

Alaska's Air Transportation Industry

By Neal Fried

Barnstorming pilots were the pioneers of Alaska's aviation industry. When James Martin shipped a biplane to Fairbanks in 1913 for the Fourth of July exhibitions, the foundation for Alaska's air transportation industry was placed. Others joined in the fray, traveling the state, setting new records or performing daring flying feats. Then Roy Jones arrived in Ketchikan in 1922 to establish the first commercial airline with his Curtis MF "Flying Boat." Two years later Ben Eielson, Alaska's most famous flyer, convinced the U.S. Post Office to deliver the first air mail. The industry was well on its way.

In 1924 Noel Wien came to Fairbanks to fly his plane commercially. This marked the beginning of Wien Airlines, Alaska's dominant air carrier for many years. Bob Reeve, who started out flying miners onto inaccessible glaciers near Valdez, extended commercial aviation to the Aleutian Islands. His operation developed into Reeve Aleutian Airways. Linous "Mac" McGee founded McGee Airways in 1932 which became Alaska Airlines after many mergers and acquisitions.

Alaska was natural territory for the plane. Quickly it became hard to think of a time when the plane was not a "native species" to the state. There were virtually no road systems. The only other means of travel was by rail, dog sled, or water, most of which were useless during part of the year.

Many understood the plane's potential, and an industry quickly developed. Small airports and airstrips were established in many communities. When World War II got underway, Alaska's first big airfields were built for the defense of the territory and to ferry warplanes to the Soviet Union. After the war, larger civilian airports were built and the industry blossomed. Recently the Alaska Department of Transportation and Public Facilities (DOTPF) inventoried the state for airports and airstrips. They counted 988 of them—from its three international airports in Anchorage, Fairbanks and Juneau, to small emergency and recreational airstrips. There are so many airfields that the ownership of 149 of them is unknown.

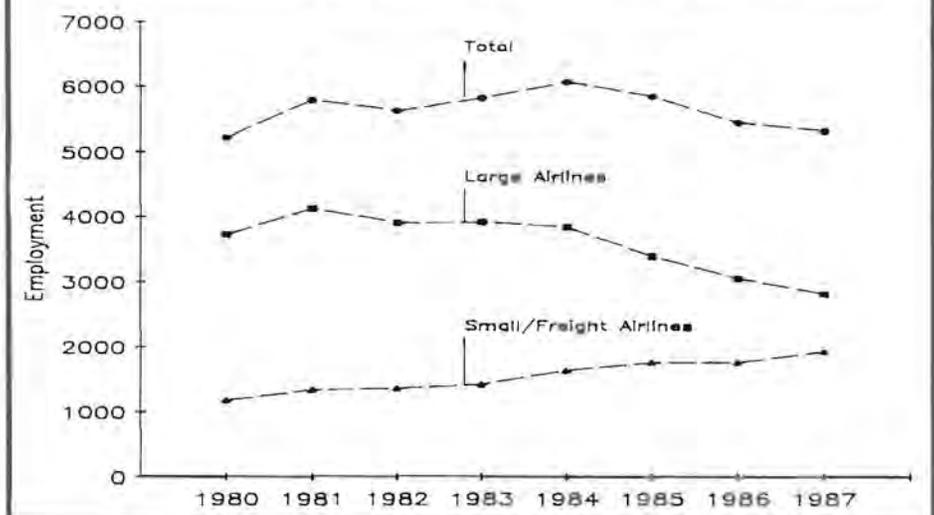
Today Alaska's aviation industry is the state's largest transportation sector. Only the commercial side of this industry is addressed in this article, though the recreation side is an important component. The large military aviation sector is not addressed in this article either. The discussion will begin in 1980 because deregulation, though enacted in 1978, was not felt in Alaska until the early 1980s. Nineteen eighty also marked the end of the post-pipeline construction slump and the beginning of the oil revenue boom.

Aviation—A Large Employer

Presently 5,300 people are employed in the air transportation industry. This number includes; private sector airport services, scheduled and nonscheduled passenger and cargo carriers, charters and flightseeing services. Possibly an equal number work in direct support of these oper-

Alaska's aviation industry is the state's largest transportation sector.

Figure 1
Alaska Air Transportation Employment 1980-1987



ations. For example, 1,366 people work for the Federal Aviation Administration. Other indirect air transportation employment includes: repair facilities, aviation suppliers, airport personnel, state and municipal employees supporting and operating the airports, caterers, flight training schools, customs and others. Air transportation's percentage of total employment is five times higher in Alaska than in the rest of the nation. The industry transports 3.9 times the state's population each year. This compares to the entire U.S. passenger traffic, which equals 1.3 times the nation's population.

As economic activity began to pick up in 1980, air transportation employment began to grow (Figure 1). There is an irrefutable link between economic activity and the volume of business this industry enjoys, but not all of this growth resulted from increased economic activity. Deregulation played an equally important role.

Deregulation of Alaska's Airline Industry

Before deregulation there were only five certified air carriers in Alaska. In other words, the Civil Aeronautics Board had only given permission to five carriers to provide scheduled air service to the entire state. The carriers were Alaska Airlines, Kodiak Western, Wien Airlines, Munz Airlines, and Reeve Aleutian. These major air carriers subcontracted with smaller non-certified airlines for some routes. The subcontracted routes provided the only means for noncertified carriers to grow, which put them at the mercy of the certified carriers.

The effects of deregulation on services and costs of air travel vary. Deregulation has meant most Alaskan communities are now being serviced more frequently and by more carriers. For example, before deregulation the village of Alakanuk received scheduled service from one airline 9-12 times per week. Today three airlines provide scheduled services 50 times per week. A study by the State's House Legislative Research Agency corroborates this trend. That agency found that between 1978-1984 there was an increase in departures in 127 communities, a decrease in 24 and no change in 28.

Deregulation meant many routes became self-supporting. Today only 52 communities are receiving subsidies from the U.S. Department of Transportation to provide essential air service. The cost of this subsidy was reduced to \$4 million dollars. If adjusted to 1981 dollars, this amounts to about a third of what the subsidy was prior to deregulation.

Deregulation's impact on the cost of travel is less clear, though some general conclusions can be made. An informal study prepared by the Civil Aeronautics Board (CAB) comparing pre-deregulation air fares (1982) with early deregulation fares (1983), concluded fares increased moderately. The author surveyed the present cost of air fares (all intrastate) with pre-deregulation in 61 communities. In 67% of the cases air fares increased (after adjusting for inflation), they fell in 23% of the cases and remained relatively unchanged in the rest. In most cases the changes in fares were small.

In a different vein, a House Research report came to a surprising conclusion about Alaska's passenger air fare costs, stating that "on a cost-per-mile basis, air fares in Alaska are not substantially higher than those in the rest of the country, and are in fact less expensive in some cases." On the cargo side, prices appear to have stayed relatively level. However, for the carriers it has become a much more competitive business because of all of the new entries.

A certification process existed, but it took two to seven years, was quite costly and it was rarely successful. During the last 27 years of regulation only one new applicant was successful in obtaining certification. Even some large carriers such as Wien Airlines were frustrated when they wanted to expand their services to the lower 48 markets. Before deregulation, Wien tried unsuccessfully to enter the Seattle market on three separate occasions but failed each time.

Before 1982 the federal government subsidized the airline industry to the tune of \$10 million a year in Alaska. The subsidy assured that the air carriers could provide service to all of their certificated points. In 1981, 187 out of 220 communities receiving

scheduled service were on subsidized routes.

Deregulation Delivers Rapid Change

With deregulation, any airline business that could prove financial and managerial competence obtained certification. The process required six to ten months, and the results of easier certification were immediate.

Approximately 24 subcontractors were certified immediately and presently more than 40 certified airlines are flying scheduled routes in Alaska. During this same period, more than 24 air carriers have gone bankrupt or have been absorbed by others. Only two of the original five certified airlines still exist today—Alaska Airlines and Reeve.

Though many of the new airlines entered the field at the expense of the larger carriers, total employment grew. Employment for the large carriers peaked in 1981, but employment for the smaller carriers grew uninterrupted through 1987 (Figure 1). The recessionary economy was partially responsible for the losses sustained in 1986 and 1987 by the large carriers. However, deregulation was also responsible for much of this shift in employment.

Mail—A Most Important Ingredient

The U.S. Postal Service is the bread and butter of Alaska's air transportation industry. For federal fiscal year 1987, \$61.8 million was paid to Alaska's certified air mail carriers. According to the Postal Service and some industry officials these revenues represent about 50-60% of the air transportation revenues earned on routes in the state. This compares with 5% nationwide.

The "bush airlines" are more dependent on mail as a source of revenue, though it is important to nearly all carriers as a stable source of revenue. The U.S. mail must be carried by certified carriers. To qualify for this lucrative business many smaller airlines applied for certification. Sending freight via mail to Alaska's smaller communities often proves to be the most economical way for the sender and receiver, because of the heavy subsidies the Postal Service pays. For example, a 20 pound package sent

priority mail from Anchorage to Am-
bler via Kotzebue costs the sender
\$10.09. The air transportation cost to
the Postal Service is \$22.01, not in-
cluding the Postal Service's handling
costs. For nonpriority mail, the sub-
sidy is larger.

For communities not served by certi-
fied air carriers, the Postal Service
runs a dozen air taxis on contract to
provide mail service. Some of these
communities include Red Mountain,
Alexander Creek, and English Bay.
Gold Creek was formerly served by
the Alaska Railroad, but it became
cheaper to send mail via airplane
when the railroad ownership changed
hands.

Geographic Detail

Air transportation is important to all
regions of the state. Proportionately,
the Gulf Coast region has the
smallest air transportation industry
(Table 1). The industry supplies 1% of
the region's wage and salary employ-
ment. Much of the Gulf Coast is ac-
cessible by road and water on a
year-round basis. In Southeast Alaska
the need for air transportation is
greater because of the lack of road
access, though excellent water access
exists. For the Northern and South-
western parts of the state, which often
lack water or road access, more than
3% of their employment is in this in-
dustry. Anchorage has road and water
access, but it has nearly the same

share of total employment as most
rural areas of the state. This is be-
cause Anchorage is both the state's
air transportation hub and an interna-
tional crossroads.

Though 43% of the state's population
resides in Anchorage, 60% of the air
industry's employment is in An-
chorage. No other airport in the state
experiences 20% of the passenger or
cargo traffic that moves through the
Anchorage International Airport.
More than 40 scheduled and
nonscheduled airlines operate out of
the airport. In 1987 more than 2.7
million passengers boarded or
deplaned and another 1.7 million
were in transit.

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Alaska's International Air Connection

Of those passengers in transit, 1.6
million were internationally bound.
Cargo-wise, Anchorage International
tops the nation for international tran-
sit cargo, beating out New York or
Dallas. Alaska benefits from this ac-
tivity because its location is almost
equidistant between Europe and Asia
(Figure 2). This makes Anchorage a
convenient place for an international
air pit stop. Almost 95% of all Asia-
Europe bound air cargo traffic comes
through Anchorage and 70% of Asia
to the "Lower 48." According to An-
thony Sampson's book *Empires of the
Sky*, "Anchorage owes its prosperity
to oil but even more to the planes

**Table 1
Alaska's Air Transportation Industry
Employment By Area¹
1987**

	Air Transportation Employment	Distribution By Area	Total Employment	Air Transportation as Percent of Total Employment
Alaska Statewide	5,288	100.0%	210,252	2.5
Anchorage-MatSu Region	3,207	60.6	107,523	3.0
Anchorage Borough	3,155	59.7	101,046	3.1
Gulf Coast Region	173	3.3	19,687	0.9
Interior Region	488	9.2	29,368	1.7
Fairbanks North Star Borough	321	6.1	25,456	1.3
Northern Region*	408	7.7	12,835	3.2
Southeast Region	569	10.8	28,598	2.0
Southwest Region*	396	7.5	12,348	3.2

¹ Totals will not add due to inclusion of 9 month averages.

* Represents a 9 month average.

Figure 2
Alaska's Strategic Location for International Air Trade



The future of Alaska's international air business is clouded by improved technology and changing diplomatic relations.

which have connected it both to the world and to the rest of Alaska." This statement sheds some light on Anchorage's strategic location in international aviation.

The economic effects of the international side of the airport vary. At present very few international bound passengers ever leave the international terminal and visit the city of Anchorage. In 1987, of the more than 1 million Japanese who landed at the airport, only 7,000 of them spent any time outside of the airport. This is not to say they have no impact on the local economy, because in 1987 these passengers spent \$81.6 million in the airport's duty free shops. In addition to the revenues, the concessionaire, Duty Free Shoppers, employs 260 people.

Additionally, most of the international passenger and cargo airlines have staffs residing in Anchorage. More than 250 people are employed by these airlines. Many of the flight crews shift in Anchorage, which generates a need for lodging. All of them purchase fuel and perform maintenance here. According to the MAPCO, Tesoro, and Chevron refineries, jet fuel is one of the single largest products they produce and market. Jet fuel is a premium fuel to the refineries, because all of their product can be sold relatively easily in Alaska.

The other international airports in the state are in Fairbanks and Juneau. During the past three years Fairbanks International experienced setbacks on the international side. In 1984 the last major international carrier, Japan Airlines, pulled its permanent presence out and consolidated its operations in Anchorage. On a more positive note, Emery Worldwide began to make weekly stops in Fairbanks in January 1988 and Cargo Lux, based out of Luxembourg, makes occasional stops. Air North, a Canadian carrier, makes scheduled flights between Fairbanks, Dawson and Whitehorse. It is this airline which gives Juneau an international status, flying scheduled flights between Juneau and Whitehorse.

The future of Alaska's international air business is clouded by improved technology and changing diplomatic relations. Many airlines are purchasing Boeing's new 747-400 series for their passenger traffic. This plane has the capability of flying from Europe to Asia nonstop. "Glasnost" may eventually be good for Alaska-Soviet trade, but more immediately it could mean more Europe-Asia bound airlines will fly over the Soviet Union instead of the Polar Route. Japan Airlines, British Airways and others have already diverted some of their flights. Concern over these developments spurred the state into establishing an aggressive airport marketing effort last year.

Not all of the news on the international front is bad. It may be inevitable that Anchorage will lose more passenger flights as the airlines acquire new jets. Nevertheless, many of the old passenger jets will be converted into cargo carriers. This means cargo

traffic will probably increase. Air cargo traffic worldwide is growing dramatically because of growing trade and falling costs. Recognizing the upsurge in air cargo traffic, a recent issue of Forbes magazine refers to these cargo carriers as the "21st-century truckers."

The Soviet impact on Alaska's international air traffic business is more difficult to judge because of its political nature. Many people in the business believe that political uncertainty will prevent most air carriers from pulling out of Alaska completely. The Soviet Union is also one of the few nations which charges an air rent for the use of its air space and landing costs are considerably higher than in Anchorage. Developments in this amphitheater will have to be watched closely.

There are a number of promising possibilities for growth in the international air arena. Some ideas include:

- Attracting freight forwarders, such as the Flying Tigers, which use Anchorage as a hub to consolidate freight and then deliver to various national and international markets.
- More trade between international markets and Alaska.
- Tapping more of the transit international air passenger traffic for tourism.

Presently most of the internationally bound passenger airlines do not want to block seats for Anchorage because they would rather fill seats for the entire trip. The Anchorage International Airport Tourism Marketing Council and the state are now actively seeking ways to tap into the international tourist traffic.

Fallout from "Glasnost" may reintroduce direct flights between Alaska and the Soviet Union. This would mark a resumption of direct Soviet-Alaska flights which ended in the early 70s. MarkAir and Alaska Airlines have applied for air rights to Provideniya. Governor Cowper plans to be on the inaugural flight in late May or early June of this year.

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Figure 3
Anchorage International Airport Passenger and Freight Traffic, 1980-1987

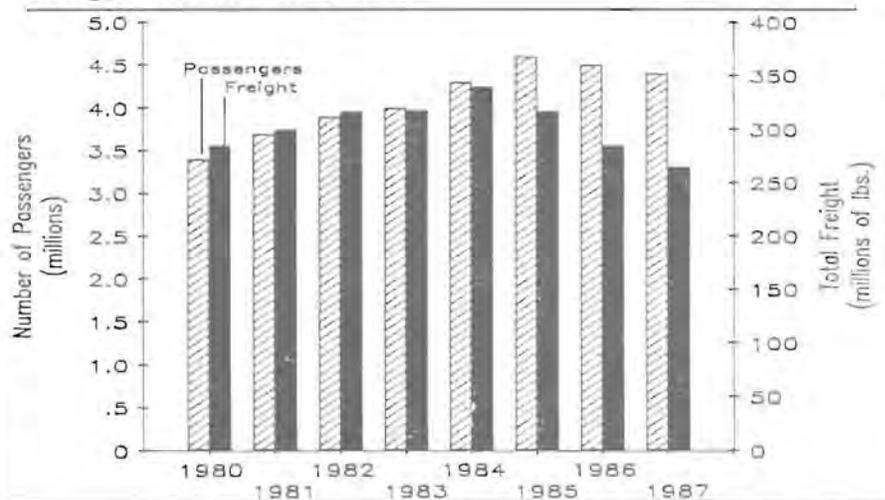
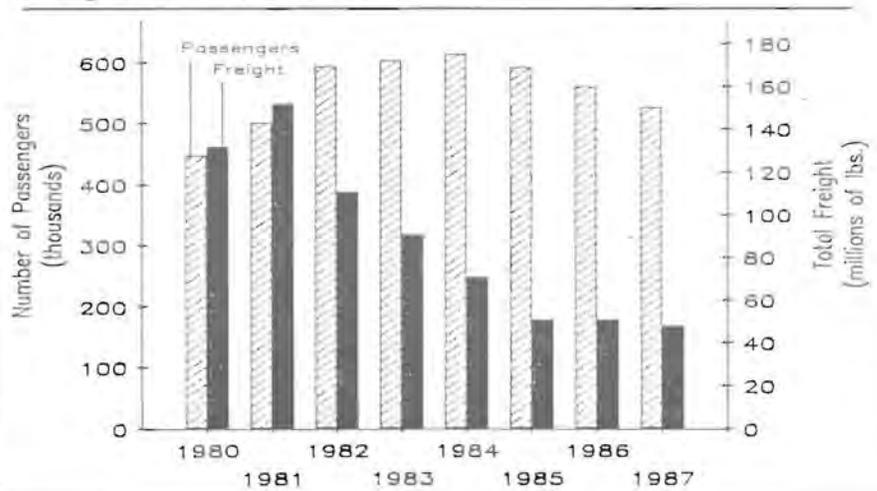


Figure 4
Fairbanks International Airport Passenger and Freight Traffic, 1980-1987



Alaska Aviation Superlatives

Compared to the rest of the nation Alaska has about eight times as many pilots and 15 times as many aircraft per capita.

There are a total of 10,500 pilots: 2,763 commercial, 4,733 private, and 1,039 airline transporters.

Alaska has three times as many air passengers per capita as the rest of the United States.

As a percentage of total employment, the state's work force devotes three times the number of jobs to the air transportation industry as the rest of the nation.

Five out of Alaska's top fifty employers are in or support the air transportation industry. They include: Alaska Airlines, MarkAir, International In-Flight Catering, ERA Helicopters and Reeve Aleutian.

The air transportation industry paid out \$145 million in payroll in 1986.

4.3 million passengers and 265 million pounds of freight in transit touched down at Anchorage International Airport in 1987.

Anchorage International Airport is the busiest international transit cargo airport in the nation.

About 95% of all Asia-Europe bound and 70% of Asia- "Lower 48" bound air cargo goes through Alaska.

Lake Hood is the largest and busiest seaplane base in the world.

Alaska has the largest number of seaplane bases in the nation, with 110 compared to Minnesota's 64.

There are 988 airports and airstrips in the state.

More books have been written about Alaska's flying heroes than any other profession in the state.

Conclusion

During the past two years, air transportation activity fell victim to the statewide recession. Nineteen eighty-five was the last year this industry posted employment growth. Passenger and cargo traffic fell in the state's major airports in 1986-87 (Figures 3 & 4). However, not all of air transportation's business fell. The number of transit passengers grew in 1987 at Anchorage's international terminal. Load factors of these planes went up in 1987 due to the increased value of the yen and German mark. Small airline employment continued to grow uninterrupted. Employment losses were concentrated in the larger carriers, where shadows of deregulation may still linger.

In early 1988 employment in the industry began to level off, and if the economy rebounds as predicted, Alaska air transportation will follow suit. Nationally and worldwide the industry is booming. Shortages of qualified pilots and airports are plaguing the industry. This is a switch from five years ago when there was a surplus of pilots.

Some predict Alaska's airline industry will follow the national trend of consolidation. The nature of Alaska's market, however, will favor a more diverse industry because of the different demands put on the business here and the dispersed nature of the state. There is little doubt that air transportation will remain the largest sector of the state's transportation network. Alaska will remain the country's most airborne state.