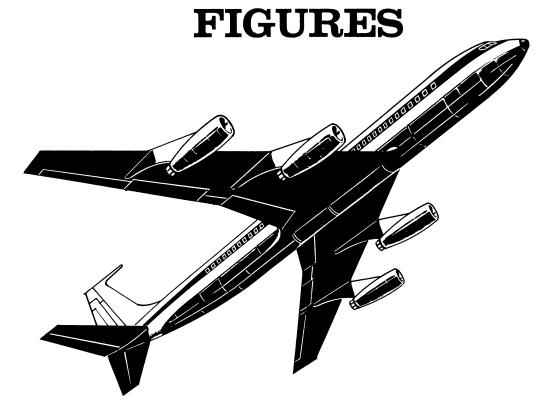
1964 **FACTS**&





Official Publication of the Air Transport Association of America

1963 AT A GLANCE



Traffic, Financial and Service Summary For the United States Scheduled Airline Industry

	1963	1962	% Change over 1962	. 1953	% Change 1963 over 1953
TRAFFIC					
Passengers (000)	71,418	62,549	14.2	31,646	125.7
Passenger Miles (000)	50,361,300	43,760,415	15.1	18,244,683	176.0
Freight Ton Miles (000)	1,023,077	898,187	13.9	303,637	236.9
Mail Ton Miles (000)	356,601	339,911	4.9	105,736	237.3
Express Ton Miles (000)	70,834	69,925	1.3	43,817	61.7
Total Revenue Ton Miles (000)	6,880,845	6,238,246	10.3	2,288,152	200.7
FINANCIAL				18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Total Operating Revenues (\$000)	3,754,956₽	3,438,586	9.2	1,317,398	185.0
Total Operating Expenses (\$000)	3,460,144 P	3,249,397	6.5	1,211,062	185.7
Net Operating Income (\$000)	294,811 P	189,189	55.8	106,336	177.2
Net Profit or Loss (\$000) 1		52,816	59.2	62,811	33.9
Rate of Return on Investment 2	6.6% P	5.7%		9.9%	
Profit Margin on Sales 3	2.2% P	1.5%		4.8%	
SERVICE				SSS CHARGE LEVINO	
No. of Aircraft in Service	1,837	1,831	0.3	1,384	32.7
Fastest Cruising Speed (mph)	625	625		300	108.3
Plane Miles Flown (000)	1,094,400	1,009,784	8.4	657,092	66.6
Available Seat Miles (000)	94,843,500	82,611,805	14.8	28,961,952	227.5
No. of Points Served 4	N Company		7 P	C84 71707	
Domestic	551	560	-1.6	541	1.8
International	148	148		159	-7.9
Route Miles Served	#NC0865				
Domestic	280,117	284,103	-1.4	168,343	66.4
International	328,740	325,361	1.0	240,646	36.6
No. of Employees	176,223 *	172,827	2.0	114,680	53.7
Average Annual Wage (\$)		7,295	2.7	4,562	64.2
Total Payroll (\$000)	\$	1,260,747	4.7	523,189	152.3

P Preliminary

Twenty-Fifth Edition

1964 Facts and Figures

The Standard Reference of United States Scheduled Air Transportation

¹ After taxes, special items and nonoperating income or loss

² Net income before interest and after taxes as per cent of average net worth and long term debt and advances

³ Profit as per cent of revenues

⁴ Many points serve more than 1 city Does not include Alaskan Points

^{*} As of September 30, 1963

AIR TRANSPORT ASSOCIATION OF AMERICA

 $Twenty\text{-}Fifth\ Edition$

Facts and Figures, 1964

Definition of Terms

Passenger Miles and Ton Miles
AVAILABLE SEAT MILES FLOWN. Total seat miles available for sale in scheduled service.
AVAILABLE TON MILES. Total ton miles of lift capacity available for sale in scheduled and charter service.
CHARTER FLIGHT. Transportation of passengers or property on other than scheduled and designated extra section flights.
EXPRESS TON MILE. A ton of express flown one mile.
FREIGHT TON MILE. A ton of freight flown one mile.
PASSENGER MILE. One passenger flown one mile.
PASSENGER LOAD FACTOR. The percentage of available seat miles actually sold in scheduled service.
PASSENGER TON MILES. Passenger miles converted to ton miles. (See definition of revenue ton miles.)
REVENUE PASSENGER MILES. The number of fare paying passengers flown times the length of trip in miles. This is the amount of available seat miles sold.
REVENUE PLANE MILES. Aircraft miles flown in scheduled service.
REVENUE TON MILES. The ton miles sold in scheduled and charter service. In the construction of this traffic measure passenger miles are converted to ton miles on the basis of about 10 to 1. That is, ten passengers with allowable free baggage are accepted as equalling one ton.
SEAT MILE. One passenger seat, filled or unfilled, flown one mile.
TON MILE LOAD FACTOR. Percentage of available ton miles sold in scheduled and charter service.
U. S. MAIL TON MILE. A ton of mail flown one mile. The mail figures are in two categories. These are defined as Priority and Non-Priority. Priority mail includes air mail and air parcel post. Non-Priority mail is first class mail that moves in air service. At present Non-Priority mail is being flown on an experimental basis between certain selected cities.
Revenues and Profit and Loss
$\ensuremath{\mathbf{EXPRESS}}$ $\ensuremath{\mathbf{REVENUE}}.$ Revenues accrued from the carriage of express.
$\ensuremath{\mathbf{FREIGHT}}$ $\ensuremath{\mathbf{REVENUE}}.$ Revenues accrued from the carriage of freight.
INCOME TAXES. Federal income taxes.
NET OPERATING INCOME. The total operating revenue from air transportation services less the operating expenses (see definition of Operating Expenses). Net Operating Income is before taxes and interest charges and does not include non-operating items.
NET PROFIT OR LOSS. Net income after Federal income taxes—the amount available for dividends or investments in the business.
OPERATING EXPENSES. The expenses incurred in the conduct of the business except for such items as debt financing and other non-operating items.
OTHER REVENUE. All other revenues, including excess baggage, chartered services, foreign mails, service charges on non-revenue transportation of employees and special services such as photography and crop dusting.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
PUBLIC SERVICE REVENUES. Payments by the Federal Government to insure air service to communities in the United States and its territories which could not otherwise afford it; to maintain essential international air routes which are not yet self-supporting; and to develop helicopter service.

PROFIT MARGIN ON SALES. Net profit after interest and after taxes as per cent of operating revenues.

RATE OF RETURN ON INVESTMENT. Total return, i.e., net profit plus interest paid on long-term debt, as per cent of average investment. Investment is the average of total net worth (stockholders' equity) plus long-term debt as the beginning and end of the year.

U. S. MAIL REVENUE. Service revenue for the transportation of mail. This is the amount paid by the Post Office to purchase air transportation for mail, and is not subsidy.

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Revised data filed by the scheduled carriers with the Civil Aeronautics Board are the major source of the statistics.



STUART G. TIPTON
President
Air Transport Association
of America

THE PRESIDENT'S MESSAGE

Just 50 years ago, a tiny awkward flying boat pulled itself from the waters of Tampa Bay and successfully wobbled 18 miles—to the surprise of a great many. The little Benoist continued to make successful flights all through the winter of 1914 and surprise turned to acceptance.

The growth that has been achieved by the air transport industry in the last 50 years has been so steady and so successful that the airlines have passed the acceptance point and, more often than not, are taken for granted.

Fortunately, airline management has never taken air transportation for granted. Every step since the pioneering Benoist has been taken deliberately and with an eye toward a continual improvement of the product so as to provide better service at better rates and with increased safety.

Looking back on the history of the airlines, it becomes clear that these steps have been in keeping with national goals—those standards of performance and productivity which have seen this nation develop into the most highly developed industrial nation in the world.

1963 is a good case in point. It marks the end of five full years of the Civil Jet Age. It marks a

high point in the usefulness of air transportation to the traveling public, to the nation's commerce, to its postal service and to the national defense. In these past five years, the scheduled airlines of the U.S. have literally spawned a new industry and proven again that the airlines have not only set, but met, requirements that have outpaced the nation's industrial expansion.

These are just some of the indicators of the airlines' performance:

- Employment. In the five years of the jet age, the airlines have created 25,000 new jobs in their industry alone. The Civil Jet Age has also created more than 100,000 new jobs in supporting industries.
- Dollar turnover. Since 1959 the airlines have taken in, via operating revenues, \$15.8 billion. They have pumped into the economy, via operating expenses, \$15.0 billion, of which more than \$6.0 billion has gone to employees. This turnover has helped spin the wheel of the nation's economy and stimulated growth in hundreds of supporting companies.
- Capital improvements. The first five years of the jet age saw the airlines investing \$3.5 billion in new jet flight and supporting equipment. New equipment is on order for delivery through the next three years which will add more than \$1.0 billion to that figure.
- Increased productivity. The number of passengers has increased 45 per cent, cargo ton miles have increased 104 per cent and mail volume has come up 100 per cent, all in the space of five years.

As we enter the sixth year of the jet revolution, it becomes clear that economists can hardly overestimate the significance of air transportation to the country. The stimulus provided the national economy by jet transportation has been of inestimable value in pushing the gross national product to record highs.

Looking beyond statistics, however, it can be seen that air transportation has aided national goals in other and equally important ways. One current national goal is the expansion of world trade. Here airline performance has been of great value to the nation's leaders and to the general economy. Air transportation has opened new markets for products in every part of the world. It has spurred the flow of commerce between this country and all other countries. It has given the United States a real advantage in the maintaining of U.S. positions and policies throughout the globe. It has provided the means for our government to stay on top of opportunities for trade expansion everywhere in the world.

Another national goal is to find a solution to the balance of payments problem—one which concerns us as American businessmen just as it concerns our public officials. For several years the combination of U.S. public and private spending abroad has exceeded our foreign earnings. A national program is under way to reduce this deficit, and the airline industry plays a major role in the endeavor by helping to expand the export market, by facilitating international commerce, by promoting tourism from abroad, and, as a result of its own huge investment in flight equipment, by stimulating the sale of U.S.-produced aviation products to airlines of all countries.

Still another national goal that has been aided by the airlines is the maintenance of a strong military posture. The Civil Reserve Air Fleet—a ready reserve of more than 300 first line aircraft—offers the U.S. quick and ready airlift to support military activities wherever and whenever an emergency arises. The very fact that a strong and well developed air transportation system exists in this country means that an important line of communication and transportation is available for domestic support of military operations at all times and under all conditions.

With such a sweeping revolution as the jet age behind them, one might think that the airlines at this point would just stand pat and hold on to their present jet aircraft until a completely new aircraft is developed. This thinking might be true of many industries; it certainly is not true in air transportation. Not only are the airlines continuing to improve their present fleets, they have

placed orders for even more equipment. On order for delivery this year and in 1965 and 1966, are 317 pure jet aircraft. Some of these are long range four-engine aircraft, some of them are a new breed of three-engine aircraft, some are twinengine jets and some are designed for all-cargo work.

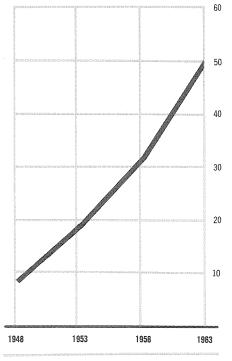
But these are just for the immediate future. Still to come are the supersonic transports. U.S. airlines have manifested their interest in this spectacularly new equipment by depositing with the government thousands of dollars in orders. The supersonic age will be here early in the 1970's and the lessons learned from the subsonic program will go a long way toward the smooth integration of these aircraft into the U.S. air transportation system.

All through the various stages of airline development—the pioneering days, the early pressurized equipment and most recently the jet age—airline management has met or exceeded not only its own goals but the larger goals of the nation. That these goals have been achieved reflects in large part an attitude on the part of the government that air transportation and, indeed, all industry is to be encouraged to develop to its highest potential. In the years just ahead and beyond them in the supersonic years, it is vital that the U.S. government and its agencies maintain an attitude which will join with air transportation in the promotion of this important segment of the national economy.

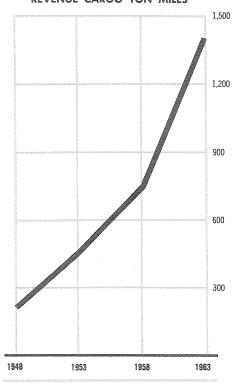
Although the air transportation system has been revolutionized countless times since the days of the Benoist, there is one slogan which has never changed in the half century. Painted on the crude wooden shack at Tampa which housed the early flying boat was the hand-lettered battle cry: "Safety First". The airline owners had the sign painted as a reminder that no matter what else, safety was the motivating force. Now, 50 years later, it is still the number one concern of the U.S. scheduled airlines.

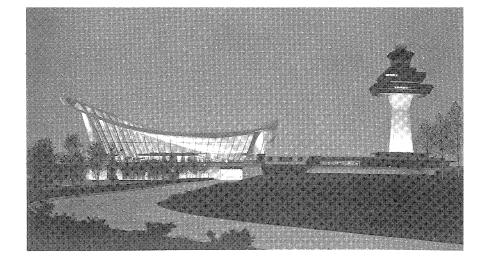
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MILLIONS OF REVENUE CARGO TON MILES





JET AGE PROMISE

The transition to turbine-powered aircraft was a bold investment. It required vision; it required courage; and it required management ingenuity.

The public began to feel the revolutionary impact of jet aircraft virtually from the day they were introduced—at the end of 1958. In 1963, the airlines themselves began to reap the benefits of the age they had coaxed and nurtured into being.

Signs of viability appeared in 1962, when the industry realized \$52.8 million in net profits. This compared to a net loss of \$37.8 million in 1961. The 1962 trend continued during 1963, for a net profit totaling \$84 million for the year.

Behind the welcome earnings picture were gains in every category of traffic. The airlines flew some 71 million passengers about 50 billion passenger miles and more than 1 billion ton miles of freight—up 15 and 14 per cent respectively above 1962. Mail and express, which, with freight, compose the cargo category, also reached new heights. Late in the year, the cargo capacity of the airlines was expanded with the introduction of the first all-cargo jets, thus setting the stage for further development of the air freight market.

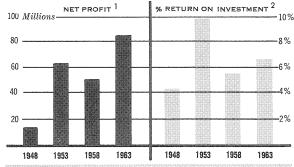
Jet Efficiency

Improvement in the airlines' traffic and financial picture was due in large part to the efficiency of the jets. While they comprised only about a third of the aircraft in the nation's commercial fleet of approximately 1,837 aircraft, they accounted for more than 80 per cent of the traffic.

But jet efficiency was not the only reason for the favorable turn. Sound, progressive management was another reason. Airline manage-

AIRLINE EARNINGS INCREASE Selected Years





- 1. Net income after special items
- 2. Net income before interest as a per cent of total investment

BECOMES REALITY

ment has built an entirely new air transport system around the jets: maintenance bases, terminals, operations, reservations and baggage-handling techniques. This complex new jet system is now fully at work and last year began to demonstrate its inherent efficiency.

The introduction of reduced fares to broaden the air travel market also contributed to the increase in traffic and in revenues. However, the rise in revenues did not keep pace with traffic gains. This was because of the lower promotional fares. The revenue per passenger mile was about 4 per cent below 1962.

The strength of the economy in general, to which the airline industry is keenly sensitive, was another factor in the economic success of 1963. The various business indicators that showed an upward trend for the national economy also pointed the way to better airline business.

Still another factor was that by the end of 1963 the airlines had absorbed most of the jet "break-in" costs. Prior to 1962, these costs had not permitted jet transports to begin to realize their potential for economical operations. But as their fleet-modernization programs approached maturity, the airlines began to glimpse the breakeven point, when operating revenues cover operating expenses—and beyond.

Once their revenues went over the breakeven point, the airlines achieved profitability.

The Impacts

The improved economic health of the airlines means improved public service:

• The domestic airlines do more passenger business than railroads and buses combined on the basis of revenue passenger miles in scheduled operations.

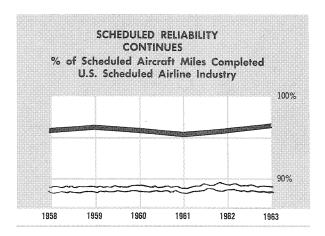
- More than 550 points in the United States now receive scheduled airline service.
- The domestic route mile network covers about 280,000 miles.
- More than 176,000 men and women are employed by the airlines, with an annual payroll of more than one and one-quarter billion dollars.

The Outlook

The airlines' experience with the jet revolution has been vital in developing their ability to meet the challenges of improved service commensurate with an advancing technology. During the next decade, the airlines will be making a substantial investment in the present generation of subsonic jets for both passenger and cargo operations. In support of these services, they will also be buying new electronic equipment to improve operational reliability.

But the most dramatic challenge on the horizon is the supersonic aircraft. This looms as a formidable investment requirement in the early seventies.

The emergence of jet age travel as a profitable operation can place the industry in the position to make these and other investments required for continued progress possible. An enlightened government can make the possibility a certainty by promulgating regulatory policies that will foster and not inhibit airline prospects.



SCHEDULE RELIABILITY

During 1963, the fifth full year of the jet age, the U.S. scheduled airlines provided the American public with the fastest and most efficient mode of travel available. This was achieved in significant part because of the airlines' continuing and unflagging efforts to achieve what is known in industry circles as "all-weather" operations.

All-weather operations define themselves. They mean flights safely and efficiently completed in all kinds of weather—foul or fair.

Over the years, the industry has made remarkable progress toward this goal. But the airlines will not be satisfied until they can accomplish their flights under "zero-zero" conditions; that is, when both vertical and horizontal visibility are virtually non-existent because of bad weather.

During 1963, the airlines worked toward allweather operations on three important fronts: improved airborne facilities, improved ground facilities, and improved maintenance of the aircraft themselves.

Improved Airborne Facilities

The devices, or "black boxes", the airlines install in their aircraft in the interest of improved flight safety and reliability and the installations made on the ground for the same purpose are part of the nation's over-all Air Traffic Control System.

As a further contribution toward modernizing this system, last year the airlines announced that they would undertake a voluntary program to outfit practically all their aircraft with improved radar beacon transponders, bringing to about \$25 million the airlines' investment in airborne radar beacon equipment.

This move was in line with the program of the Federal Aviation Agency, the federal body in charge of air traffic control, to use radar equipment capable of positively identifying aircraft and measuring altitude as a basic element in modernizing the management of the airways.

The essential elements of the radar beacon system are interrogators on the ground and transponders in the planes. The transponders in the improved system will be capable of transmitting to the radar scopes of ground air traffic controllers a series of "blips" fully identifying aircraft and automatically reporting their altitude.

The radar beacon system in use today is capable of indicating only limited information on types of flight operations and aircraft identity.

The positive aircraft identification and altitude reporting capabilities of the "more sophisticated" transponders are regarded by industry as one of the most significant improvements in air traffic control since the introduction of radar. It is expected that virtually all airline aircraft will be equipped with these transponders by 1966.

Improved Ground Facilities

In line with their drive for greater schedule reliability, last year the airlines conducted two major surveys of operation and traffic control facilities at airports and along the approaches to airports.

One, called a "delay survey", was a joint study of the airlines and the Federal Aviation Agency and sought to identify the nature and extent of delays caused by air traffic control and airport deficiencies. It was the most extensive survey of this type ever undertaken and was based on reports made by airline crews on 353,000 flights during a two-month period.

Findings from the delay survey are expected to be valuable in determining methods of increasing the on-time performance of airline service and improving airports and the air traffic control system.

The other survey was entitled "Airline Industry Survey of Airports". Its objective was to determine what the airlines would need in airport improvements over the five-year period 1964-69 and covered operation facilities on the airport,

as well as approach and landing facilities. These included runways and taxiways, approach and runway lighting, devices for measuring runway visibility, and the most modern types of electronic navigational aids, such as very high frequency omni-directional ranges (VOR), instrument landing systems (ILS) and distance measuring equipment (DME).

Some 600 airports used by the airlines were examined on an airport-by-airport basis. Summaries of the findings, which were submitted to the Federal Aviation Agency, the Weather Bureau and the managers of the airports surveyed, listed each improvement that will be needed at a given airport during the next five years, the reasons for the improvement, and the relative priority at the airport for each improvement.

The airlines see the project as a continuing one—thus making certain that future interruptions in airline schedules will be held to a minimum.

Greater Schedule Reliability at Small Airports

There are some 395 "smaller" airline airports (those generating up to 27,500 passengers a year) which, because they do not normally qualify for the full complement of airport navigational aids, cannot permit aircraft landings and takeoffs under the same weather conditions as the larger terminals equipped with a full complement of aids. This is in line with the priority system for providing electronic and visual airport traffic aids, based on planning standards set up by the FAA, which take into account factors such as the total number of annual instrument approaches at the airport. The limited poor-weather capability of these airports results in delays and schedule cancellations which would not be necessary were these airports adequately equipped.

To explore ways to improve airline service reliability at these smaller airports, the Air Transport Association, the airlines' national service organization, sponsored a symposium last year attended by top FAA and airline officials and technical experts on electronic and visual air navigation systems. Managers of small airports, representatives of the Civil Aeronautics Board and manufacturers of electronic equipment were also present.

The discussions centered on the belief that any airport which qualifies for certificated service should have a basic package of aids which would permit landing minimums of at least 400 feet up and one mile out. Depending upon the volume of traffic above the minimum for airline certifica-

tion, airports should have the aids necessary to permit progressively lower landing minimums.

It was generally recognized that if costs could be reduced, more airports could be provided with the necessary aids and services. However, as in all other operational areas, the airlines were careful to press the point that, in reducing costs, there could be no compromise with safety.

Since the symposium, much attention has been focused on the cost problem. The airlines, the FAA and the manufacturers are optimistic that less expensive aids can be built which would bring acquirement within reach of small airports. This is evidenced in the low cost ILS, DME, and lighting systems now nearing completion of their development cycles.

Unflagging Maintenance

The airlines enthusiastically endorsed the Federal Aviation Agency move which established in 1963 a Maintenance Year program for awards to aviation mechanics as another valuable step in the continuing drive to assure that maintenance contributes to the highest standards of airline safety and schedule reliability.

Recognizing the role of the mechanic in maintaining safe and efficient aircraft operations was the first step in a planned FAA program of annual awards. The 1963 awards were made in two categories—airline and general aviation (all aircraft other than airline and military)—and were presented at a ceremony in December by the Federal Aviation Agency Administrator to the winner in each category.

The aviation mechanic safety awards underscored a facet in a system that successfully oper-

GROWING INVESTMENT IN AIR SAFETY Flight Equipment Maintenance Expense U.S. Scheduled Airline Industry

	1953	1958	1963
Direct Maintenance—Flight Equipment (millions of \$)	141.7	248.4	417.2
Direct Maintenance—Cents per plane mile	21.6	25.5	38.2
Direct Maintenance— Cents per seat mile	0.49	0.47	0.43

ates under the highest safety standards. To support this system, last year the airlines spent in the neighborhood of \$650,000,000 maintaining their aircraft and other equipment—about a fifth of all operating expenses and around a two-anda-half fold increase in the last eight years.

The carriers employ more than 35,000 aviation mechanics to maintain their 1,837 aircraft—an average of about 19 per plane.

The technical skills required of today's airline aviation mechanic have increased tremendously. For example, the piston-powered aircraft that dominated the airways 15 years ago each carried about \$12,000 worth of electronic equipment. The newest jets are equipped with an average of nearly \$200,000 in electronic devices.

An aviation mechanic could be trained to test and repair the electronic equipment in the earlier planes in an average of 100 hours. It takes 1,500 hours to train a mechanic to handle the electronic equipment in a modern jetliner.

For every hour an airliner spends in flight, an average of 19 man hours is spent at maintenance centers in testing, checking, rechecking, repairing and replacing its parts. The airlines' practice of progressive maintenance keeps their aircraft in virtually mint condition.

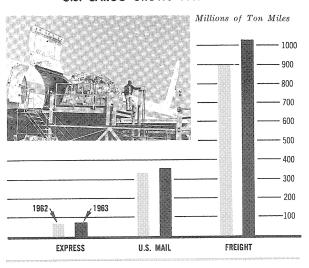
Another factor in airline maintenance and safety is the communications network existing between the airlines, the Federal Aviation Agency and aircraft manufacturers. The discovery of the slightest flaw by an aviation mechanic or flight personnel in an aircraft is instantly communicated to other airlines operating the same type of plane.

Improved Safety Record

Unflagging efforts in the foregoing categories helped to give the scheduled airlines in 1963 the third best safety year in history. According to the Civil Aeronautics Board, their safety rate was 0.23 fatalities per 100 million revenue passenger miles, compared with 0.26 in 1962, 0.30 in 1961 and 0.76 in 1960. It was the 12th consecutive year in which the fatality rate per 100 million passenger miles was less than one.

President Lyndon B. Johnson recognized the airlines' outstanding safety record when he said in his report on the nation's aeronautics and space activities, "The airways were never busier nor safer than during 1963. The steady improvement in the safety record of commercial airlines is encouraging more and more Americans to take advantage of the speed and convenience of air travel."

U.S. CARGO GROWS 11% in 1963



HIGHLIGHTS OF 1963

FREIGHT LEAPS FORWARD

In 1963, the scheduled airlines offered the public more than 10,000 flights a day, all of which carried some kind of cargo—mail, express, freight. Included in their aircraft fleet were all-cargo piston and turboprop planes, ranging in capacity from 5 to 45 tons; combination passenger/cargo piston types, with cargo capability ranging up to 5 tons; turboprop combination aircraft, with capacity up to 4 tons; and jet combination planes, each capable of hauling up to 9 tons of cargo. One could say that each of the jet combination planes has a DC-4 air freighter in its belly.

During the second half of the year, the cargocapacity graph of the airlines veered sharply upwards. This was because the first *all-cargo* jets ever to fly in commercial fleets began to enter U.S. scheduled service. At the end of the year about a dozen of these giant "jet freighters", with a maximum payload of 90,000 pounds, were in operation by U.S. carriers, with many more on order for future delivery. This represents an investment of well over \$200 million.

Capability? A single cargo jet can haul a load of more than 40 tons nonstop coast-to-coast, or 35 tons nonstop New York to Paris.

The cargo jet is also versatile. It can be changed from all-cargo to all-passenger configuration within several hours. Or it can be converted

to a mixed configuration—part cargo and part passenger. This makes the aircraft eligible for practically any kind of military contract work, and most desirable for the airlines' role in national defense.

By use of revolutionary mechanized ground-handling equipment, in which the carriers are investing heavily, and the containerization or palletization of loads, jet freighters can be loaded and unloaded in 40 minutes. For transatlantic, transcontinental and semi-transcontinental runs, this airplane has been demonstrating its efficiency over the piston type. However, in shorter hauls and other areas not feasible for the larger jets, the piston and turboprop freighters will continue to be used.

Cargo Promotion

During 1963, the airlines continued their aggressive air cargo sales program. Domestically, they spent more than \$2 million to sell air freight on a competitive basis. This included advertising through the principal media of the daily press and magazines. A special category of management magazines receives a heavy outlay of the cargo advertising dollar. In support of press and magazine channels to shippers and the general public were promotional efforts through direct mail, sales brochures, and booklets.

The cargo sales program went well beyond advertising media. Airline management is continuously adding to its sales force. Last year, there were about 500 air freight sales specialists selling their services throughout the United States.

The program was accelerated, too, through contracts with more than 500 trucking companies, which enabled the airlines to bring door-to-door air-freight service to some 9,500 points. Air Cargo, Inc., a wholly owned subsidiary of the scheduled airlines, is responsible for these ground services which tie into scheduled airline operations.

NEW EQUIPMENT

While the all-cargo jet was the only entirely new plane to enter airline fleets in 1963, orders were placed during the year for improved types of twin- and three-engine combination passenger/cargo aircraft designed for short-to-medium range operations.

In the early months of 1964, several U.S. carriers placed the three-engine entry—the medium-

range Boeing 727—into scheduled service. It was the first American transport with rear-mounted jet engines and the first tri-engine jet in the world to enter commercial service. Early performance reports from the airlines indicated that the 727 was exceeding all expectations for efficient and economical operations.

It is expected that two twin-engine jets—one foreign, the other American and both scheduled for short-to-medium operations—will begin entering service during 1965-66.

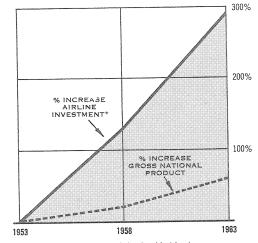
The airlines, manufacturers and federal agencies continued their efforts during the year to develop a suitable design for a short-haul aircraft—an aircraft capable of operating with small loads over short route segments more economically than the DC-3, still the "staple" aircraft for most of the local service airlines. A spur to this program was offered in early 1964 when the Federal Aviation Agency invited manufacturers to participate in a design competition to produce such a plane.

The FAA asked that manufacturers submit their proposals for evaluation by May 15, 1964.

Meanwhile, the local service airlines—the segment of the industry most interested in a modern short-haul plane—continued to improve their service by adding to their fleets twin-engine turboprops presently on the market and piston aircraft converted to turboprops. They also placed orders for the twin-engine jets being developed for delivery beginning in 1965.

The 600-mile four-engine jet continued to symbolize the progress of U.S. air transport in

AIRLINE INDUSTRY INVESTMENT PACES NATIONAL GROWTH



* Investment is the sum of the Stockholders' equity, long term debt and advances.

1963. During the year, the airlines took delivery on most of the remaining jets on order, though additional orders were placed for jet planes with improvements and other modifications making for greater speed, efficiency and comfort and putting the airlines in the second stage of the subsonic jet age.

At year's end, total fleet composition of the industry looked like this:

Piston	1,154
Turboprop	263
Pure jet	420
Total	1.837

PROGRESS ON THE GROUND

Complementing improvements in customer service aloft are the improved services to customers on the ground: reservations, ticketing, baggage handling, flight information, and miscellaneous services provided the passenger between terminal and plane.

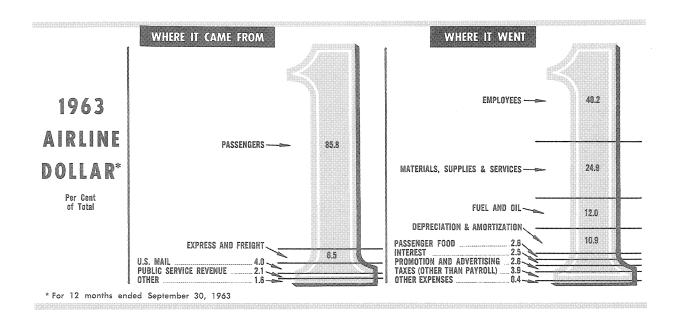
In 1963, the airlines processed 140 million reservations, issued 70 million tickets and checked 100 million pieces of baggage. Toward reaching their goal of discharging these functions swiftly and without error, the airlines accelerated installation of electronic computer reservation and flight information systems and activated improved teletype equipment to improve both interline and intraline communications.

To aid further the customer anticipating a flight, they increased their plane arrival and departure TV displays at terminals, and their recorded telephone announcements.

New machine-ticketing techniques, which reduce the time a customer waits for his ticket, were introduced at airline ticket offices and terminals throughout the country. At the same time, more airlines were "ticketing by mail", a procedure whereby tickets are mailed to persons holding advance reservations. They make payment by return mail or at flight check-in time.

At year end, the carriers had completed development of a revolutionary system to speed the recovery of misdirected luggage which could not be located by routine tracing efforts. Known as ARCH (Airline Baggage Recovery Clearing House), the system uses the latest electronic and sorting equipment to link all major airlines into a nationwide teletype hookup for rapid exchange of information relating to lost and found luggage. It works like this: airlines transmit daily to the clearing house a list of unclaimed bags. They also transmit a list of missing bags. An accurate description—color, type, contents—is given of each bag. Punch cards and electronic sorters match the two lists, the appropriate offices are notified by teletype and the bags are returned to their owners.

ARCH went into operation on May 1, 1964.



HANDS ACROSS THE SEA

The U.S. scheduled airlines continued their vigorous leadership in helping to remove the barriers to international travel and trade during 1963. Early in the year, the Air Transport Association received the President's E Award for excellence in furthering the travel and export expansion programs of the United States.

Again, in March of 1964, the airlines were commended by the President "for continuing their efforts throughout 1963 to streamline border-crossing formalities for air travelers and air cargoes."

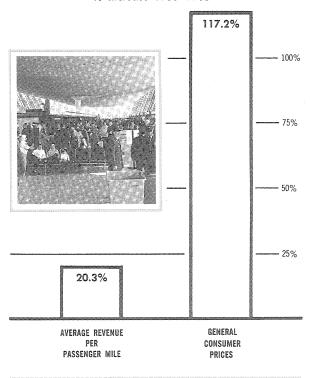
The President's citation is reflected in last year's volume of tourism and of exports. Foreign nationals traveling to the United States aboard U.S. scheduled airlines totaled nearly one-half million. And U.S. cargo exports aboard the U.S. carriers came to almost 93 million pounds.

But the international highlight of the year was that the U.S. share of transatlantic air passenger traffic went up for the first time in nine years. It increased from 37.8 per cent in 1962 to 41.5 per cent in 1963.

Working with appropriate government agencies, airline "facilitation" achievements last year included:

- Elimination of tourist fees for Mexicans visiting the United States. Reciprocal action was taken by the Mexican Government for U.S. tourists and now free tourist cards are available to citizens of the United States for visits to Mexico up to thirty days.
- Adoption of the visa-by-mail procedure for Mexican tourists. This procedure eliminates in-person application for visas at U.S. consular offices and is currently in effect in many countries of the world.
- Establishment of a National Aviation Facilitation Committee and program. Composed of government and airline representatives, the committee has recommended a program to streamline the rules for controlling the entry and clearance of aircraft, persons and goods across international boundaries.
- Replacement of written by oral baggage declaration requirements for air passengers clearing Customs upon arrival in the United States.
- Adoption of complete clearance procedures for air exports at 22 U.S. "point-of-origin" cities, thus eliminating possible delays at gateway airports.

AIR FARES STAY LOW AS COST OF LIVING MOUNTS % Increase 1938-1963



REDUCED FARES

Domestic fares held their own last year—were even lowered on certain routes to develop new travel markets. But the most arresting fare developments were international and served as a further airline prod to international tourism.

In support of the U.S. Commerce Department's "Visit USA" program and as part of the over-all industry effort to promote travel to this country, the airlines initiated a pair of dramatically promotional "Visit USA" fares in September. These special fares are set at \$100 for unlimited travel to any of 567 cities in the U.S. for 15 days and \$200 for unlimited travel to those cities for a period of 45 days. They were made possible through an agreement among 12 local service and two Alaskan airlines and are restricted to persons living more than 100 miles beyond the border of any state of the United States.

Sons and daughters from two through 21 years of age in the company of their parents may travel at half fare. Also under the tariff a free baggage allowance of 66 pounds is permitted.

How to take advantage of these bargain rates? Any scheduled airline or accredited travel agent, either in the United States or in a foreign country, may sell what is called a "Visit USA Exchange Order" to a qualifying passenger. This Exchange Order will entitle the holder to airline tickets for unlimited travel under the terms of the tariff.

It is believed that the "Visit USA" program will receive further stimulus during 1964 from the reduced transatlantic fares that went into effect on April 1. This reduction came about in large part through the leadership taken by U.S.-flag carriers last year in their rate negotiations with foreign-flag carriers and was in line with the long-standing policy of the U.S. airline industry to bring to the public the lowest possible fares in keeping with sound business practice.

Transatlantic rates came down from 3 to 21 per cent below those in effect at the end of 1963—an all-time low for members of the International Air Transport Association, the organization representing most of the scheduled airlines of the world.

Improved Transatlantic Traffic Control

In anticipation of the upward effect it is believed reduced fares will have on the already heavy air traffic between North America and Europe, six countries initiated a joint study last year of the traffic control and navigation system governing the flow of traffic across the North Atlantic. Known as SPANAT, or "Systems Planning Approach North Atlantic", the study calls for careful, long-range planning to make the best use of the most modern air traffic control equipment available to assure safe and efficient flight operations between North America and the continent of Europe. SPANAT is another example of the careful planning going forward to accommodate the pressure of the jet age.

AIRLINES AND NATIONAL DEFENSE

The Civil Aeronautics Act of 1938, the birthright of the scheduled airlines, clearly identified the airline industry as an arm of national defense. Last year, the airlines initiated a new program to extend their effectiveness in handling national defense airlift requirements by establishing a Special Air Transport National Defense Committee, composed of top management representatives from every type of airline.

During the year, the committee and appropriate government agencies worked toward the

development of effective plans for the airline role in all four phases of national defense:

- Limited emergencies of varying degrees
- A national emergency
- A period of nuclear attack on the United States
- Recovery and rehabilitation from attack

This move clearly implemented the twenty-one executive orders issued by the President in 1962 and 1963 directing appropriate Federal Government agencies to undertake a program "to develop a state of readiness with respect to all conditions of national emergency, including attack upon the United States."

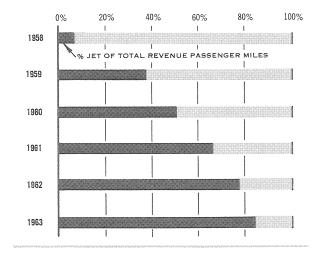
As the degree of emergency increases, the military need for commercial airlift increases. This process could continue to a point where, because air transportation is vital to the national economy, remaining commercial airline operations would become just as essential to the military effort as military airlift itself.

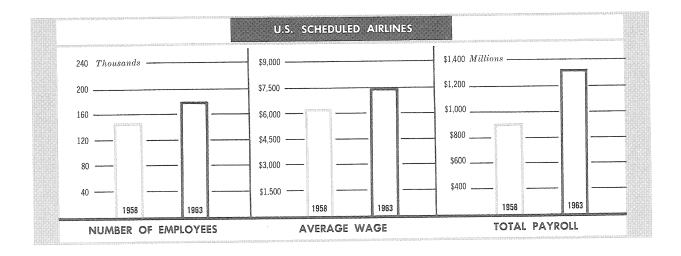
For this reason, one of the important goals the airlines' special defense committee has set for itself is to work out a method of meeting varying military requirements in national emergencies with the least amount of disruption to the scheduled commercial pattern of the airlines.

CRAF and WASP

Airline support of the nation's military program is already well developed. Through CRAF

GROWTH OF JET SERVICE
% of Passenger Miles in Turbine Powered Aircraft
U.S. Scheduled Airlines





(Civil Reserve Air Fleet)—an operating unit of about 350 of the most modern transport aircraft, completely equipped with flight and ground crews—the airlines are ready for military service on 36-hour call. If CRAF were fully activated, it would provide about two billion annual ton miles of lift. Extent of activation would be determined by requirements of a specific emergency.

Where CRAF serves the needs of the military, WASP, the War Air Service Pattern, would serve civil traffic in a national emergency. All aircraft not in CRAF would become part of WASP, operated by the airlines under the supervision of the Civil Aeronautics Board. The new airline program keeps the capabilities of CRAF and WASP as a base, but seeks further ways to develop maximum support for the military from the enormous current airline lift potential.

Airline Military Traffic

The airlines also serve the military by providing needed airlift of troops and materiel within the United States.

The major part of this service is supplied by two classifications of movement: JAMTOs (Joint Airline Military Traffic Offices) and CAMs (Commercial Air Movements).

JAMTOs

Last year marked the 10th anniversary of the JAMTO concept. Under this concept, joint airline ticket offices are set up at military installations across the country to meet the needs of individual military personnel and their families. The offices

are operated jointly by a committee composed of representatives of the airlines serving the area and provide the same services as an airline's airport or downtown ticket office. JAMTOs have complete communication facilities.

At the end of 1963, there were 90 JAMTOs at military installations throughout the country. A measure of their usefulness to the military is that about one million military personnel last year booked \$90 million worth of airline passage through JAMTO offices. A decade ago, the 20 JAMTOs then in operation accounted for less than \$8½ million in airline revenues.

CAMs

A movement of 25 or more military personnel by air is called a CAM—Commercial Air Movement. Suppose the Army wants to move 200 troops from Washington, D. C. to a base on the West Coast. The Army transportation officer communicates with the Defense Management Service of the Department of Defense and states the conditions of the movement—where, when and how many.

Defense Management Service then puts out a "tender" to the various transportation modes who might be interested—airlines, buses, railroads—asking for bids. The bid that best meets the military requirements gets the job.

Price does not always determine the winner. Frequently, it is the value of service that tilts the balance in favor of one mode or another. For example, in the course of a single year troop movements by air save many millions of man-hours.

Fifteen years ago, only one or two per cent of military traffic went by air. The railroads carried the bulk of the rest. Last year, the airlines accounted for more than 70 per cent of Department of Defense official expenditures for passenger travel within the United States.

AIR TRAVEL CARD— VALUABLE BOOST TO BUSINESS

While airline fleet modernization has revolutionized the transportation of man, a single credit plan, symbolized by a 3½ by 2-inch plastic card, is doing much to expand this revolutionary form of transportation, together with many of the goods and services attendant upon it.

Known as the Air Travel Card, this latter-day "Open sesame!" is the only card that offers its holders a truly comprehensive credit service. Unlike any other credit card, it covers transportation on all the world's major airlines—plus charges for hotel, motel, restaurant, car-rental, secretarial and communication services.

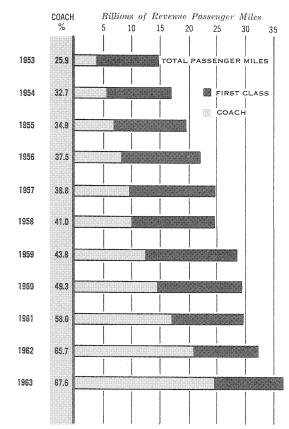
At the end of 1963—the year of the "World's Most Honored Credit Card's" 26th birthday—there were more than 1¼ million cardholders and some 125 airlines—U.S. and foreign—honoring the card for transport credit. For the first time in history, the Air Travel Card generated revenues totaling more than \$1 billion in a single year.

The plan which "mothered" the card is known as UATP—Universal Air Travel Plan—and became effective in 1936. UATP became world-wide in scope in 1948 and today is sponsored jointly by the International Air Transport Association, representing foreign-flag carriers, and the Air Transport Association's Air Traffic Conference, for U.S. airlines.

It is estimated that last year about a quarter of U.S. domestic carrier revenues—nearly \$700 million—came through use of the Air Travel Card. Another estimate indicates that well over 90 per cent of airline tickets purchased in 1963 with the Air Travel Card were for business purposes.

The airlines believe that the Air Travel Card should be as close to a "complete service" as possible and therefore extended its use to include personal credit in 1959. And so today the card is honored not only by 125 of the world's major airlines, but also by some 12,000 additional commercial services in the 50 U.S. states and in 40 foreign countries. Of the 12,000 vendors, about 4,200 are hotels and motels.

COACH CONTINUES GROWTH % of Passenger Miles by Class of Service Domestic Trunk Airlines



1963 RESULTS BY

There are seven classifications of U.S. certificated scheduled airlines. It is on this basis that their service, traffic and financial results are compiled by the Civil Aeronautics Board.

THE 11 DOMESTIC TRUNK airlines served a record 53,381,000 revenue passengers for an increase of 14.2 per cent over 1962. Revenue passenger miles increased 14.3 per cent to 36,383,-800,000.

Records were also established in all categories of cargo traffic. Mail ton miles were 167,063,000,

a gain of 4.3 per cent; express rose to 64,915,000 ton miles; and freight ton miles measured 520,-631,000, an increase of 9.8 per cent.

Operating revenues increased 9.0 per cent to \$2,451,787,000. Operating expenses rose to \$2,308,904,000, a 6.1 per cent increase, leaving an operating income of \$142.9 million and a net profit of \$16.5 million after taxes, interest, and special items.

Meanwhile, the trend toward coach showed no let up in 1963. Coach passenger miles accounted for 67.6 per cent of the total trunkline revenue passenger miles flown in 1963.

THE 13 LOCAL SERVICE airlines carried 15.9 per cent more passengers, flew 16.3 per cent more passenger miles and carried 13.6 per cent more mail, 14.3 per cent more express and 25.0 per cent more freight than in 1962.

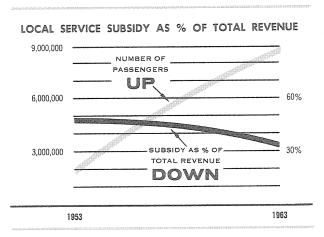
Some 8,867,000 revenue passengers flew local service airlines in 1963 for a total of 1.9 billion passenger miles. Mail ton miles were 4.4 million, express ton miles were 4.3 million and freight ton miles were 9.0 million.

The local service airlines are making significant progress in their program to reduce service subsidy which supports operations at several hundred small communities. These smaller cities do not yet generate enough commercial revenues to fully support air service, but Congress and the Civil Aeronautics Board have concluded that this service is an important factor in the development of these local economies. The overall amount of subsidy has risen until recently.

INCREASED PRODUCTIVITY PER EMPLOYEE Domestic Trunk Airlines

	Number of Employees		Available Ton Miles per Employee		Available Ton Miles
1948	57,263	Х	23,713	=	1,357,881,000
1953	77,893	х	37,146	=	2,893,390,000
1958	107,857	х	48,202		5,190,102,000
1963*	121,945	Х	73,281		8,936,230,000

^{*} Data for year ended September 30, 1963.



However, through improved efficiency and traffic promotion, the local airlines' relative dependence upon subsidy has been coming downfrom one-half of the total revenues 10 years ago to less than one-third today.

Of the 475 cities now authorized to be served by the local service airlines, 300 are served by them exclusively and might otherwise have no scheduled air service.

HELICOPTER airlines, as a group, flew 12,510,000 revenue passenger miles, an increase of 52.7 per cent.

Cargo volume for the combined operations amounted to 74,000 ton miles of air mail, an increase of 13.8 per cent; 44,000 ton miles of express, and 6,000 ton miles of freight, both of which matched last year's achievement.

In 1963 the helicopter operations—which serve metropolitan Los Angeles, Chicago and New York—experienced a net loss of \$154,000 on revenues of \$8,636,000 and expenses of \$8,840,000. This compares with a net profit of \$89,000 in 1962.

Begun shortly after World War II on an experimental basis, the helicopter services constitute the nation's proving ground for the development of safe, efficient and economical scheduled helicopter transport. With the certification of San Francisco-Oakland Helicopter Airlines late in 1963, the Civil Aeronautics Board extended the experiment into another metropolitan area. The military services have saved millions of dollars by the application of improved flight, maintenance, supply and utilization methods developed by the helicopter carriers.

INTRA-ALASKAN airlines carried 224,000 revenue passengers, a decrease of 6.3 per cent. They

flew 46,600,000 passenger miles, a decrease of 4.1 per cent.

They carried 2,832,000 ton miles of air mail, for an increase of 9.9 per cent and 2,640,000 ton miles of freight, a 1.0 per cent increase over 1962.

This group of carriers earned a net profit of \$264,000 on operating revenues of \$19,748,000 and operating expenses of \$18,838,000. This compares with a net profit of \$514,000 in the previous year.

The value of air transport to the well-being of Alaska was underscored by the airlines swift response in the early spring of 1964, when part of the state was crippled by a series of earthquakes.

Senator E. L. Bartlett recognized the vital role of the airlines when he said, "The U.S. scheduled airlines dramatically displayed their airlift capability by flying emergency personnel and supplies to earthquake-stricken Anchorage and Kodiak."

But the airlines were not only valuable in bringing aid to Alaska immediately following the disaster. Since then, they have been playing a major role in accelerating the state's reconstruction.

INTRA-HAWAIIAN scheduled airlines established new records in all categories of traffic. They carried 973,000 passengers, an increase of 10.9 per cent. They flew 144,000,000 revenue passenger miles, an increase of 11.8 per cent.

The two Intra-Hawaiian airlines carried 114,000 ton miles of mail, an increase of 4.6 per cent, and 2,151,000 ton miles of freight, a gain of 2.4 per cent.

They achieved a net profit of \$189,000 on operating revenues of \$15,501,000 and operating expenses of \$14,691,000. This compares with a net loss of \$119,000 in 1962.

The indispensability of scheduled air transport in the progress of our newest state is reflected by its high utilization. The per capita annual use of air service is well in excess of one flight per person.

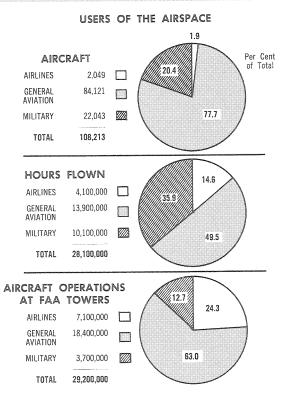
ALL-CARGO airlines in their domestic and international services carried a record 193,013,000 ton miles of freight in 1963, representing a 30.0 per cent increase over the previous year. Mail volume was 11,877,000 ton miles, an increase of 8.3 per cent; and express volume was 769,000 ton miles, an increase of 78.4 per cent.

While scheduled services continued to post new records, charter operations declined 28.3 per cent to 331,169,000 ton miles. The all-cargo airlines realized a net loss of \$1,373,000 in 1963 on operating revenues of \$103,601,000 and operating expenses of \$98,209,000. This compares with a net profit of \$4,473,000 in 1962.

U.S. INTERNATIONAL AND TERRITORIAL airlines scored substantial traffic gains and established new records in all categories of passenger and cargo business in 1963. The number of passengers rose 13.9 per cent to 7,515,000. Revenue passenger miles gained 17.4 per cent, reaching 11,905,400,000.

These carriers moved 170,288,000 ton miles of mail, an increase of 5.3 per cent; 794,000 ton miles of express, down about 1.0 per cent; and 295,610,000 ton miles of freight, an increase of 12.0 per cent.

The international and territorial airlines earned a net profit of \$64,022,000 on operating revenues of \$929,380,000 and operating expenses of \$796,740,000, an improvement over the 1962 profit of \$33,585,000.



Fiscal year 1963 data as shown in FAA's "Aviation Forecasts, Fiscal Years 1964-1969" except General Aviation hours in the air from the "1963-1968" edition. Commercial airline hours include domestic and international service of U.S. certificated route, supplemental intrastate and contract carriers.

THE FUTURE

WITH CONFIDENCE

"If there is a word to characterize the times in which we live it is change . . ."

This comment which opened the White House task force report "Project Horizon" about two and a half years ago is none the less true today.

No word could better recall the course of airline history since the end of World War II. No word could better chart the course of airline history in the making.

Change is once again on the airlines' horizon—and it is clearly technological. It is the supersonic transport—the SST.

As in past equipment "revolutions", the airlines see in the SST not only a big challenge, but a big opportunity—a big opportunity to provide a new standard of public service.

It was for this reason that the airlines endorsed in June of 1963 the late President Kennedy's recommendation to Congress that "we proceed with a national program to support the development of a commercial supersonic transport aircraft which is safe for the passenger, economically sound for the world's airlines, and whose operating performance is superior to any existing aircraft."

Speed is an elusive factor until a new plane has been tested and placed in operation. Speed can be only "relative" on the drawing board. The airlines envision an SST with a speed potential of more than Mach 2.2—or more than twice the speed of sound.

Other characteristics required by the airlines are an SST capable of being operated at a reasonable profit; operated without undue annoyance to persons on the ground; able to fit into the total air transportation pattern, including airports and present and projected air traffic control facilities; and most importantly, capable of being operated in a way to permit the airlines to continue to improve their safety record.

A unique problem faces the industry in financing the development of the SST. For the first time in history, government is required to make a direct financial contribution to a civil transport development program. This is so because the magnitude of the program is beyond the resources of any single manufacturer.

It can also be traced to the lack of many indirect contributions the government has made in the past through military technological developments applicable to commercial aircraft. With the shift from aircraft to missiles in recent years, the military activity has been substantially reduced. Basic research and development are thus required for the SST—a costly proposition.

Estimates of the cost of an American SST when ready for sale are between \$20 and \$30 million. This means that the airlines will have a heavy investment problem presented to them when the supersonic transports are ready for service in the seventies. Already the U.S. scheduled carriers have placed delivery position orders for 37 SST aircraft.

But apart from the initial cost, the economic "unknown" that concerns the airlines most is cost of operation once the SSTs are placed in service.

The airlines insist that if a supersonic transport is to be truly useful to the airlines and to the public, it must be operationally and economically efficient. It must follow the general trend of increasing aircraft productivity that has enabled the carriers over the years to improve service while keeping the cost to the passenger and shipper at a reasonable level. This factor, of course, is important both to the airlines and to the manufacturers who will be selling the SST in the world market. It is also important to the FAA in maintaining an airways system commensurate with the demands of advancing aviation technology. Toward the cost of operating the system, the airlines-a minority user-contribute more than \$100 million annually.

Meeting successfully the challenge of the supersonic transport is not wholly in the hands of management. Government regulatory agencies also play a crucial part.

While the earnings trend of the airlines is encouraging for the future, the fact must be recognized that between 1956 and 1963 the trunk carriers fell a cumulative \$754 million short of reaching the profit levels which would have obtained had the carriers been able to achieve the 10.5 per cent rate of return which the Civil Aeronautics Board has said is fair and reasonable.

With this earnings gap, the airlines must continue to cut costs and to maintain their aggressive merchandising program. They fully intend to do so. Their optimism is predicated on the belief that an understanding government will permit them to accumulate adequate reserves to continue to produce a modern air transport service and advance successfully into the future.

AVAILABLE SERVICE AND UTILIZATION

U. S. Scheduled Airline Industry

(In Millions Except Helicopter)

authorodronissakinnasikkulusakaldirinnissäkinnissäkinnistäkin elekään jälken akkaitiodrissäkinnissäkinnissäki	Available Ton Miles Flown	Revenue Ton Miles Flown	Ton Mile Load Factor (%)	Available Seat Miles Flown	Revenue Passenger Miles Flown	Passenger Load Factor (%)	Revenue Plane Miles Flown
Domestic Trunk Airlines 1959	6,582.8 7,176.2 8,114.2	3,166.8 3,332.5 3,435.2 3,771.0 4, 257.6	53.2 50.6 47.9 46.5 46.2	45,793.2 49,153.6 52,525.0 59,736.8 67,601.3	28,127.2 29,233.2 29,534.8 31,827.8 36,383.8	61.4 59.5 56.2 53.3 53.8	743.5 712.8 676.8 699.9 752.7
Local Service Airlines 1959 1960 1961 1962 1963	282.3 329.4 388.6	108.8 121.2 142.4 170.3 198.3	45.6 42.9 43.2 43.8 45.0	2,309.2 2,724.7 3,228.4 3,797.3 4, 266.9	1,024.3 1,141.6 1,343.8 1,607.7 1,869.0	44.4 41.9 41.6 42.3 43.8	85.4 93.3 103.2 113.0 121.3
Intra-Hawaiian Airlines 1959 1960 1961 1962 1963	30./ 21.6 21.5	12.7 17.7 12.5 12.6 14.1	60.2 57.7 57.9 58.6 54.7	187.2 217.1 202.3 212.4 239.5	110.9 127.5 125.6 128.8 144.0	59.2 58.7 62.1 60.6 60.1	5.3 5.6 5.2 5.5 5. 7
Helicopter Airlines (in thousands) 1959 1960 1961 1962 1963	2,228 2,183 2,329	856 1,053 969 907 1,332	48.7 47.3 44.4 39.0 43.4	14,628 18,764 18,276 20,125 27,657	7,477 9,475 8,604 8,192 12,510	51.1 50.5 47.1 40.7 4 5.2	1,899 2,219 2,157 1,518 1,463
Intra-Alaskan Airlines 1959	18.9 20.5 25.2	11.5 10.6 11.8 13.4 16.5	58.1 56.1 57.6 53.2 53.9	100.7 102.9 105.9 116.5 117.9	37.7 43.0 46.0 47.6 46.6	37.4 41.8 43.4 40.9 39.5	5.9 6.6 7.4 7.5 7.5
All-Cargo Airlines (Domestic) 1959 1960 1961 1962 1963	325.1 385.2 615.1	274.3 249.7 295.1 472.1 343.3	82.5 76.8 76.6 76.8 72.2				9.7 8.7 7.2 5.6 7.9
International and Territorial Airline 1959 1960 1961 1962 1963	1,773.4 2,039.0 2,468.8 2,925.9	1,159.2 1,291.3 1,495.5 1,619.9 1,856.0	65.4 63.3 60.6 55.4 53.2	10,842.1 13,346.1 15,769.5 18,724.4 22,590.2	7,064.2 8,306.3 8,768.5 10,137.8 11,905.4	65.2 62.2 55.6 54.1 52.7	178.7 168.5 161.3 171.5 192.1
All-Cargo Airlines (International) 1959 1960 1961 1962 1963	102.1 175.3 232.2	58.4 73.1 133.1 177.5 166.2	65.2 71.6 75.9 76.4 71.2				6.5 5.9 6.0 5.0 5.7
CONSOLIDATED INDUSTRY 1959 1960 1961 1962 1963	9,383.5 10,579.9 12,325.9	4,734.1 5,024.3 5,393.9 6,238.2 6,853.3	56.8 53.5 51.0 50.6 49.2	59,247.1 65,567.3 71,856.6 82,611.8 94,843.5	36,371.8 38,863.0 39,830.8 43,760.4 50,361.3	61.4 59.3 55.4 53.0 53.1	1,030.2 998.0 969.7 1,009.4 1,094.4

NOTE: Available Ton Miles and Revenue Ton Miles include charter operations; all other items are for scheduled services only. In some instances, individual figures may not add to Consolidated Industry totals because of rounding; Avalon Air Transport figures are included in industry totals for 1960, 1961 and 1962.

REVENUE TON MILES OF TRAFFIC CARRIED

U. S. Scheduled Airline Industry

(In Thousands of Revenue Ton Miles)

	Passenger	Priority U. S. Mail	Non Priority U. S. Mail	Express	Freight	Excess Baggage	Charter Flights	TOTAL
Domestic Trunk Air 1959 1960 1961 1962 1963	2,672,087 2,777,148 2,806,469 3,023,888 3,456,932	98,487 108,061 117,929 131,711 138,661	17,929 22,845 26,762 28,501 28,402	53,107 55,440 56,745 64,879 64,915	282,472 320,950 384,161 473,955 520,631	29,419 29,071 26,881 25,430 23,797	13,271 18,968 16,270 22,665 24,227	3,166,772 3,332,483 3,435,218 3,771,029 4,257,565
Local Service Airlin 1959 1960 1961 1962 1963	97,516 108,652 127,602 152,662 177,555	1,693 2,110 2,771 3,288 3,766	503 587 584 545 587	2,211 2,419 3,019 3,772 4,312	3,125 3,845 5,492 7,218 9,026	711 799 875 990 1,004	3,061 2,744 2,084 1,837 2,096	108,820 121,155 142,428 170,312 198,346
Intra-Hawaiian Air 1959	8,879 10,156 10,047 10,308	76 82 82 90 93	5 14 19 21		1,625 1,806 1,846 2,100 2,151	30 31 31 51 40	2,058 5,605 494 10 285	12,668 17,685 12,515 12,578 14,109
Helicopter Airlines 1959 1960 1961 1962 1963	901 818 779	87 91 94 65 74		41 40 40 44 44	7 7 7 6 6	4 5 5 3 4	7 10 6 10	856 1,053 969 907 1,332
Intra-Alaskan Airlii 1959 1960 1961 1962 1 963	3,872 4,434 4,741 4.874	1,501 1,796 2,209 2,576 2,832			2,140 2,422 2,829 2,620 2,640	116 127 135 147 155	3,869 1,844 1,929 3,211 6,027	11,498 10,625 11,843 13,428 16,450
All-Cargo Airlines 1959 1960 1961 1962 1963		582 674 407 175 504	161 233 261 146 505	1,250 1,050 754 417 748	104,237 88,516 78,286 81,816 110,096		168,049 159,224 215,352 389,536 231,410	274,279 249,697 295,060 472,090 343,263
International and 1 1959 1960 1961 1962 1 963	706,696 831,066 877,022 1,017,184	Airlines 73,697 82,626 93,220 108,987 115,811	21 12,233 42,492 52,760 54,477	481 520 609 798 794	158,868 191,065 216,561 263,931 295,610	12,897 13,922 13,191 15,125 16,821	139,878 78,350 110,247 150,848 174,431	1,100,817 1,218,245 1,362,428 1,619,903 1,855,967
All-Cargo Airlines 1959 1960 1961 1962 1963	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	5,547 6,567 6,425 4,441 4,663	2,658 5,968 6,602 6,205	4 14 21	36,579 34,853 43,764 66,537 82,917		16,178 28,796 76,823 99,759 72,111	58,383 73,091 133,094 177,497 166,165
CONSOLIDATED IN 1959 1960 1961 1962 1963	3,489,760 3,732,533 3,827,038 4,209,926	181,670 202,007 223,139 251,333 266,404	18,614 38,565 76,087 88,578 90,197	57,090 59,469 61,167 69,925 70,834	589,053 643,468 732,951 898,187 1,023,077	43,177 43,955 41,118 41,748 41,821	346,371 295,606 423,231 668,136 510,603	4,734,093 5,024,283 5,393,933 6,238,246 6,880,845

NOTE: In some instances individual figures may not add to totals because of rounding; Foreign Mail ton miles carried by International & Territorial airlines and by All-Cargo Airlines in international operations are included only in the total ton mile column; Avalon Air Transport figures are included in the Consolidated Industry totals for 1960, 1961 and 1962.

OPERATING

U. S. Scheduled Airline Industry

		U.	S. Mail	Public Service				
	Passenger	Priority	Non-Priority	Revenue	Express	Freight	Other 1	Total
Domestic Trun	k Airlines							
1958	1,362,994	33,042	3,076	2,386	16,141	57,350	38,261	1,513,250
1959	1,632,647	37,158	3,417		19,158	67,027	39,203	1,798,610
1960	1,756,439	40,420	4,353		21,785	74,792	44,846	1,942,63
1961	1,826,820	43,958	5,071		21,446	85,289	43,782	2,026,36
1962	2,020,975	49,002	5,486		24,332	102,364	47,935	2,250,09
1963 P	2,208,395	51,256	5,476	988	25,238	116,468	43,967	2,451,78
Local Service	Airlines							
1958	56,487	1,275	90	32,747	812	1,184	2,388	94,99
1959	•	1,472	154	42,179	1,019	1,727	3,180	122,82
1960		1,764	159	54,126	1,353	2,108	3,369	146,48
1961	•	2,209	236	62,936	1,684	3,090	3,280	177,05
1962	·	2,674	188	67,948	2,061	4,070	3,691	206,09
1963 P		2,953	206	68,148	2,513	5,029	4,235	226,30
Intra-Hawaiia	n Airlines							
1958	7,064	55		109		777	1,388	9,39
1959	•	61	1			833	1,060	11,43
1960		65	2	109		956	2,901	15,21
1961		68	4	697		984	690	14,08
1962		72	6	230		1,161	387	13,68
1963 P		77	7	716		1,179	396	15,50
Helicopter Air	lines							
1958	1,460	216		4,371	101	31	112	6,29
1959		227		4,915	132	40	136	7,76
1960		246		4,931	210	41	85	8,60
1961		253		5,258	189	39	89	8,60
1962		174		5,518	215	39	135	8,58
1963 P	3,284	193		4,640	216	40	264	8,63
Intra-Alaskan	Airlines							
1958	4,202	1,536		2,911		1,226	2,429	12,30
1959	· ·	1,803		3,611		1,299	2,813	14,49
1960		2,089		4,852		1,513	1,793	16,03
1961	,	2,529		6,352		1,775	2,029	18,86
1962	,	2,873		5,139	********	1,691	2,685	18,73
1963 P 2	-,	3,065		5,199		1,689	294	19,74

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REVENUES

(In Thousands of Dollars)

	_	U. S. Mail		Public Service				
	Passenger	Priority	Non-Priority	Revenue	Express	Freight	Other 1	Total
All-Cargo Airlines	(Domestic)							
1958		155	128		301	15,876	40,522	56,982
1959		202	39		357	18,658	34,014	53,269
1960		238	41		337	15,770	32,642	49,028
1961		154	49		246	13,166	45,765	59,381
1962		81	25		120	11,662	78,813	90,702
1963 P		182	83		237	15,563	51,523	67,587
International and Territorial Airline								
1958	395,604	34,033		3,929	102	45,318	51,895	530,881
1959	· ·	36,638		3,831	137	51,740	55,262	592,226
1960	· ·	40,201	3,198	4,146	177	58,625	50,707	684,62
1961	· ·	45,362	10,457	3,709	200	63,066	66,461	722,412
1962	,	53,905	13,030	3,433	235	71,017	73,557	810,400
1963 P		57,646	13,667	846	204	80,168	83,255	928,43
All-Cargo Airlines 1958 1959	<u></u>	894 2,952				7,471 10,371	11,505 4,771	19,870 17,860
1960		4,229				8,964	8,123	21,31
1961		4,018	1,046		1	9,388	21,838	36,29
1962		2,295	1,870		4	11,747	23,767	39,68
1963 P		2,486	1,710	********	9	13,714	18,094	36,01
CONSOLIDATED II	NDUSTRY							
				40 452	47 457	100 000	4 4 4 4 4 4 4	
1958	1,827,811	71,206	3,294	46,453	17,457	129,233	148,510	2,243,96
1958		71,206 80,512	3,294 3,611	54,536	20,803	151,461	148,510 140,439	, ,
	2,167,109	•	•	•	•	,	, .	2,618,47
1959	2,167,109	80,512	3,611	54,536	20,803	151,461	140,439	2,618,47 2,884,27
1959	2,167,109 2,387,937 2,484,644	80,512 89,259	3,611 7,753	54,536 68,164	20,803 23,862	151,461 162,777	140,439 144,525	2,243,964 2,618,47 2,884,27 3,063,57 3,438,58

¹ Includes revenues from excess baggage, foreign mail, charter operations, and incidental revenues.

² Kodiak Airlines not included in 1963 totals.

DISTRIBUTION OF

U. S. Scheduled Airline Industry

				General		Deprecia-			
	Flying Operations	Maintenance	Passenger Service	Aircraft & Traffic Servicing	Promotion & Sales	Adminis- trative	Total G. S. & A.	tion & Amorti- zation	Total Operating Expenses
Domestic	Trunk Line	es							
1958	437,518	286,127	101,222	231,109	165,945	56,950	555,226	139,254	1,418,125
1959	505,243	346,387	130,942	275,301	198,780	64,992	670,015	171,729	1,693,374
	548,125	397,032	150,356	305,674	215,093	74,360	745,483	217,145	1,907,785
1961	574,519	399,808	156,809	328,301	225,553	82,374	793,037	266,569	2,033,937
	593,816	444,047	164,546	362,912	241,895	89,255	858,608	278,999	2,175,470
1963 P	628,837	472,012	181,557	394,110	261,460	92,891	930,018	278,001	2,308,904
Local Serv	vice Airline	es							
1958	29,267	18,571	4,529	24,047	7,028	5,545	41,149	4,348	93,335
1959		25,056	6,078	31,185	9,293	6,861	53,417	6,882	122,186
1960		30,967	7,183	36,492	11,605	8,247	63,527	7,784	144,309
1961		35,987	8,388	42,368	13,515	9,185	73,456	9,583	167,696
1962		42,298	9,726	48,095	16,298	10,611	84,730	10,604	192,724
1963 P		47,372	10,646	53,122	18,586	11,524	93,878	11,834	213,921
Intra-Haw	aiian Airli	nes							
1958	2,505	1,699	414	1,672	1,285	1,023	4,394	659	9,257
1959	=	1,933	457	1,948	1,725	1,217	5,347	909	11,265
1960		3,273	695	2,373	2,059	1,391	6,518	1,411	15,468
1961		2,867	392	2,321	2,181	1,540	6,434	1,092	13,456
1962		2,677	409	2,430	2,074	1,619	6,533	1,106	13,250
1963 P		2,930	512	2,706	2,337	1,863	7,418	1,125	14,691
Helicopter	Airlines 1								
1958		1,619					1,982	945	5,963
1959		2,017					2,361	1,036	7,110
1960		2,546					2,710	1,192	8,382
1961	•	2,633					3,086	1,143	8,807
1962		2,454					3,378	1,212	8,835
1963 P		2,789					3,307	1,000	8,840
Intra-Alas	kan Airlin	es ¹							
1958	3,947	3,167					4,191	715	12,020
1959		3,961					4,824	1,059	14,397
1960		4,309					5,328	1,049	15,055
1961		4,461					5,901	1,003	16,213
1962		4,811					6,191	1,084	17,421
1963 P 2	· · · · · · · · · · · · · · · · · · ·	5,139					6,578	1,166	18,838
1000 . ~	0,330	0,100					5,010	.,	. 5,550

P Preliminary.

¹ Detailed General Services & Administration expense data not reported by this group.

² Kodiak Airlines not included in 1963 totals.

OPERATING EXPENSES

(In Thousands of Dollars)

			General Services & Administration					Danuasia		
	Flying Operations		Passenger Service	Aircraft & Traffic Servicing	Promotion & Sales	Adminis- trative	Total G. S. & A.	Deprecia- tion & Amorti- zation	Total Operating Expenses	
All-Cargo	Airlines	(Domestic)								
1958	22,555	12,560	1,867	5,314	1,670	3,128	12,733	7,551	55,399	
1959	•	12,671	1,338	4,795	1,500	3,121	11,524	6,106	51,525	
1960		11,442	1,165	5,380	1,874	3,028	11,879	5,933	49,603	
1961	•	12,395	1,444	6,777	2,099	3,189	14,048	8,647	58,206	
1962	•	20,849	1,847	8,411	2,169	4,032	16,461	12,029	80,401	
1963 P	•	16,518	1,744	8,478	2,342	3,784	16,348	10,330	66,307	
Internatio Territorial		3	,							
	163,516		26 442	76,043	76,834	25,615	218,268	54,190	519,604	
	170,391	83,630 05,776	36,442 44,070	76,043 84,235	70,034 87,091		247,120	60,366	573,653	
	170,391	95,776 101.516	44,070 47,727	•	101,778	28,999	280,056	78,049	639,328	
	186,561	101,516	47,737	98,216	•	28,912	298,147	104,111	698,311	
	193,422	109,490	52,219	103,275	107,327	31,818	•	•		
	193,422 216,447	113,601 119,251	56,045 68,908	111,892 122,717	116,745 133.345	40,791 39,388	325,472 369,207	91,696 91,837	724,192 796,740	
All C	A !!!	/I								
-		(Internationa	-					1 000	00.740	
1958	,	5,343	638	3,567	944	1,263	6,412	1,620	22,749	
1959	•	5,228	217	3,883	1,256	1,528	6,884	1,265	22,612	
1960	•	5,998	534	3,968	1,292	1,697	7,491	1,587	26,332	
1961		8,489	1,417	4,819	1,579	2,034	9,849	4,091	37,890	
1962	,	8,413	1,749	5,001	1,615	2,367	10,732	4,699	36,543	
1963 P	9,984	7,348	1,389	4,641	1,588	1,955	9,573	4,997	31,902	
CONSOLI	DATED IN	DUSTRY 3								
1958	670,099	412,716	145,112	341,752	253,706	93,524	844,355	209,282	2,136,452	
1959	752,249	493,029	183,102	401,347	299,645	106,718	1,001,492	249,352	2,496,122	
1960	812,152	557,180	207,670	452,103	333,701	117,635	1,123,161	314,193	2,806,686	
1961	858,330	576,245	220,669	487,861	352,254	130,140	1,204,229	396,303	3,035,115	
1962		639,273	234,323	538,741	380,796	158,472	1,312,331	401,473	3,249,397	
1963 P 2	950,168	673,359	264,756	585,774	419,658	151,405	1,436,327	400,290	3,460,143	

³ The total of General Services and Administration expense is greater than the sum of the detail accounts since some airlines report total expense only.

SUMMARY OF

U. S. Scheduled Airline Industry

	Total Operating	Total Operating	Net Operating	Interest on Long-Term	Other Non- Operating Income (Net)	Income Taxes	Net Profit or Loss 1	Rate of Return on Invest- ment 2 (%)	Profit Margin on Sales 3 (%)
	Revenues	Expenses	Income	Debt					
	A . 1.								
Domestic Trunk									
	1,513,250	1,418,125	95,125	24,457	20,743	44,722	44,794	6.5	3.0
	1,798,610	1,693,374	105,236	32,397	38,484	53,061	61,682	7.1	3.4
	1,942,635	1,907,785	34,850	43,950	31,791	18,212	68	2.8	
	2,026,368	2,033,937	−7,569	61,569	20,528	-12,038	-34,567	1.5	
1962	2,250,094	2,175,470	74,623	72,364	27,184	23,160	8,308	4.7	0.4
1963 P	2,451,787	2,308,904	142,886	69,470	16,000	56,603	16,509	4.0	0.7
Local Service A	Airlines								
1958	94,993	93,335	1,658	827	246	395	1,138	9.2	1.2
1959	•	122,186	635	1,887	197	-178	64	4.9	0.1
1960	·	144,309	2,172	2,872	713	294	1,940	9.1	1.3
1961	•	167,696	9,359	3,274	703	3,147	4,862	11.8	2.7
1962	· · · · · · · · · · · · · · · · · · ·	192,724	13,374	3,748	1,475	5,305	5,920	11.7	2.9
1963 P		213,921	12,383	3,748	777	4,623	4,622	9.3	2.0
Intra-Hawaiian	Airlines								
1958		9,257	136	167	-2		-114	1.3	
1959		11,265	166	305	83	-37	50	4.8	0.4
1960		15,468	-251	494	228		-512	0.2	
1961	•	13,456	629	516	- 99		133	6.5	0.9
1962	•	13,250	431	445	– 35	31	-119	3.5	
1963 P	,	14,691	811	461	-128		189	7.5	1.2
Helicopter Airl	ines								
1958		5,963	328	96	16	114	491	11.9	7.8
1959	•	7,110	650	87	50	309	501	10.7	6.5
1960		8,382	219	59	51	92	150	4.0	1.7
1961		8,807	-205	32	50	- 78	-46	0.3	
1962			-203 -252	234	129	-223	89	4.0	1.0
		8,835		294 294	234	- 223 - 91	– 154	1.5	
1963 P	8,636	8,840	-204	254	234	_ 31	-104	1.5	
Intra-Alaskan A	Airlines								
1958		12,020	284	131	108	219	92	4.2	0.7
1959	.,	14,397	97	339	244	169	28	4.9	0.2
1960	,	15,055	976	318	-16	196	430	9.3	2.7
1961	18,866	16,213	2,652	295	35	1,408	922	14.5	4.9
1962	18,735	17,421	1,314	288	46	573	514	8.9	2.7
1963 P 4	19,748	18,838	908	266	77	459	264	5.8	1.3

P Preliminary

¹ Net Profit or Loss shown is after "Special Items," which are not included in the detail. Therefore, the items do not add to the profit figures shown.

² Net income before interest and after taxes as per cent of net worth and long-term debt.

PROFIT OR LOSS

(In Thousands of Dollars)

	Total Operating Revenues	Total Operating Expenses	Net Operating Income	Interest on Long-Term Debt	Other Non- Operating Income (Net)	Income Taxes	Net Profit or Loss 1	Rate of Return on Invest- ment 2 (%)	Margin on Sales 3 (%)
All-Cargo Airlines	(Domestic)								
1958		55,399	1,583	1,442	639	2,041	-2,142	-1.79	
1959	•	51,525	1,744	1,400	1,435	761	719	5.10	1.3
1960		49,603	- 575	1,240	730	187	-1,128	0.24	
1961		58,206	1,174	2,365	-2,911	311	-4,578	-3.19	
1962	*	80,401	10,301	4,775	2,897	4,108	4,355	10.4	4.8
1963 P		66,307	1,279	3,804	2,288	215	—542	3.7	
International and Territorial Airlines									
1958	530,881	519,604	11,277	6,211	8,868	5,829	7,608	3.6	1.4
1959	592,226	573,653	18,573	8,831	12,757	10,453	13,156	4.5	2.2
1960		639,328	45,293	16,715	6,424	18,818	16,216	5.3	2.4
1961		698,311	24,102	24,275	4,869	5,691	-2,169	3.2	
1962		724,192	86,208	26,337	6,016	33,233	33,585	8.8	4.1
1963 P	929,380	796,740	132,636	24,042	5,689	48,821	64,022	12.3	6.9
1958	19,870 17,860 21,317	22,749 22,612 26,332 37,890	2,879 4,752 5,015 1,599	326 294 583 1,628	1,111 264 176 — 8	- 689 -1,046 - 5	-1,471 -3,519 -7,945 -2,240	 9.3 -27.8 -71.9 2.1 	
1961	•	•	-1,599 3,139	2,841	8 356		118	7.7	0.3
1963 P	•	36,543 31,902	4,112	2,67 5	495		–831	4.7	
CONSOLIDATED II	NDUSTRY								
1958	2,243,964	2,136,452	107,512	33,657	31,729	52,631	50,396	5.5	2.2
1959	2,618,471	2,496,122	122,349	45,540	53,514	63,566	72,681	6.2	2.8
1960	2,884,277	2,806,686	77,591	66,232	40,097	37,794	9,140	3.2	0.3
1961	3,063,577	3,035,115	28,459	93,959	23,167	-1,573	-37,758	2.1	
1962	3,438,586	3,249,397	189,189	111,035	37,354	66,187	52,816	5.7	1.5

³ Profit as per cent of revenues.

⁴ Kodiak Airlines not included in 1963 totals.

ASSETS, LIABILITIES AND

U. S. Scheduled Airline Industry

	1958	1959	1960	1961	1962	(Sept. 30) 1963
Domestic Trunk Airlines¹						
Assets						
Current Assets Investments and Special Funds Flight Equipment Reserve for Depreciation and Airworthiness Ground Property and Equipment Reserve for Depreciation Other Property Deferred Charges Total Assets	184,162 1,521,386 -753,446 237,840 -115,772 100,272 28,567	633,794 132,780 1,898,778 -834,828 279,018 -132,553 105,921 55,340 2,138,250	681,196 130,063 2,327,772 - 926,748 318,308 - 153,437 104,311 67,632 2,549,097	694,186 139,299 2,759,623 -1,083,326 351,737 -175,025 63,709 69,762 2,819,953	810,571 110,957 3,022,651 -1,222,042 371,058 -187,731 58,952 2,991,693	837,465 155,531 3,007,831 -1,318,105 384,991 -204,535 48,642 55,543 2,967,364
Liabilities and Equity						
Current Liabilities Long-Term Debt Other Non-Current Liabilities Deferred Credits Stockholders' Equity—Net of Treasury Stock Preferred Stock Common Stock Other Paid-In Capital Retained Earnings Less: Treasury Stock Total Liabilities and Equity	588,730 19,713 78,818 687,068 24,000 111,957 236,106 315,493 488	474,011 804,578 2,014 114,563 743,084 19,072 116,627 262,522 345,298 435 2,138,250	499,245 1,069,651 103,438 137,751 739,012 18,864 119,911 278,465 322,391 619 2,549,097	523,565 1,408,938 22,263 148,173 717,075 34,162 128,124 292,126 263,276 613 2,819,953	592,202 1,449,941 27,552 190,678 731,321 33,552 133,085 303,713 262,114 1,143 2,991,693	652,955 1,275,195 30,892 220,554 787,767 21,286 147,795 325,627 294,803 1,745 2,967,364
Local Service Airlines						
Assets						
Current Assets. Investments and Special Funds Flight Equipment Reserve for Depreciation and Airworthiness Ground Property and Equipment Reserve for Depreciation Other Property Deferred Charges Total Assets	2,894 46,305 -20,444 7,595 -4,119 1,518 2,650	29,911 2,055 67,202 -25,175 9,870 -4,871 1,931 3,542 84,465	38,131 2,487 82,394 -29,867 11,472 5,779 1,147 4,514 104,499	44,257 2,428 95,492 -36,484 13,688 -6,878 4,730 5,415 122,647	49,512 4,066 107,589 - 39,688 15,724 - 8,241 4,296 4,987 138,264	52,362 7,574 117,368 - 45,521 17,099 - 9,306 3,886 5,042 148,504
Liabilities and Equity						
Current Liabilities Long-Term Debt Other Non-Current Liabilities Deferred Credits Stockholders' Equity—Net of Treasury Stock Preferred Stock Common Stock Other Paid-In Capital Retained Earnings Less: Treasury Stock Total Liabilities and Equity	18,106 362 221 12,579 163 7,360 5,732 —595	34,215 31,062 4,072 293 14,823 163 8,245 7,180 -691 74 84,465	43,031 43,781 159 441 17,087 163 8,434 7,474 1,089 73 104,499	44,199 50,067 58 618 27,704 2,665 10,598 9,254 5,263 73 122,647	49,115 52,625 142 1,301 35,082 2,323 11,172 10,877 10,819 109 138,264	49,718 57,330 126 1,834 39,495 2,100 12,325 11,406 13,774 109 148,504

¹ Balance sheet data for Domestic Trunk Airlines includes their international as well as domestic operations.

STOCKHOLDERS' EQUITY

(In Thousands of Dollars)

	1958	1959	1960	1961	1962	(Sept. 30) 1963
Intra-Hawaiian Airlines						
Assets						
Current Assets	77 634	3,481 299 11,134 -4,104 1,778 -1,147 144 859 12,444	4,309 56 12,980 -4,261 2,231 -1,273 96 1,086 15,224	3,680 9 12,047 -4,679 2,553 -1,354 269 1,145 13,667	3,338 12 12,294 -6,016 2,587 -1,226 229 1,085 12,301	3,775 27 14,643 -7,012 2,800 -1,329 107 1,374 14,384
Liabilities and Equity						
Current Liabilities	2,681	2,614 6,164 	4,709 7,393	3,719 6,658 74 3,217 1,570 1,361 1,793 -1,507 13,667 3,098 588 5,347 -3,488 1,107 -665 1,387 730 8,103	3,578 5,555 71 3,098 1,555 1,376 1,793 -1,626 12,301 3,620 214 10,018 -2,933 1,349 -765 113 859 12,475	5,336 5,400 87 3,562 1,511 1,420 1,793 -1,162 14,384 3,237 214 9,469 -2,876 1,473 -852 259 818 11,741
Liabilities and Equity						
Current Liabilities Long-Term Debt Other Non-Current Liabilities Deferred Credits Stockholders' Equity—Net of Treasury Stock Preferred Stock	1,319 1 5 4,187	2,021 696 1 152 4,687	1,762 300 55 199 5,010	2,303 492 38 308 4,963	2,207 4,923 31 235 5,078	2,183 4,329 23 191 5,016
Common Stock Other Paid-In Capital Retained Earnings Less: Treasury Stock	. 770 . 2,686 . 731	770 2,686 1,231	957 2,672 1,381	957 2,673 1,331	964 2,692 1,423	964 2,692 1,361
Total Liabilities and Equity	. 7,316	7,557	7,326	8,103	12,475	11,741

ASSETS, LIABILITIES AND

U. S. Scheduled Airline Industry

	1958	1959	1960	1961	1962	(Sept. 30) 1963
International and Territorial Airlines						
Assets						
Current Assets Investments and Special Funds Flight Equipment Reserve for Depreciation and Airworthiness Ground Property and Equipment Reserve for Depreciation Other Property Deferred Charges Total Assets	96,983 321,169 -155,841 37,894 -23,571 7,543 10,381	141,000 115,982 426,986 -181,146 45,587 -25,130 7,006 19,179 549,464	179,258 48,752 596,836 -215,519 54,502 -28,475 5,317 31,117 671,788	201,285 64,220 548,936 -206,783 58,925 -32,075 6,214 36,554 677,274	210,175 66,511 593,042 -241,915 62,553 -35,443 3,603 31,444 689,970	227,034 72,303 611,217 - 279,005 64,837 - 38,082 3,309 32,693 694,306
Liabilities and Equity						
Current Liabilities Long-Term Debt Other Non-Current Liabilities Deferred Credits Stockholders' Equity—Net of Treasury Stock Preferred Stock	1,445 8.490	105,555 262,388 1,532 10,346 169,643	137,215 335,540 2,568 24,924 171,541 141	157,468 318,390 3,131 28,630 169,656	172,338 301,520 4,403 31,305 180,405	214,448 237,511 2,993 49,446 189,907
Common Stock Other Paid-In Capital Retained Earnings Less: Treasury Stock Total Liabilities and Equity	19,346 82,872 61,566 1,442	22,163 80,773 68,253 1,546 549,464	22,293 78,764 71,915 1,572 671,788	20,150 79,031 71,859 1,385 677,274	19,483 80,901 81,372 1,352 689,970	19,106 74,500 97,545 1,244 694,306
Intra-Alaskan Airlines						
Assets						
Current Assets Investments and Special Funds Flight Equipment Reserve for Depreciation and Airworthiness Ground Property and Equipment Reserve for Depreciation Other Property Deferred Charges Total Assets	5,827 -2,583 3,075 -1,274 402 271	3,973 278 7,729 -2,742 3,475 -1,500 316 371 11,900	4,272 564 8,294 -3,594 3,725 -1,631 137 346 12,113	6,208 631 8,367 -4,272 3,886 -1,880 144 469 13,550	5,386 820 9,509 -4,948 4,138 -2,074 418 455 13,704	6,043 862 10,450 -5,472 4,300 -2,257 388 499 14,813
Liabilities and Equity						
Current Liabilities Long-Term Debt Other Non-Current Liabilities Deferred Credits Stockholders' Equity—Net of Treasury Stock Preferred Stock Common Stock	3,484 3,250 5 237 3,133 	3,736 4,841 62 72 3,189 	3,905 4,081 59 22 4,046 	4,860 3,695 89 81 4,826	4,470 3,432 105 143 5,554 420 2,119	5,307 3,568 145 159 5,633 457 2,119
Other Paid-In Capital Retained Earnings Less: Treasury Stock Total Liabilities and Equity	169 875 10,109	179 970 11,900	184 1,516 12,113	183 2,270 13,550	283 2,733 13,704	283 2,774 14,813

STOCKHOLDERS' EQUITY

(In Thousands of Dollars)

	1958	1959	1960	1961	1962	(Sept. 30) 1963
All-Cargo Airlines ²						
Assets						
Current Assets Investments and Special Funds Flight Equipment Reserve for Depreciation and Airworthiness Ground Property and Equipment Reserve for Depreciation Other Property Deferred Charges Total Assets	3,337 55,701 -17,522 4,500 -2,258 4,534 4,962	20,481 20,572 59,027 -22,331 4,214 -2,378 701 2,233 82,519	18,677 28,394 54,884 -25,425 4,050 -2,438 6,231 3,532 87,905	28,541 21,920 127,996 - 35,620 5,266 - 2,735 7,175 8,567 161,114	33,632 9,098 157,912 -40,917 5,613 -2,976 5,618 8,621 176,599	30,963 8,158 156,941 - 50,528 5,879 - 3,302 7,950 7,439 163,500
Liabilities and Equity						
Current Liabilities Long-Term Debt Other Non-Current Liabilities Deferred Credits Stockholders' Equity—Net of Treasury Stock Preferred Stock Common Stock Other Paid-In Capital Retained Earnings Less: Treasury Stock Total Liabilities and Equity	17,509 1,900 3,326 28,172 1,437 9,155 19,257 19,257 254	22,001 28,325 1,385 3,030 27,778 1,193 10,303 22,370 -6,078 10 82,519	17,340 46,797 379 2,615 20,774 1,192 15,325 20,569 -16,306 6 87,905	39,693 96,166 35 1,838 23,382 1,192 23,300 21,633 -22,738 5 161,114	39,057 105,080 408 5,288 26,766 1,192 23,016 21,742 —19,179 5 176,599	29,903 96,836 480 8,939 27,341 1,192 24,044 13,932 —11,823 5 163,500
CONSOLIDATED INDUSTRY 3						
Assets						
Current Assets Investments and Special Funds Flight Equipment Reserve for Depreciation and Airworthiness Ground Property and Equipment Reserve for Depreciation Other Property Deferred Charges Total Assets	287,834 1,963,196 - 955,192 293,230 - 148,433 114,350 47,894	835,955 272,130 2,476,344 -1,072,670 344,836 -168,076 116,074 82,006 2,886,599	929,117 210,788 3,089,137 -1,208,641 395,349 -193,642 117,289 108,814 3,448,211	981,291 229,096 3,558,129 -1,374,879 437,235 -220,642 83,636 122,647 3,816,498	1,116,285 191,667 3,913,394 -1,558,708 463,099 -238,529 41,596 106,412 4,035,225	1,160,880 244,669 3,927,919 -1,708,521 481,379 -259,662 64,541 103,408 4,014,612
Liabilities and Equity						
Current Liabilities Long-Term Debt Other Non-Current Liabilities Deferred Credits Stockholders' Equity—Net of Treasury Stock Preferred Stock Common Stock Other Paid-In Capital Retained Earnings Less: Treasury Stock Total Liabilities and Equity	803,144 23,426 91,099 899,397 25,750 151,960 348,356 375,596 2,265	644,153 1,138,054 9,066 128,515 966,811 22,053 161,452 377,502 407,869 2,065 2,886,599	707,362 1,507,543 106,658 166,008 960,640 21,973 170,618 389,920 380,398 2,270 3,448,211	775,957 1,884,406 25,554 179,749 950,837 39,589 186,897 406,693 319,737 2,076 3,816,498	863,089 1,923,076 32,642 229,056 987,363 39,041 191,249 422,000 337,680 2,608 4,035,225	959,849 1,680,170 34,660 281,211 1,058,722 26,546 207,774 430,232 397,272 3,102 4,014,612

² Balance sheet data for All-Cargo Airlines includes their international as well as domestic operations. 3 Avalon Air Transport figures included only in Consolidated Industry 1960, 1961 and 1962.

COMPARATIVE TRANSPORT SAFETY RECORD

Passenger Fatality Rate per 100,000,000 Revenue Passenger Miles

(For Selected Years)

		•					
Ú. S. Scheduled Airlines	1953	1958	1959	1960	1961	1962	1963
Domestic							
Fatalities		114	209	306	124	121	48
Rate	0.56	0.43	0.68	0.96	0.38	0.34	0.12
International and Territorial							
Fatalities	2	10	59	1	0	0	73
Rate		0.16	0.80	0.01	0.00	0.00	0.58
Total U. S. Scheduled Airlines							
Fatalities	88	124	268	307	124	121	121
Rate		0.38	0.71	0.76	0.30	0.26	0.23
Motor Buses							
Fatalities	70	120	100	60	80	90	N.A.
Rate		0.24	0.18	0.11	0.15	0.16	N.A.
Railroads							
Fatalities	50	62	12	33	20	27	13
Rate		0.27	0.05	0.16	0.10	0.14	0.07
Autos							
Fatalities	23.500	24,200	24.800	24,600	24,700	26,800	N.A.
Rate		2.3	2.3	2.2	2.2	2.3	N.A.
N.A. — Not Available							

AIRLINE FARES COMPARED

Average Revenue per Passenger Mile — Intercity Common Carriers

(For Selected Years, In Cents Per Mile)

Scheduled Airlines:	1953	1958	1959	1960	1961	1962	1963	% Change 1953/1963
Domestic—Coach All Services International—Tourist*	4.13 5.43 5.77	4.52 5.64 5.58	4.63 5.88 5.38	5.01 6.09 5.59	5.42 6.28 5.50	5.76 6.44 5.43	5.62 6.17 5.47	+36.1 $+13.6$ -5.2 -15.4
All Services Railroads, Class I First Class Coach	6.88 3.38 2.53	6.46 3.75 2.76	6.29 3.84 2.77	6.35 3.83 2.77	6.08 3.94 2.84	5.87 3.97 2.89	5.82 4.00 P 2.99 P	+18.3 +18.2
Motor Buses, Class I	2.03	2.42	2.59	2.70	2.70	2.71	2.74 P	+35.0

^{*} Includes Economy Fares.

PERSONNEL EMPLOYED

By the Scheduled Airlines Industry¹

(1955-1963)

Year (Dec. 31)	Pilots and Copilots	Other Flight Personnel	Pursers, Stewards, Stewardesses	Communi- cations Personnel	Mechanics	Aircraft and Traffic Servicing Personnel	Office Employees	All Others	Total
1955	10,857	2,762	7,454	3,499	29.196	19.114	45.030	4,291	122,203
1956	11,386	3,384	8,097	3,605	30,962	20,657	49,336	4,076	131,503
1957	13,286	3,797	9,450	4,004	31,162	36,052	31,799	17,640	147,190
1958	12,897	3,667	9,811	3,978	29,580	37,256	32,003	17,958	147,150
1959	14,471	4,075	10,902	4,390	32,823	43,839	32,324	21,346	164,170
1960	13,535	3,811	10,600	4,233	34,181	43,334	35,440	21,101	166,235
1961	13,936	4,162	11,858	3,745	34,065	44,617	36,642	20,916	169,941
1962	13,820	4,151	12,178	3,418	34,925	46,696	36,952	20,687	172,827
1963*	14,094	3,873	13,064	3,238	35,404	47,992	37,626	20,898	176,223

P Preliminary.

¹ Data for Alaskan and All-Cargo carriers not included prior to 1959.

^{*} As of September 30, 1963.

REVENUE PASSENGERS CARRIED

U. S. Scheduled Airline Industry

(For Selected Years, In Thousands of Passengers)

(2 0.	2000000	1 00.0, 1.0 1	. Notiounus o	, i accompe	٥)		
	1953	1958	1959	1960	1961	1962	1963
Domestic Trunk Airlines	26,138	39,515	44,488	45,184	44,677	46,759	53,381
Local Service Airlines	2,032	4,265	5,213	5,591	6,470	7,651	8,867
Helicopter Airlines	1	230	366	490	430	359	458
Intra-Hawaiian Airlines	553	573	755	857	838	877	973
Intra-Alaskan Airlines	177	158	178	201	216	239	224
International and Territorial Airlines	2.745	4.428	4.999	5.497	5.699	6,598	7,515
TOTAL SCHEDULED AIRLINE INDUSTRY	31,646	49,169	55,999	57,872 1	58,408 1	62,549 1	71,418
	AVE	RAGE LEN	GTH OF H	l AUL			
		(Statut	e Miles)				
Domestic Trunk Airlines	547	618	632	647	661	681	682
International and Territorial Airlines	1,257	1,383	1,413	1,510	1,539	1,536	1,584

¹ Includes Avalon Air Transport

PASSENGER TRAVEL BETWEEN THE UNITED STATES AND FOREIGN COUNTRIES*

(Thousands of Passengers)

	1953	1958	1959	1960	1961	1962	1963
Passengers via Air	1,715	3,402	4,064	4,576	4,954	5,364	5,997
Passengers via Sea	1,112	1,219	1,426	1,474	1,469	1,568	1,639
Total via Air and Sea	2,827	4,621	5,490	6,050	6,423	6,932	7,636
Air Share (%)	60.7	73.6	74.0	75.6	77.1	77.4	78.5
Passengers via U. SFlag Airlines	1,152	2,053	2,358	2,505	2,458	2,680	3,020
Passengers via Foreign-Flag Airlines	563	1,349	1,706	2,071	2,496	2,684	2,977
U. S. Citizens via Air (%)	65.9	66.0	64.3	63.0	61.2	61.4	61.8
U. SFlag Airlines' Share (%)	67.2	60.0	58.1	54.8	49.6	50.0	50.4

^{*} Figures are for fiscal years and 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, "Report of Passenger Travel Between the United States and foreign countries."

INTERCITY PASSENGER TRAVEL IN THE UNITED STATES

(Passenger Miles in Millions)

	,-,			,,,,,			
	1953	1958	1959	1960	1961	1962	1963
Common Carriers							
Airlines	14,794	25,375	29,308	30,557	31,062	33,623	38,456
Railroads	26,905	18,474	17,502	17,064	16,154	15,859	14,527 E
Motor Bus 1	28,400	20,800	20,400	19,900	19,700	21,000	21,400 E
Total	70,099	64,649	67,210	67,521	66,916	70,482	74,383
Air Share (%)	21.1	39.3	43.6	45.3	46.4	47.7	51.7
Private Automobile	529,200	629,496	659,435	680,600	692,000	713,000	723,000 E
Total Common Carrier and Auto	599,299	694,145	726,645	748,121	758,916	783,482	797,383
Common Carrier Share (%)	11.7	9.3	9.2	9.0	8.8	9.0	9.3
Air Share (%)	2.5	3.7	4.0	4.1	4.1	4.3	4.8

¹ Includes charter

E Estimated

AIRCRAFT OWNED AND ON ORDER

By U. S. Scheduled Airline Industry

(For Selected Years)

		All (vol. months of the months in the control of th			accept of the Control		New aircraft on order for delivery in 1964 and subsequent years*	
Manufacturer	Model	1953	1959	1960	1961	1962	1963	1964
Armstrong-Whitworth:	Argosy (Turboprop)				7			
Boeing:	377 B707 (Jet) B720 (Jet) B727 (Jet)	44 	21 66 	3 91 22	94 76	117 99	127 103	23 8 176
British Aircraft Corp.:	BAC 111							44
Canadair:	CL 44 (Turboprop)				9	21	21	11
Convair:	240 340 440 540 (Turboprop) 880 (Jet) 990 (Jet)	113 25 	46 122 36 1	51 117 31 4 14	46 115 31 5 39	50 119 30 45 15	50 121 32 50 19	 31
Curtiss:	C-46	75	66	42	44	40	46	
Douglas:	DC-3 DC-4 DC-6 DC-7 DC-8 (Jet) DC-9 (Jet)	425 185 189 	305 73 325 220 18	276 52 301 217 75	250 25 260 215 93	213 15 230 203 100	208 13 226 178 101	 9 18
Fairchild:	F-27 (Turboprop)		34	42	44	46	49	1
Lockheed:	Lodestar Constellation Super Constellation Electra (Turboprop)	11 115 25	104 137 96	75 129 107	69 115 122	44 114 117	40 111 117	
Martin:	202 404	26 96	19 85	15 80	17 64	17 66	18 59	
Nord Aviation:	262							8
Sud Aviation:	Caravelle (Jet)				17	20	20	
Vickers:	V-700 (Series) (Turboprop) V-800 (Series) (Turboprop)		67 15	61 13	57 13	55 12	57 11	
Other:		38	15	24	27	23	44	
Total Fixed Wing:		1,367	1,871	1,842	1,854	1,811	1,821	329
Helicopters: Bell: Sikorsky:	B47 S51 S55 S58 S61 (Turbine)	6 3 8 	5 2 5 6	5 2 5 7	1 1 5 7	1 5 5 4	1 	 3
Boeing Vertol:	S62 (Turbine) V44B V107 (Turbine)		5	1 5 	5	1 4	 4	
Total Helicopters:		17	23	25	19	20	16	3

^{*} The U.S. scheduled airlines have placed 19 orders for the British-French Concorde, and hold 37 tentative delivery positions for the U.S. supersonic transport.

Source for 1963 totals is Federal Aviation Agency's "The U.S. Civil Air Carrier Fleet, September 30, 1963."

CLASSES OF UNITED STATES COMMERCIAL AIR CARRIERS

There are nine generally recognized classes of operators in the air transport industry of the United States. These classifications are used by the Civil Aeronautics Board in connection with the economic regulation of the industry and under the Federal Aviation Act are based largely on the scope of operations authorized or allowed by that Act. Classes One to Seven have certificates of convenience and necessity authorizing them to conduct regularly scheduled services.

1. The Domestic Trunk Carriers include those carriers which presently have permanent operating rights within the continental United States. There are currently eleven trunk lines, most of which operate high-density traffic routes between the principal traffic centers of the United States.

American Braniff Continental Delta Eastern National Northeast ¹ Northwest Trans World

United Western

2. The Domestic Local Service Carriers have, with one exception, been certificated since 1945. These carriers, thirteen in number, operate routes of lesser traffic density between the smaller traffic centers and between these centers and principal centers.

Allegheny Bonanza Central Frontier Lake Central Mohawk ¹ North Central ¹ Ozark Pacific Piedmont Southern Trans-Texas West Coast ¹

3. The Intra-Hawaiian Carriers operate between the several islands comprising the State of Hawaii.

Aloha

Hawaiian

4. The Intra-Alaskan Carriers provide service within the State of Alaska.

Alaska Coastal-Ellis Cordova Kodiak Howard J. Mays ² Northern Consolidated

Western Alaska West Coast 1

5. The Helicopter Carriers presently operate between airports, central post offices, and suburbs of New York, Chicago, Los Angeles and San Francisco. Originally certificated as exclusive mail carriers they now fly passengers, air freight and air express, in addition to U. S. mail.

Chicago Helicopter Airways

Los Angeles Airways

New York Airways

San Francisco & Oakland Helicopter Airlines ³

6. The International and Territorial Carriers include all U. S.-Flag air carriers operating between the United States and foreign countries other than Canada, and over international waters. Some of these carriers conduct operations between foreign countries and some are extensions of domestic trunk lines into Mexico and the Caribbean and to Alaska and Hawaii.

Alaska American Braniff Caribbean Atlantic

Eastern Mackey ² National Northwest Pacific Northern Pan American Pan American-Grace Samoan South Pacific

Transportation Corp.
of America
Trans World
United
Western

7. The All-Cargo Carriers operate scheduled flights carrying freight, express and mail between designated areas in the U. S., and in one case to the Caribbean and in another to Europe.

Aerovias Sud Americana Airlift International

Flying Tiger Seaboard World

Slick

- 8. Supplemental Air Carriers. A class of air carriers now holding temporary certificates issued by the CAB authorizing them to perform passenger and cargo charter services as well as scheduled operations on a limited or temporary basis, supplementing the scheduled service of the certificated route air carriers. As of February 1, 1964, there were 15 such companies. Statistical data of these carriers is not included herein.
- 9. Intra-state Air Carriers. A class of air carriers operating as an intra-state common carrier, whose operations are limited to an area within the boundaries of a particular state, and whose operating authority is granted by the Aviation or Transportation Board of Control of that state. Statistics for this carrier group are not included in this report.
- 10. Others. Among other classes of operators are the air taxi operators and air freight forwarders. Air taxi operators are a class of air carriers operating light aircraft up to a gross weight of 12,500 lbs., and engaging in a wide variety of passenger and/or cargo transportation services, with no necessarily fixed routes. Air freight forwarders are classified as indirect air carriers and are engaged in the assembly and consolidation of cargo for transportation by a direct air carrier. There are 94 forwarders operating in domestic interstate and foreign and overseas commerce. Statistical data for these groups of carriers is not included herein.

² Certificated non-mail carriers.

¹ Also certificated to provide trans-boarder service.

³ Certificated to carry persons, property and mail at a service rate.

AIR TRANSPORT ASSOCIATION OF AMERICA

Twenty-Fifth Edition

Facts and Figures, 1964

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North Central Airlines, Hal N. Carr, President & General Manager, 6201 34th Avenue South, Wold Chamberlain Field, Minneapolis, Minnesota 55423

Northeast Airlines, James W. Austin, President & General Manager, Logan International Airport, Boston, Massachusetts 02128

Northern Consolidated Airlines, Raymond I. Petersen, President & General Manager, Box 6247, International Airport,

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Post Office Box 8800, Chicago, Illinois 60666

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^{*}Associate Member