUNK CARRIERS

These airlines are authorized to operate over specified routes within the United States. This group includes the domestic operations of the following airlines:

American	Northeast
Braniff International	Northwest
Continental	Pan American
Delta	(1970 only)
Eastern	Trans World
National	United
	Western

## LOCAL SERVICE CARRIERS

These airlines are authorized to operate over specified routes which are generally located within certain regions of the United States. This group includes the system operations of the following airlines:

Allegheny	North Central
Frontier	Ozark
Hughes Air West	Piedmont
Mohawk	Southern
	Texas International

## INTRA-HAWAIIAN CARRIERS

These airlines operate solely within the State of Hawaii.

Aloha	Hawaiian
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## INTRA-ALASKAN CARRIERS

These airlines operate solely within the State of Alaska.

Kodiak	Western Alaska
Reeve Aleutian	Wien Consolidated

## ALL-CARGO CARRIERS

These airlines are authorized to operate flights carrying freight, express and mail over specified domestic and international routes.

Airlift International	Flying Tiger
	Seaboard World

## HELICOPTER CARRIERS

These carriers are authorized to transport persons, property and U.S. mail over specified routes within certain localities.

Chicago Helicopter Airways	Los Angeles Airways
	New York Airways
	San Francisco and Oakland Helicopter Airlines

## INTERNATIONAL AND TERRITORIAL CARRIERS

These airlines are authorized to operate over specified routes between the United States and foreign countries and between the United States and its territories. This group includes the international and territorial operations of the following airlines:

Alaska	National
American	Northeast
Braniff International	Northwest
Caribbean-Atlantic	Pan American
Delta	Trans World
Eastern	United (through 1969)
	Western