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Cause and Effects of Governmental Dregulation of The Airline Industry

D.K. Miller

CAUSE AND EFFECTS OF GOVERNMENTAL DEREGULATION OF THE AIRLINE INDUSTRY

by

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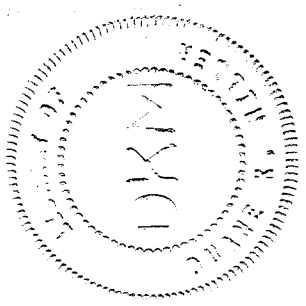

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This independent study submitted by D.K. Miller in partial fulfillment of the requirements for the Degree of Master of Public Administration from the University of North Dakota is hereby approved by the Faculty Advisory Committee under whom the work has been done.

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I. INTRODUCTION

"For I dipt into the future,
far as human eye could see,
Saw a vision of the world
and all the wonder that would be;
Saw the heavens fill with commerce,
argosies of magic sails,
Pilots of the purple twilight,
dropping down with costly bales;
Saw the heavens fill with shouting,
and there rain'd a ghastly dew,
From the nations airy navies
grappling in the central blue."

--Tennyson (1809-1882) "Locksley Hall"

Tennyson's prophetic verse has been a favorite of aviation enthusiasts since the dawn of manned flight. This bit of verse has often been inserted in the Congressional Record by lawmakers as a preface to their speech on aviation matters. The poet placed primary emphasis on the peaceful use of aviation, and secondarily conjured up the spectre of war in the skies. It was, however, war which spurred the develop of the aviation industry. Even though the emphasis in World War I was on the speed and agility of the warplane, many far-sighted businessmen were aware that a machine capable of carrying a load of bombs could easily be adapted to carry passengers and commercial cargo.

In the beginning, the airplane was unable to compete economically with surface vessels in the carriage of passengers and cargo, and the few efforts that were made

were doomed to failure. Indeed, the early air line operators were not much interested in carrying passengers. People had to be cared for, catered to, and their comfort provided for. Cargo and mail did not complain if the flight was late or the accommodations uncomfortable. Money could be made in transportation of the mail. When government funds were available an air mail service was started using war surplus military aircraft and Army pilots. The eventual passing of the airmail service to commercial enterprise laid the foundation for the air transport industry we have today.

This study will focus on the history of government regulation of the economics of air transportation; the regulations that have existed since 1938; the changes that have been made by passage of Deregulation Acts of 1977 and 1978; and the effects of these changes on the commercial aviation industry.

To understand the effects of deregulations, it is necessary to examine the controls that existed prior to the Deregulation Act of 1978.

The passage of the Airmail Act of 1925, the Kelly Act, provided the impetus for private investment in the machines and people who were to operate the air mail service. These early companies, after many failures and a few successes, became the core companies around which were formed the early airlines. Even so, it was not until 1930

that an emphasis was placed on the development of passenger and cargo service.

The Airmail Act of 1930, the Watres Act, provided economic incentives for the airline companies to develop the capacity necessary to attract passengers and become a truly competitive form of public transportation. This act provided the government subsidy and mail pay to be based on capacity available rather than the weight of the mail carried. Incentives were also offered for night and bad weather flying, terrain pay, and bonuses were offered for the use of multi-engined airplanes.

Spurred by the provisions of the Watres Act, the airlines demanded large multi-engined aircraft capable of carrying combined loads of mail, passengers, and express. The decade of the 1930s also saw the combining and consolidation of companies to form many of the major airlines which today provide the fastest, safest, most reliable mode of mass transportation the world has ever known.

Total governmental control of the economics of commercial aviation became a fact in 1938 with the passage of the Civil Aeronautics Act. For the next forty years, commercial aviation was conducted under the economic rules of the Act. It was not until 1978 that the Civil Aeronautics Board released the industry from the regulations which had prevented duplication of routes, and

had controlled fares and rates for carriage of persons, mail, and cargo. Today the airlines are stripped of the protection offered by governmental regulation, and they are forced to operate in a system which allows free market entry, fare wars, and unrestrained competition. In 1934, such practices led to increased regulation--today they are permitted by less regulation.

From twelve contract airmail routes in 1926-- the United States air carrier industry has grown to mammoth proportions. We have progressed from the Boeing M-40, capable of carrying two passengers and 600 pounds of mail to wide-bodied jet transports which carry up to 400 passengers and ten tons of cargo and mail. These same aircraft, when used for cargo, are capable of payloads in excess of 200,000 pounds.[1]

The sixty-two certificated airlines operate domestic routes totaling over 325,000 unduplicated route miles. In 1981, more than five million air carrier departures enplaned 280 million passengers, 1.2 million tons of mail, and 2.6 million tons of cargo. Passenger revenue miles flown totaled 259 billion. With 438 billion seat miles flown, the load factor is 59%. This means simply that 59% of the seats are occupied by paying revenue passengers for every mile flown by our nation's airlines. The industry employs over 600,000 people, with another 2.5 million workers engaged in supporting roles. (See Table 1)

TABLE 1

TRAFFIC DATA, ALL (SCHEDULED AND NONSCHEDULED) SERVICES OF THE CERTIFICATED ROUTE AIR CARRIERS: 1978 and 1981

TRAFFIC CATEGORY	TOTAL AIR SERVICES	
	1981	1978
Revenue Passenger Miles Flown (000)	259,767,025	236,997,534
Available Seat Miles (000)	438,344,868	381,113,418
Average Load Factor (Percent)**	59%	62%
Revenue Passenger Enplanements (000)	279,301	290,090
Revenue Ton Miles Flown (000)*	33,875,088	31,095,013
Passenger	25,967,700	23,699,802
Freight	6,457,080	6,257,200
Express	67,974	56,494
U.S. Mail	1,347,498	1,167,683
Foreign Mail	25,842	13,833
Revenue Aircraft Miles Flown (000)	2,793,454	2,608,128

* Totals may not add due to rounding
** Percent revenue-passenger miles flown of available seat miles. This represents the proportion of aircraft seating capacity that is actually sold and utilized.

Source: FAA Statistical Handbook of Aviation, CY 1981

New ideas and new perspectives are needed if the airlines are to continue to grow and prosper. Even today there are clouds on the horizon. Each fluxuation in the economy of the country drastically affects the air line industry. In the past few years most of the airlines have

survived one crisis after another-- the fuel 'crunch' of 1974; inflation; passage of the Deregulation Act of 1978 resulting in the restructuring of route patterns; the disruption caused by the Air Traffic Controllers strike in 1981; and the worst recession since the early 1930's. One major air line, Braniff, did not survive. Several smaller air lines have folded-- and many others, large and small, are reeling from the effects of these permutations.

II. HISTORY OF AIR CARRIER REGULATIONS

FEDERAL LEGISLATION

> "It is in the public interest and in accordance with the public convenience and necessity to develop and maintain legislation responsive to the public need for transportation for the commerce, Postal Service, and national defense of the United States."
>
> --Title I, Sec.102 A 5. Declaration of Policy, Federal Aviation Act 1958.

By 1925, the Post Office had operated the airmail service long enough to prove the practicability of the commercial, non-military use of the airplanes.

In 1918, when the service was started, it was generally understood the Post Office operation was only temporary and that as soon as it was feasible the carriage of the mail would be turned over to commercial enterprise. It was estimated, at that time, that it would be at least five years before this transfer could take place. Consequently, by the mid-1920's, the Post Office was ready to ask private industry to take over the airmail routes.

The last flight of the Post Office operation took place on September 9, 1927. Beginning in June, the pilots were released, and many of them went to work for the civilian contractors and continued flying the same routes they had been flying.

There were 43 pilots at that time, and another 600 employees in ground jobs. All of these people had contributed to more than 12 million miles flown. The entire cost to the government, from the beginning in 1918, until the last flight in 1927, had been $17.5 million. They had generated postage revenues of just over $5 million.[2] The difference of $12.5 million cannot be counted as a loss-- but rather as a small price to pay for its role in the development of the commercial aviation and airline industries. These industries have repaid this debt many times over not only in tax revenues, but in valuable service to commerce, the public, and national defense.

AIRMAIL ACT OF 1925

Civil air transportation got its start in the United States on February 2, 1925. On this date, Congress passed the Airmail Act of 1925. It was also known as the Kelly Act, named for Clarence Kelly, a Pennsylvania representative, who not only sponsored the bill but also led the fight for its passage.

The purpose of the Act was to provide for public companies to contract for the carriage of the airmail. This purpose was reflected in the title, "An Act to Encourage Commercial Aviation and to Authorize the Postmaster General to Contract for the Airmail Service."

An important feature of the Act was the method of

payment to the contractors. They could not be paid more than 80% of the revenue derived from the sale of postage. This feature was a compromise to opponents of the bill who had argued against government subsidy of the aviation industry. The remaining one fifth, or 20% was to go to the Post Office to pay the costs of ground handling of the mail. In essence, the operation of the airmail service under the Kelly Act was not to cost the government. This proved to be a major weakness of the Act.

Postmaster General Harry S. New was authorized to award contracts on two transcontinental routes and twelve feeder routes.

By the beginning of 1926, twelve Contract Airmail routes had been awarded.

THE FIRST CONTRACT AIRMAIL ROUTES[3]

Route No.	Company	Route / Date Began
CAM 1	Colonial Air Lines	New York to Boston June 18, 1926
CAM 2	Robertson Aircraft Corp.	Chicago to St. Louis April 15, 1926
CAM 3	National Air Transport	Chicago to Dallas May 12, 1926
CAM 4	Western Air Express	Los Angeles to Salt Lake City April 17, 1926
CAM 5	Varney Speed Lines	Elko, Nevada to Pascoe, Washington April 6, 1926
CAM 6	Ford Air Transport	Detroit to Cleveland February 16, 1926
CAM 7	Ford Air Transport	Detroit to Chicago February 15, 1926
CAM 8	Pacific Air Transport	Los Angeles to Seattle September 15, 1926

CAM 9 Charles Dickenson	Chicago to Minneapolis June 7, 1926
CAM 10 Florida Airways Corp.	Atlanta to Jacksonville September 1926
CAM 11 Clifford Ball	Cleveland to Pittsburgh April 21, 1926
CAM 12 Western Air Express	Pueblo, Colorado to Cheyenne, Wyoming December, 1926

These routes, awarded under the Kelly Act, were for the feeder lines branching off the main transcontinental route which was still being operated by the Post Office, pending selection of one or two companies of sufficient size and assets to take over the route.

CAM 5 and CAM 12 were designed to establish an air link between the main railroads which crossed the country. CAM 5 thus connected the Union Pacific with the Northern Pacific, while CAM 12 was the connecting link between the Union Pacific and the Santa Fe Railroads.

CAMs 6 and 7, awarded to the Ford Motor Company, are of special interest to the Air Cargo industry. In early 1925, Henry Ford, using single-engined airplanes had established air service connecting his main manufacturing plant in Dearborn, Michigan with his parts suppliers in Cleveland and Chicago. He has the honor of being the first to establish regularly scheduled freight service, and also one of the first to offer scheduled passenger services.

The transcontinental CAMs were opened for bid early in 1927. On January 15, the San Francisco to Chicago

portion of this route was awarded to Boeing Airplane Company, while the bids that had been received on the New York - Chicago portion were rejected as unsuitable. Not until March was a suitable company found, and the route was awarded to National Air Transport. These two companies were destined to become one some years later. Following a bitter proxy fight in 1931, the two companies were merged under the corporate name of United Aircraft Corporation. At an even later date, Varney Air Lines joined the company, and it operates today as United Airlines and is the largest airline in the free world.

Under the Kelly Act, the contracting airline was paid 80% of the postage revenue from the mail carried. In an attempt to avoid subsidy, Congress had created a problem in computing airmail pay. In effect, each letter had to be counted twice. Once by the post office, and again by the carrier before being boarded on the airplane. The system was irrational.

The Postmaster General solved this problem by the first amendment to the Kelly Act. Passed in June, 1926, the new contracts called for payment to the carriers based on weight. The rate was $3.00 per pound for the first 1,000 miles, and $ .30 per pound for each subsequent 100 miles. This system eliminated double handling, and it was based on non-subsidy, but it was still a weakness.

In early 1927, the airmail postage rate of $ .10 per

one-half ounce between any two points in the United States was adopted. This rate provided a great impetus to the public to use air mail. In May, a further reduction became effective and the cost of an airmail letter dropped to $ .05 for the first one-half ounce, $ .10 for each additional ounce.[4]

The first amendment to the Kelly Act did away with the need to count each individual letter, and the second amendment, passed in May, 1928, removed the language guaranteeing the government against loss. Thus subsidy quietly came to the airline industry. The second amendment also lowered the postage rates to a straight $ .05 per ounce and resulted in a 95% increase in airmail traffic. The result was that the airlines could actually receive more money for carrying the mail than the cost of the postage.

To the young, profit starved airlines this presented a golden opportunity. Now that they were being paid by the pound for carrying mail, several of the companies began sending large quantities of airmail to themselves. There were envelopes stuffed with blank sheets of paper, and even telephone directories and spare airplane parts mailed to themselves, as private citizens, destined to be carried on their own routes. One enterprising airline contractor mailed two tons of lithograph material from New York to Los Angeles. It cost him over $6,000 in postage, but his

airline collected $25,000 for carrying it.[5] A neat profit by anyone's business standards.

In the view of Postmaster General Walter Folger Brown, who served from 1929 to 1933, these practices had to be corrected. The resulting legislation was not just another amendment to the Kelly Act, but rather a major piece of legislation which changed not only the method of carriage of mail, but also the compensation for it. It was probably the one most significant influence which affected the future of the airline industry up to that time. This legislation was the Airmail Act of 1930, known as the Watres Act.

AIR COMMERCE ACT OF 1926

The Kelly Act provided the economic motivation for the establishment of airlines, but it was apparent these companies did not have the financial resources to maintain and improve the airway system which had been established by the Post Office.

Therefore, on the heels of the Kelly Act, Congress passed another Act directed at promoting Air Commerce. This major legislation was the Air Commerce Act of 1926. The new law charged the federal government with the responsibility of maintaining and operating the airway system, including air navigation aids. It was also to promote safety through a system of regulation.

The functions of safety regulation were to be carried out by the Department of Commerce; therefore the Bureau of Air Commerce was established. Among the safety regulations adopted was the requirement for pilots to be licensed and medically certificated; and that aircraft were to be licensed and certified as airworthy. This laid the ground work for what was later to become the Civil Aeronautics Authority, and even later the Federal Aviation Administration.

The Air Commerce Act and the Kelly Act beyond a doubt provided the foundation upon which was built the civil air transportation system we have today.

AIRMAIL ACT OF 1930

When Postmaster General Walter Folger Brown was appointed to office by President Hoover in 1929, there were 44 airline companies, each holding government mail contracts. Routes were awarded on the basis of competitive bids and while this format resulted in the mail being carried at lowest possible rates, none of the companies were profitable.

Brown defined the airlines problems as: (1) being unwilling to invest in new equipment, (2) operating obsolete aircraft, (3) demonstrating questionable safety practices resulting from cost cutting, and (4) maintaining marginal operations resulting in new growth.

Brown's solution was to eliminate competitive bidding on routes and to use airmail pay to support those companies strong enough to encourage commercial aviation. To accomplish this he needed legislation. This legislation was drafted by Brown, who personally lobbied it through Congress. It was the Airmail Act of 1930.

This Act, also known as the Watres Act, after the two Congressmen who sponsored the bill, gave the Postmaster General virtual dictatorial power over the airline industry; therefore, commercial air transportation took on the characteristics of a federally regulated industry. The Act gave the Postmaster General:

(1) Power to award routes without competitive bidding

(2) Power to establish a second transcontinental route to compete with United Aircraft and Transport Company

(3) Power to extend or consolidate routes in the public interest. This resulted in several smaller companies joining together in order to qualify for an airmail route

(4) Power to award routes to airlines willing to fly at night, in bad weather and over bad terrain, and to offer bonuses for use of multi-engined aircraft. This one feature alone eliminated many of the smaller, poorly equipped companies.

The new law contained provisions for computing mail pay on the basis of the space available instead of weight. This encouraged the airlines to purchase larger aircraft, which in turn gave rise to development of passenger traffic.

Brown, armed with his new powers, met with the contracting companies and outlined his philosophy and his plan to encourage development of a national air transportation system. He envisioned no more than four major carriers, each with strong route systems, each with sufficient assets to allow full development of the routes assigned to them. He disliked the reckless competition that was going on, but even more, he disliked a monopoly. His solution was regulated competition.

His philosophy led to the eventual merging of many of the smaller companies and contributed to the formation of the corporate entities we know today as United Airlines, Trans World Airlines, American and Eastern Airlines. This conference was destined to become known as the "Spoils Conference". Brown urged smaller companies to merge, under threat of not awarding airmail contracts to those who

failed to do so. Many of the companies followed his suggestion.

When Brown left office, he left 34 established airmail routes. The per mile cost of airmail was $ .54 compared to $1.10 when he entered the office.[6] In looking back, it is obvious the development of the industry we enjoy today would have been much slower, were it not for Brown's accomplishments.

Walter Folger Brown left office in 1933 because of a change in administration. The newly appointed Postmaster General James A. Farley was immediately put under pressure to investigate charges made by airline executives that they had been denied airmail contracts because Brown and the major companies, who participated in the "Spoils Conference", had conspired against the smaller lines. A fact finding committee was formed, headed by Hugo Black, an Alabama congressman. Charges and countercharges were exchanged-- among them was that Brown had awarded contracts only to those companies which had followed his edict to merge. But no firm evidence was ever produced that would prove any wrong-doing on Brown's part.

There were, however, suspicions that the major lines had been in collusion with each other to control rates which had the effect of placing the smaller, less affluent lines at a disadvantage when bidding for contracts. These suspicions reached the ear of Farley who reacted by

cancelling all airmail contracts and announcing to the country that the Army Air Corps would take over the airmail service starting in February of 1934. The Army, he said, carried the mail in 1918 and they could do it again.[7]

The airline pilots at the time of cancellation were experienced even for a fledgling industry. Most had 4,000 or more flying hours, and some had as much as 9,000 hours. They had day and night flying experience, and they knew their routes well. They were used to the weather normally experienced on the routes they flew and their aircraft were equipped with radio and navigation aids. The Army pilots on the other hand, flew barely 200 hours per year, their aircraft were not equipped for night or bad weather flying, and a mere 600 men were assigned to the task that had occupied several thousand airline employees.

The ill equipped and poorly trained Air Corps had tragic results trying to carry out the government's order. The record of the first week's operation was: five pilots killed and six more injured, eight airplanes destroyed, over $500,000 in property damage. A few days later two more pilots were killed, and one was badly injured.

This needless slaughter was continued into March. Finally after 66 crasnes, 12 deaths, and a cost to the government of nearly four million dollars, President Roosevelt ordered the Army to cease flying the mail on June 1, 1934, after nearly six months of operation.[8]

At the time of the cancellation, the airlines had been carrying the mail at a cost to the Post Office of between $ .425 to $ .54 a mile. It had cost the Army $2.21 during its operation. It was obvious that for economy, service, and safety, the airlines could do a better job.

Reinstatement of the airlines required new legislation in the form of the Airmail Act of 1934.

AIRMAIL ACT OF 1934

This act prohibited the companies that had been accused by the Black Commission of collusion, those companies that had participated in the "spoils conference", from bidding on airmail contracts.

Many of the companies merely changed their corporate names. Transcontinental Air Transport - Western Air Express (TAT-WAE) became Transcontinental and Western Airlines (TWA); Eastern Air Transport became Eastern Airlines; and American Airways became American Airlines. United Airlines had not had a representative at the conference, thus they were not involved.

As a result, most of the companies resumed operation of their former routes. Further, they bid on the contracts at ridiculously low rates which led to another crisis. The airlines had been without government mail contracts for nearly half of the year, and as a result of their income being less than one-half normal, many were forced to close

their doors. As a result of this, by the start of World War II only 16 companies had survived. Walter Folger Brown's philosophy of "survival of the fittest" seemed to have been confirmed.

The Act of 1934 also created a Federal Aviation Commission to study aviation financial policy. The commission suggested possible alternatives: (1) the Interstate Commerce Commission (ICC) would regulate the aviation industry; or (2) a new independent regulatory agency could be created. President Roosevelt favored use of the ICC, an existing agency.

A minor provision of the Act, seemingly unimportant at the time, called for the separation of airline companies and airplane manufacturers. In the interest of safety, it was felt that airplane users should not be controlled by the holding companies that owned airplane builders. This provision required Boeing, North American Aviation, and General Motors to divest themselves of their interest in airline companies.

Table 2 lists the economic controls instituted in the 1934 Act. Table 3 illustrates how four of the major airlines evolved. This evolution can be primarily credited to the philosophy of Walter Folger Brown.

TABLE 2

AIRMAIL ACT OF 1934

SUMMARY OF ECONOMIC CONTROLS

---

1. The Interstate Commerce Commission will establish rates for carriage of passengers and cargo.

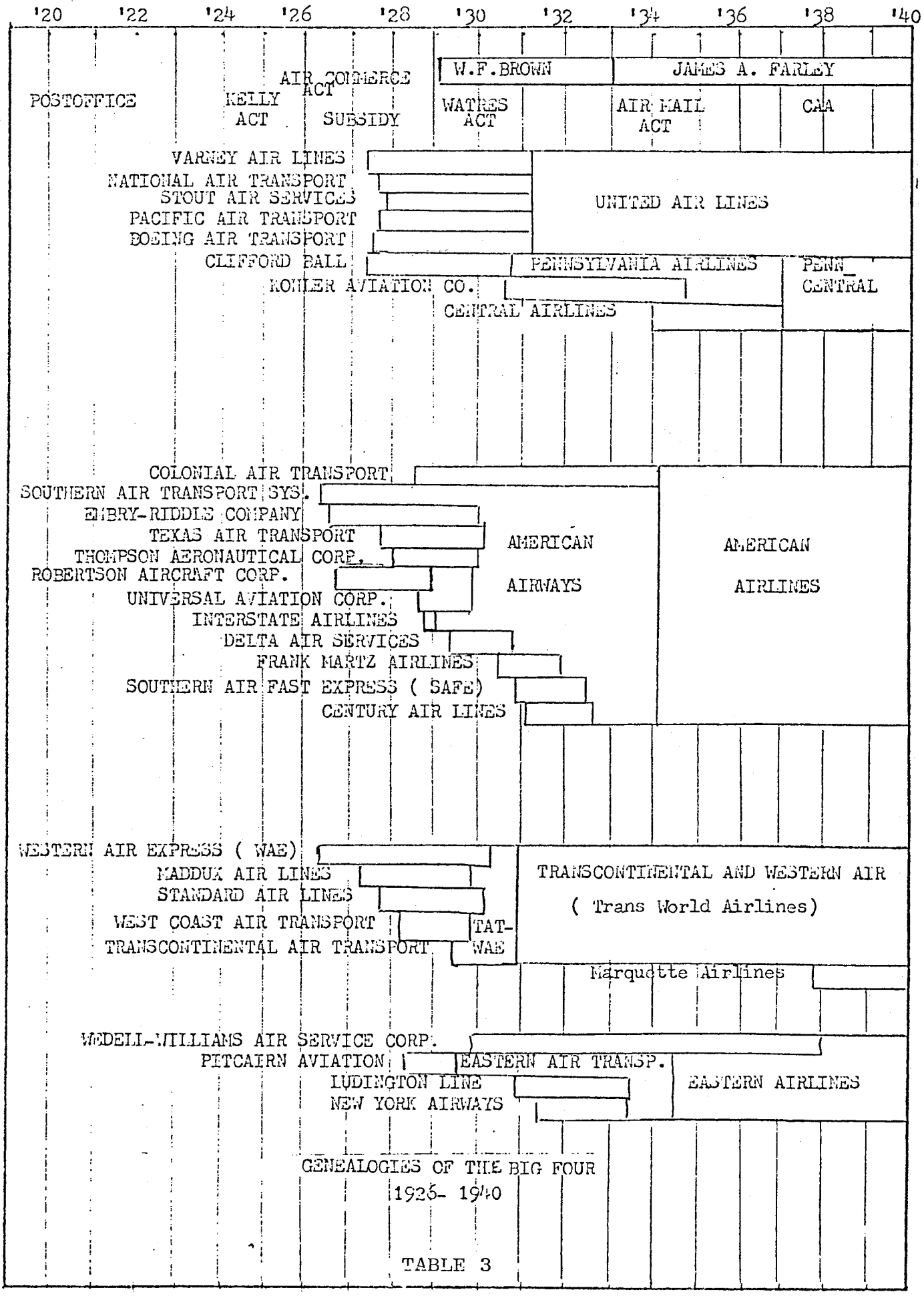
2. The Postmaster General will establish rates for carriage of the mail.

3. The ICC and the Postmaster General will regulate accounting practices of the carriers.

4. Air Carriers having mail contracts are prohibited from holding any interest in any other aviation enterprise, except airports.

5. Other aviation enterprises are prohibited from holding any interest in carriers having airmail contracts.

6. Any carrier having an airmail contract must disclose the name of any person having substantial interest (5% or more) in the company.



GENEALOGIES OF THE BIG FOUR
1926- 1940

TABLE 3

III. AIR CARRIER ECONOMIC REGULATIONS

A direct result of the turbulence of the 1930's was the realization that the United States needed a healthy air transportation system. Passenger traffic was up, and passenger revenue exceeded mail pay and subsidy. Both the airline industry and the government came to the conviction that a strong airline industry was essential to the nation's social, economic, and political strength and that the time was at hand to revise the existing air legislation. It took nearly four years of talking and maneuvering before a satisfactory solution was reached.

In order to do a good job for both the airlines and the public, the federal government decided it must have regulatory powers over the aviation industry, and that it must regulate air commerce in the same way it regulated interstate commerce. The authority by which it exercised these functions stemmed from the United States Constitution.

By 1938 the airline industry was an established and recognized segment of American Life. The airlines had airmail contracts and passenger traffic was increasing at a steady rate. This increase was due partly to the newer, faster, safer, and more comfortable airplanes; and partially because the nation was recovering from the great

depression that had devastated the economy a few years previously.

CIVIL AERONAUTICS ACT 1938

In 1938, the airlines approached the government and suggested working out a set of guiding principles. The three agencies charged with overseeing the industry-- Post Office, Interstate Commerce Commission, and Department of Commerce-- had overlapping authority and this worked a hardship on the industry.

After months of study by industry leaders and government officials, a new all-encompassing law was passed. The new law had its basis in Article I, Section 8, of the United States Constitution, known as the Commerce Clause.

The Civil Aeronautics Act of 1938 was sponsored by Senator Pat McCarran and Representative Clarence Lea, and it passed Congress on June 23, 1938. The McCarran-Lea Act amended or cancelled all major existing and previous legislation affecting aviation in any way.

The mechanics of the Act were simple. All air transportation regulation, both economic and safety, was to be administered by three separate agencies. These consisted of:

1. The Civil Aeronautics Authority, consisting of five members, was to establish aviation policy by

legislation of the safety and economics of air transportation.

2. An Administrator was appointed to carry out the safety policies of the Board.
3. A three member Air Safety Board was to investigate accident.

For the first time, a firm regulatory system made it possible for the companies to plan for future development.

1940 AMENDMENT TO CIVIL AERONAUTICS ACT OF 1938

It was soon apparent that there were still overlapping lines of authority, and as a result, in 1940, President Roosevelt proposed changes which become known as the 1940 Amendment to the Civil Aeronautics Act. The functions were reshuffled into two agencies instead of three.

The first agency created by the 1940 Amendment was the Civil Aeronautics Administration (CAA) headed by an Administrator whose function was the execution of safety regulations. This included enforcement and promotion of air safety as well as safety in the operation of the airway system. This agency was also to oversee research and development. The Civil Aeronautics Administration was placed under the Department of Commerce.

The second was the Civil Aeronautics Board (CAB) consisting of five members. The Board was to be an

independent agency reporting directly to the President of the United States. They were to exercise judicial and legislative authority over civil aviation, as well as executive control in the area of air carrier economic regulation. The investigation of accidents was also the responsibility of the Board.

Included in Title IV of the Civil Aeronautics Act of 1938, were Sections 401 through 416 which were the principle regulations governing the economics of the air carrier industry. One of these sections, 401 (e), granted permanent certificates of convenience and necessity to those carriers who had been in operation providing adequate and continuous airmail service between May 14 and August 22, 1938. This clause was called the Grandfather Clause. Possession of a certificate of convenience and necessity by an airline gave virtual monopoly control over the route by the airline which held the certificate. Few routes between city-pairs had more than one carrier, and if another carrier wished to serve the route, it was not permitted without Civil Aeronautics Board approval. This approval involved a very complicated hearing process in which the petitioning airline had the burden of proof that the issuance was in the public interest. Needless to say, this one provision of the Civil Aeronautics Act of 1938 was the most important rule in the Act-- to the airline industry.

Only a violation of the Act could cause an airline to

lose its permanent certificate. Section 401 (e) was the protection the airlines needed to allow them to secure long term financing, to commit themselves to purchase new equipment, to enter into long range labor contracts, and to plan for the future. It was the stabilizer they had waited for since 1926.

The airlines receiving permanent certificates were:

American Airlines	Eastern Airlines
Braniff Airways	Inland Airlines
Chicago and Southern Airlines	Northwest Airlines
Continental Airlines	National Airlines
Wilmington-Catalina Airlines	Northeast Airlines
Transcontinental and Western Air	United Airlines
Pennsylvania-Central Airlines	Western Air Express
Mid-Continent Airlines	Delta Airlines

Of these 16 carriers, six have faded away through mergers or reorganization, and two have changed their names. Chicago and Southern and Northeast merged with Delta; Inland merged with Western; Pennsylvania-Central later became Capitol and subsequently merged with United; Transcontinental and Western changed their corporate name to Trans World Airlines; and Mid-Continent merged with Braniff. Braniff declared bankruptcy on May 12, 1982. National was merged into Pan American Airways system in 1981.

The Civil Aeronautics Act of 1938 provided the practical machinery for the development and control of commercial air transportation for over 20 years. Despite the four years of America's involvement in World War II, the airline industry experienced steady growth while the Act was in effect. Many of its economic rules have remained in effect, intact, until the Deregulation Act of 1978.

FEDERAL AVIATION ACT OF 1958

In 1958, the Federal Aviation Act was introduced, which changed the structure of the agencies, but the rules which governed the economics of the air carrier industry remained, and were virtually unchanged.

This act was basically designed to increase the scope and structure of the administrator's powers to promote safety; establish a national air space system for control of all air traffic; and allow the administration to make safety rules.

The Federal Aviation Administration (FAA) was moved from the Department of Commerce to the newly formed Department of Transportation in 1966. The Civil Aeronautics Board (CAB) remained an independent agency, reporting directly to the President.

The only change which affected the CAB in all the reshuffling, occurred in 1974 when the Board's duties of

accident investigation were transferred to the National Transportation Safety Board (NTSB).

The structure of the Civil Aeronautics Board remained intact and the economic regulations were copied word for word from the Civil Aeronautics Act of 1938. These rules were inserted in the FAA 1958 as Title IV, Sections 401 through 416.

FEDERAL AVIATION ACT 1958

TITLE IV

AIR CARRIER ECONOMIC RULES

Section 401 - Certificates of Commerce and Necessity

> No air carrier shall engage in certificated air transportation unless it has in force and has been granted a Certificate of Convenience and Necessity issued by the Civil Aeronautics Board.

These certificates are issued on the basis of need for service between two or more points. They are issued subject to a public hearing, and are granted only to airlines willing and able to provide service. By controlling these certificates, the board was able to restrict the number of carriers operating over a specific route or routes.

Section 402 - Permits to Foreign Air Carriers

Specifies the method by which foreign air carriers may seek and obtain permits to engage in transportation between the United States and other countries.

Section 403 - Tariffs on Air Carriers

Every air carrier is required to file its tariffs with the CAB, to keep them open for public inspection and observe them. The section specifies the manner and form to be used in filing these tariffs.

Section 404 - Rates for Carriage of Persons Property

> It shall be the duty of every air carrier to provide transportation authorized by its certificate; to provide safe and adequate service; to establish just and reasonable rates.

The airlines form committees through their trade associations Air Transport Association (ATA); and International Air Transport Association (IATA) to meet with the government to set passenger and freight rates. The CAB sets the standards and the final rates must be approved by them.

Section 405 - Transportation of Mail

Various duties and powers of Postmaster General, and responsibility of air carriers are specified here.

Section 406 - Rates for Transportation of Mail

The board is empowered and directed to fix and determine the fair and reasonable rates of compensation for transport of mail by aircraft as well as prescribe method of compensation as by aircraft mile, pound mile, weight, or space.

There are two types of mail rates. "Service" which covers the actual cost to the carriers for carrying the mail plus a fair return on investment. "Service rate" is usually computed on a ton-mile basis for the mail actually carried.

The second is "need" pay, or Public Service Revenue, commonly referred to as subsidy. This rate is designed to sustain the airlines operation for the public interest and is usually computed on a plane-mile basis for the mail actually carried.

The board dispenses the subsidy portion of mail pay and the Postmaster General pays the service rate for mail actually transported.

Section 407 - Accounts, Records, and Reports

The board requires annual, monthly, periodic, and special reports for air carriers as well as answers to specific questions. Also a copy of any contract the carrier enters into must be submitted. Each carrier shall list stockholders owning more than five percent (5%) of the

capital stock. Each officer and director must show any interests held by him in any other carrier, or any aviation activity. All reports and records must conform to uniform system of accounts and records.

Section 408 - Consolidation, Merger, Acquisition of Control

This section governs interelationships between air carriers, between air carriers and surface carriers, and between air carriers and persons engaged in any other phase of aeronautics. Despite the fact that many of the specific prohibitions in the section apply only to acquisition of control by some other person, the board has construed the section as being applicable to all common control situations between the classes of persons enumerated therein.

The primary purpose of this section is to determine if mergers and sales are in the public interest. Antitrust is the specific target of this section.

Section 409 - Prohibited Interests

Related to Section 408, this section requires the Board to approve any interlocking relationships. It also prohibits any officer or director to profit from sale of securities by the air carrier.

Section 410 - Loans and Financial Aid

All government loans or financial aid to air carriers must have board approval. They not only review the use of the loan, but also its effect on the carriers' financial structure.

Section 411 - Methods of Competition

This section prohibits unfair or deceptive practices or unfair methods of competition in air transportation, and the Board is authorized to order the carrier to cease and desist from any such practices found to exist.

Section 412 - Pooling and Other Agreements

Section 412 requires the filing with the Board of all agreements between carriers relating to the pooling or apportioning of earnings, losses, traffic, equipment, and all other cooperative working arrangements.

This section also deals with interchange agreements and mutual aid pacts.

Section 413 - Form of Control

An aid to sections 408 and 409, this section demonstrates Congressional intent to reach all actual control situations irrespective of their forum. In determining wnether one carrier controls another, the Board must review all circumstances, not just control of voting

stock. An example would be contacts between carriers which develop pressure by one management team over another.

The Eastern-Colonial Control Case (CAB 1955) is more frequently cited. Evidence showed Colonial's executives were free to make their own terms when they requested stock-for-stock exchange on sale of assets.

Section 414 - Legal Restraints

All persons affected by board orders entered under sections 408, 409, and 412 shall be relieved from anti-trust laws and any other legal restraints to the extent necessary to enable such persons to do anything authorized, approved, or required by the board's orders.

The board, however, is charged with responsibility of enforcing the Clayton Act against air carriers-- restraint of trade.

Section 415 - Inquiry into Air Carrier Management

The Board is authorized to inquire into the management of the business of any air carrier and to require full and complete reports from air carriers and from any person controlling, or controlled by such air carrier.

Section 416 - Classification and Exemption of Carriers

This section enables the board to exempt any air

carrier by class, or individually, from any of the provision of Title IV, including those sections pertaining to certification. The board's use of this provision has ranged from permitting the carriage of a particular person on a particular flight, or exempting minor transactions from reporting of Section 408 requirements, to such major matters as establishing classes of non-certificated carriers.

Section 417[9]- Special Operating Authorizations

The board may grant authority to supplemental air carriers to conduct air transportation on temporary basis if it is required in the public interest.

Section 418[10] - Certificate for All-Cargo Air Service

On November 9, 1977, Congress amended the Federal Aviation Act to establish a new class of air carrier to be called All-Cargo Air Service Carriers. This changed removed the board's authority over routes to be flown by All-Cargo carriers and drastically reduced its powers to control rates for carriage of property.

The All-Cargo carriers are authorized to operate anywhere within the United States, Puerto Rico, and the Virgin Islands. They are permitted to fly to Hawaii and Alaska, but are not authorized to provide service between two cities within these states.

Certification is automatically granted to anyone who demonstrates they are ready, willing, and able to provide service. Insurance requirements are specified in Title VI, Section 1002 of the Act.

Section 419[11] - Small Community Air Services

The Airline Deregulation Act of 1978 added Section 419 to Title IV of the Federal Aviation Act of 1958. It was a compromise to those who felt deregulation would result in many small communities losing air service.

An "eligible point" is any city which was receiving certificated air carrier service as of passage of the deregulation act. These cities shall make a determination of the level of essential service they need and the board is authorized to provide that service to them.

An air carrier is permitted under deregulation to reduce service to an "eligible point" to the level considered essential. Further reduction is dependent upon finding a suitable replacement carrier. This has spawned a commuter airline industry replacing many of the major carriers at most of these small communities in provide essential air transportation.

> Essential air transportation means air transportation that satisfies the needs of the community and insures access to the nation's air transportation system at rates, fares, and charges which are not unjust, unreasonable, unjustly discriminatory, unduly preferential, or unduly prejudicial.

AIRLINE DEREGULATION ACT 1978

The dictionary defines "regulation" as the act of governing or directing according to rule, bringing under control and fixing the amount or rate by adjusting.[12] This definition describes control of the United States air carrier industry from 1938 to 1978.

The prefix "de" means separation, reversing, or undoing an action or freeing from a rule. Placing the "de" in front of "regulation" reverses its meaning. "Deregulation", therefore, denotes freeing from governing rules which control the amount or rate. Specifically, deregulation of the air carrier industry provides for the removal of the rules which control the routes they fly and the rates they charge for it. Directly, deregulation allows for the removal of Civil Aeronautics Board control, thus permitting open competition, primarily in routes and rates.

The trend toward deregulation in the United States is also prevalent in the trucking, railroad, communication, and banking industries.

Since 1938, the CAB has held tight economic control over air carriers by determining what routes they would fly and how much they could charge. They decided which cities would get air service, and how often they would get it. They controlled who could merge, and have even forced some mergers.[13]

The CAB made so many decisions for the carriers that about the only decisions they did not make were what types of aircraft were used, and how frequently service was provided.

The main reason given in support of this tight control was that it was believed that without regulatory control,[14] the air carrier industry would become embroiled in cut throat competition which would force some companies out of business and result in an industry structure of a few large companies with a considerable amount of power. A few small weak air carriers might remain to fight for the leftover "crumbs".

In the 1930's and 1940's, regulation and route protection provided the stability which allowed the air carriers to enter into long term financing arrangements. Many airlines in their early years were unable to obtain long term loans to buy new and modern aircraft, but when their certification became permanent, the bankers loosened the purse strings.

Many labor contracts were negotiated on the basis of

the prospect of continued growth by the company and this stability was a very major consideration in the negotiation of such labor provisions as seniority rights, domicile stability in vacancies and displacements, and pension and retirement plans.

Airport management was affected by knowing they were assured of continuing air carrier usage of their facilities. This enabled them to expand their facilities including runways, hangars, and terminal areas. The permanence of air service at an airport often allowed the airport to participate in federally funded airport development programs, which would not be available to non-air carrier airports.

Under the stabilizing effect of CAB regulation, the United States air carrier industry grew and, with few exceptions, prospered. Some airlines were consistent money makers. Eastern, Delta, Braniff, and American were prime examples. Their capital stock offerings were considered "blue chip" investments for many years.

Aviation safety was the most important beneficiary of regulation. Since 1938, excluding the war years 1941-1945, the air carrier industry has steadily improved its safety record. Today, U.S. scheduled air carriers are the safest form of public transportation anywhere in the world, with a passenger fatality rate of .0008/100[15] million passenger miles.

Despite the obvious economic and safety benefits of a regulated air carrier industry, human nature is such that not everyone is satisfied when legislation is enacted. Many factions and individuals representing the aviation industry, government, and the general public continued to express dissatisfaction after passage of the Civil Aeronautics Act of 1938 and even after the Federal Aviation Act of 1958. Dissention and criticism continued into the 1970's. The proposed Federal Aviation Act of 1975, calling for even tighter economic controls, failed to pass. The voices in opposition to government control become louder. Arguments were heard for complete abolishment of government control; and for total control including nationalization of the industry. Somewhere in between these diverse ideas lay grounds for compromise. The ideas of retaining economic regulation on the one hand, and allowing the air carriers greater freedom merited further consideration.

In the early 1970's, many economists questioned the need for economic regulation of the carriers. President Ford pressed for deregulation. Then President Carter appointed Alfred Kahn as chairman of the Civil Aeronautics Board. Kahn moved the board quickly toward deregulation in areas of price, entry, and exit.

In 1975, Senator Edward Kennedy opened an investigation into the regulatory practices of the CAB and the effect of these practices on the industry. He was

seeking answers to fundamental questions as, why were rates so high, and why was there so little route competition? Kennedy was concerned about the fact that between November 1973, and January 1975, the standard coach fare on the airlines had increased by 16%, and the average yield to the airlines had increased 20%. The answer to the higher fares was simple, he said. By allowing new entry and pricing freedom, the airlines would be forced to operate more efficiently, and increased competition would lower prices which would benefit the consumer.[16]

Kahn was in complete agreement with Kennedy and as a result, the Board geared up to deregulate the industry. Three major interrelated arguments were advanced by Kahn and other proponents, and accepted by Congress. They were:

1. That supply and demand would be in balance; that air carrier service would be provided at the level of demand in all markets that could be profitably served. Transitional problems and economic air service would be provided for by means of explicit subsidy.
2. Improvements, which would be reflected in lower costs and therefore lower prices, would come from improved efficiency.
3. The air carrier industry would profit sufficiently to provide for the cost of capital replacement and expansion.

Kennedy and Kahn both argued that air transportation, like any other business should be allowed to make those decisions which affected them.

Opponents argued that deregulation would leave the industry in ruins and that even safety would be jeopardized. They made the valid point that small cities would stand to lose air service. Proponents compromised by adding Section 417 - Small Community Air Service to the proposed legislation.

In support of the argument for allowing air carriers to make their own decisions, Kahn referred to intrastate air carriers, under no federal economic regulations, that were operating successfully in California (Pacific Southwest Airlines), Texas (Southwest), and Florida (Air Florida). These airlines were making large profits, while charging low fares. The regulated air carriers, meanwhile, were charging high fares and making little or no profit. This seemed to prove the economic theories of competition, supply and demand, and pricing.[17]

Congress began listening to these arguments and to the growing public mood that government was getting too big and intrusive into private business affairs. Working under the premise that the air carrier is basically competitive, and offers a fairly homogeneous product, they departed from a basic and long standing principle concerning governmental regulatory practice. For forty years, the air carrier

industry had existed in an environment that was virtually exempted from anti-trust laws. Actually the CAB, through its control over routes and rates, was acting as a cartel agent directed by Congress to promote and protect the industry.

In a system of limited entry and rigidly controlled prices, no real competition could exist. No doubt the CAB believed it was promoting competition in certain city-pair routes. In actuality, the air carriers had no incentive to seriously compete in individual markets. They were each satisfied to take their individual share of an ever increasing population.

During the debate over deregulation, the Congress found that this system created few, if any, incentives for operating efficiently and the result was higher fares and higher costs. Congress concluded deregulation was in the public interest.

Public Law 95-504 was signed into law by President Carter on October 24, 1978. It involved five major domestic regulatory areas. These were:

1. Scheduled operating rights and new entry.
2. Charter rules and entry.
3. Pricing.
4. Agreements, anti-trust and control relationships.
5. Air taxis, commuters, and air freight forwarders.

The new law consists of amendments to the Federal

Aviation Act of 1958. Those titles substantially changed were:

I General Provisions

IV Air Carrier Economic Regulation

VIII Other Administrative Agencies

X Procedures

XI Miscellaneous

XVI Sunset Provisions (This was a new part added to the Act)[18]

The purpose of the Airline Deregulation Act of 1978 is given in its opening paragraph and states its purpose to amend the Federal Aviation Act of 1958, "to encourage, develop, and attain an air transportation system which relies on competitive market forces to determine the quality, variety, and price of air services, and for other purposes."

A brief summary of the changes brought about by the Airline Deregulation Act of 1978 follows:[19]

1. Reduction of economic regulation of the air carrier industry.
2. Termination of the Civil Aeronautics Board in 1985.
3. Increased and protected air service to small communities.
4. Revision of the small community subsidy program.
5. Entry of new companies into the industry and into new markets.

6. Dormant route authority.
7. Termination of all Civil Aeronautics Board authority over domestic routes in 1981. Free market entry.
8. Air carrier can reduce fares and rates up to fifty percent each year without Civil Aeronautics Board approval.
9. Air carriers can raise fares up to five percent each year in competitive markets.[20]
10. After 1983, Civil Aeronautics Board authority over air fares is terminated. They then became subject to United States anti-trust laws.
11. Mergers will be approved if anti-competitive effects are outweighed by significant transportation needs and no less anti-competitive alternative is available.
12. Employees are protected. If a bankruptcy occurs within 10 years, or a reduction of 7.5 percent of airline employment in one year, and the Civil Aeronautics Board determines the cause was due to "deregulation", federal assistance is to be made available to adversely affected employees.

CIVIL AERONAUTICS BOARD "SUNSET"

As of January 1, 1985, the Civil Aeronautics Board will cease to exist. The Airline Deregulation Act of 1978 amends Federal Aviation Act 1958 by voiding Title 11 - Civil Aeronautics Board; General Powers of Board, as of

that date.

Portion of the board's powers are to be transferred to other agencies. These are:

1. On December 31, 1982, Board authority over domestic mergers and interlocking relationships were transferred to Department of Justice.
2. On December 31, 1984, authority over foreign air transportation will transfer to Department of Transportation in consultation with Department of State. Authority over domestic mail rates are transferred to the Postal Service. Essential air service subsidy programs will transfer to Department of Transportation.
3. Authority over agreements and foreign matters will transfer to Department of Transportation.
4. All other programs and the Civil Aeronautics Board will "sunset" or cease to exist as of January 1, 1985.

IV. THE AIR CARRIER INDUSTRY TODAY

Today, nearly five years into deregulation, it is impossible to determine its success or failure. The effects of the sudden release of the economic controls that had guided the industry for forty years are felt by different sectors of the industry in different ways.

The following pages will examine the effects deregulation has had on the industry in terms of economics and service patterns. We will look at routes, fares, load factors and yields, and revenue and expenses. We will also examine small communities, and airports.

In general, the large air carriers have been able to give up many short-haul routes in favor of more profitable markets. Commuter air carriers have moved in to provide the short-haul service vacated by the large carriers.

Between August 1978 and August 1980, the certificated air carriers made 1313 service changes involving entry and exit.[21] As a result, there were 217 more non-stop routes in August 1980 than just two years before.

These service changes have had an impact on the carriers, the airports they serve, the smaller communities and upon airline labor forces.

Proponents of deregulation had assumed that freedom

from tight economic controls and freedom of exit and entry, would result in a competitive industry which would force the carriers to increase efficiency, which in turn would result in lower fares to the public.

Today, the traveler is offered a wide variety of price and service options which have resulted in many cases, in generally lower fares. These lower fares, however, have resulted in lower yields to the airlines, which coupled with rising fuel costs, have created an economic hardship for the carriers. Most of them are losing money.

By examining the impact of deregulation on the sectors of the industry most effected, we will be able to better predict the future, based on our knowledge of the past.

CERTIFICATED AIR CARRIERS

Historically, since the time of Walter Folger Brown in the 1930's, the philosophy of federal air carrier regulation had been to make certain that the United States had the benefit of a few strong, well-financed air carriers.

In the 1920s and 1930s, lacking funds, fledgling airlines failed to buy new aircraft and were unable to staff and maintain the aircraft they had or required. These were among the several reasons to build a few, strong

airlines by means of protective legislation which awarded routes, paid subsidies for mail carriage, and allowed major airlines immunity from U.S. Antitrust laws.

By 1970, safety was no longer a major problem. The safety rules and regulations were reasonable, enforced by the FAA, and observed by the airlines. The public was protected. As to financial stability, there were enormous sums available to properly capitalize airlines.

Passenger traffic was at an all time high. Air travel had become a necessity and was well accepted. Further, just over the horizon was a shift from surface carriers to air freight of giant proportions. The air transport industry had grown up.

Dr. Alfred E. Kahn, Chairman of Civil Aeronautics Board, issued a press release on October 4, 1978.

> The CAB doesn't have the ability to say what markets are, what routes should be flown, and what aircraft should be used. A competitive market, allowing businessmen to invest freely, will regulate air commerce for better than CAB or any other federal agency can. This points to a future with revenues up, prices down, and more services available.[22]

On October 24, 1978, President Carter signed the Airline Deregulation Bill (S.2493).

ROUTES

In the past, many carriers had obtained certificates of convenience and necessity for routes which were not profitable simply to keep a competitor from getting it, to monopolize an area, or on the chance that the route might develop later. Just enough service was provided to retain the route. To stop this practice, the Board adopted the policy of allowing carriers to freely enter these markets, and also allowing carriers to drop service (to level deemed "essential") on unprofitable routes. These routes were deemed to be "dormant".

Shortly after the passage of deregulation, the Board awarded 248 of these dormant (unused, or unserved at a level acceptable) to 22 carriers, six of which were certificated for the first time.

Under another provision of the act, airlines may file applications on routes which other airlines are serving.

This constitutes free market entry and exit, and the airlines have extensively used both. Examples of the changes in market patterns, since deregulation:

TABLE 4

CERTIFICATED ROUTE CARRIERS

ROUTE EXPANSION - SELECTED CITY PAIRS

City Pairs	Airlines Flying (Non-Stop Serv)		Flts Per Day One-Way		Via Connects (2 or fewer stops)
	1977	1982	1977	1982	1981
Denver-Dallas	2	7	6	25	3
Denver-Salt Lake	3	8	8	28	0
Denver-San Diego	1	4	4	11	15
Denver-San Fran	2	7	6	21	2
L.A.-Houston	1	5	4	17	57
L.A.-New York	3	9	12	36	96
Cheyenne-Casper	2	0	6	0	2 *
Butte-Billings	3	1	3	1	0

* Commuter service only

Source: Official Airline Guide

FARES

The fares charged under the old rules were set by committees of the trade associations, Air Transport Association (ATA), and International Air Transport Association (IATA). These fares were subject to the guidelines contained in Title X, Section 1002 (d) of Federal Aviation Act 1958. The Board either approved or disapproved the fare.

Under deregulation, Section 1002 (d)(4)(A) was amended to allow each individual airline to increase fares five percent per year, or decrease 50 percent per year without Board approval. This increase or decrease is based on the standard industry fare "for each class of service which existed on September 10, 1977."

When the Board "sunsets" in 1985, even this restriction will cease to exist.

Fare wars have escalated over the past three years. Some have had adverse results.

Case 1. New York - Indianapolis.

In 1977, service on this route was provided by TWA and Allegheny, each with two non-stop flights each day. The fare was $135.00 coach, one way, on both airlines.

In 1981, People Express, a newly certificated carrier, entered this market with two non-stop flights each day, fare $39. TWA and Allegheny quickly matched this fare.

People Express after about six months found that their no-frills service could not compete with the full service provided on the larger carriers, and as a result of poor loads they withdrew from the market.

The two major lines immediately raised fares back up, not to $135.00, but to $139.00. As of March 1982, this fare went to $162.00, coach class, one-way.[23]

Case 2. Denver - Salt Lake City

In 1977, this route was served by Frontier, United, and Western Airlines. Jet coach fares were $56 one-way. Between 1979 and 1982, five additional carriers entered this market. One of the first of the new entrants, Texas International offered a promotional fare of $29 to attract business on this new route. Frontier, Western, United, and Hughes Air West matched this fare. The succeeding months saw the coach one-way fare go as low as $19.

As of March 1982, standard coach class one-way fare on this route is $113, and all carriers operating this route charge this fare.[24]

Case 3. New York - Washington, D.C.

New York Air, a non-union air carrier, owned by Texas Air Corporation who also owns Texas-International/Continental, entered the New York - Washington market with a $39 coach, one-way fare. Standard coach, one-way on the major airlines is $59.

As of the first quarter 1982, New York Air had amassed a total loss of $6,645,532, with a long term debt to equity ratio which had risen from .34 to 2.90.

New York Air's passenger load factor was 61.84%. Their breakeven load factor was 69.55% at the standard $59 fare. At the $39 fare, they would require a load factor in excess of 84% to make a profit.[25]

LOAD FACTORS AND YIELD

Table 5 indicates that load factors declined steadily since 1978 when deregulation was enacted. Preliminary indications are that there has been a small increase in 1982, but these figures are not available as of this time.

A portion of this drop in load factor can be attributed to general economic conditions of the country as a whole.

A more significant conclusion can be drawn by examining the increase in available seat miles, compared to the number of enplaned passengers from 1978 through 1981.

The number of passengers boarding increased just over five percent (5%), while available seat miles have risen by 16.7 percent.

One can only conclude from this that the freedom of entry of new carriers, and the free market entry of established carriers has resulted in over capacity.

This argument can be supported by the statistic that indicates the United States Air Carrier fleet has increased from 2,545 aircraft in 1978 to 3,973 in 1981 -- an increase of 56 percent (56%).[26]

Table 5 contains another very significant statistic. The average passenger revenue yield per seat mile has decreased from 8.49 cents in 1978, to 7.90 cents in 1981. This can only be a direct result of fare adjustments

downward. These adjustments may be due in part to the fare structures used be competing airlines in a free market.

For the first quarter of 1983, many airlines are reporting higher load factors and increased revenue passenger miles flown. No major labor cost increases have been reported. The fuel costs are down somewhat. Profits are determined by an excess of income over expense. Obviously this excess does not exist because most of the airlines are showing net losses for the quarter.

Seat mile costs are computed by the following methods:

Seat Mile Cost Computation

$$\frac{\text{Operating Expense}}{\text{Miles Flown}} = \text{Average cost per mile}$$

$$\frac{\text{Cost Per Mile}}{\text{Number of Saleable Seats}} = \text{Cost per seat mile}$$

Seat mile costs vary for each airline and for each aircraft type. Typical examples for Boeing 737 aircraft:

United Airlines	11.5 cents per seat mile
Western Airlines	10.8 cents per seat mile
Frontier Airlines	10.6 cents per seat mile
Air Florida	9.2 cents per seat mile
People Express	8.9 cents per seat mile

Source: Airline Pilots Association

TABLE 5

PASSENGER OPERATIONS IN SCHEDULED DOMESTIC SERVICE OF CERTIFICATED ROUTE AIR CARRIERS: 1972 - 1981

Year	Revenue Passenger Enplanements (000)	Revenue Passenger Miles (000)	Available Seat-Miles (000)	Revenue Passenger Load Factor*	Average On-Line Passenger Trip-Length (Miles)	Average Passenger Revenue Per Passenger-Miles (Cents)
1972	172,452	118,137,978	226,614,145	52.1	685	6.40
1973	183,272	126,317,334	244,699,119	51.6	689	6.63
1974	189,733	129,732,395	233,880,101	55.5	684	7.52
1975	188,746	131,728,492	241,282,125	54.6	698	7.69
1976	206,279	143,271,283	261,247,796	54.8	704	8.16
1977	222,283	156,609,249	280,618,915	55.8	704	8.61
1978	253,957	182,669,238	299,541,841	61.0	719	8.49
1979	292,700	208,890,884	332,796,130	62.8	714	8.93
1980(R)	275,182	204,367,599	350,716,595	58.0	736	8.85
1981(P)	267,044	201,296,702	349,614,256	57.4	749	7.90

(P) Preliminary
(R) Revised
*Percent revenue passenger-miles of available seat-miles.

In 1981, according to CAB economic statistics, the 1981 average yield per seat mile was 7.90 cents.

The most likely explanation: excessively low fares, as a result of unregulated, competitive marketing, are decreasing the yield per seat mile flown.

The Vice-President, Operations, of a major airline told this writer, "we can't make any money if we are flying people for nothing. The fares are too low."

Another possible factor in reduced yield is stage length. The average length of haul per passenger has risen from 719 miles in 1978 to 749 miles in 1981. (See Table 8).

Air fares are determined, for the most part, on competitive city-to-city marketing strategy, and are not based on the service rendered to the passenger.

Short-haul rates are higher per mile than long-haul rates, but so are costs per seat mile. Increasing the length of haul increases the seat mile cost, with a corresponding decrease in seat mile income (yield).

The present fare structure is therefore irrational. A more equitable structure would be a fare based on miles flown. Such a fare is now being introduced by American Airlines and many carriers are adopting this fare.

REVENUES AND EXPENSES

Tables 6 and 7 indicate that total operating revenue has risen 59 percent while operating expense has risen 41 percent, since 1978 yet the industry in 1981 indicates a net operating loss.

Tables 6 and 7 indicate that operating expenses exceeded operating revenues by over $263 million dollars. The primary culprit here was the increase in the cost of flight operations which has increased by 114 percent (114%).

Most of this increase is due to fuel costs which have risen over 96 percent since 1978.

TABLE 6

OPERATING REVENUE OF DOMESTIC OPERATORS,
CERTIFICATED ROUTE AIR CARRIERS: 1972 - 1981
(THOUSANDS OF DOLLARS)

YEAR	TOTAL OPERATING REVENUES*		PASSENGER		U.S. MAIL (INCLUDING SUBSIDY)		EXPRESS AND FREIGHT		EXCESS BAGGAGE		OTHER	
	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT
1972	8,651,742	100.0	7,564,842	87.4	229,989	2.7	595,583	6.9	12,842	0.1	248,477	2.9
1973	9,694,007	100.0	8,379,396	86.4	262,626	2.7	693,610	7.2	14,289	0.1	344,086	3.6
1974	11,545,790	100.0	9,757,503	84.5	263,614	2.3	759,036	6.6	16,581	0.1	749,056	6.5
1975	12,020,059	100.0	10,123,503	84.2	252,750	2.1	781,638	6.5	18,869	0.2	843,298	7.0
1976	13,898,501	100.0	11,855,266	85.3	294,175	2.1	932,958	6.7	22,014	0.2	794,610	5.7
1977	15,822,428	100.0	13,489,111	85.3	355,117	2.2	1,085,888	6.9	20,913	0.1	871,129	5.5
1978	18,189,473	100.0	15,508,727	85.3	335,525	1.8	1,326,842	7.3	22,900	0.1	995,474	5.5
1979	21,652,405	100.0	18,719,830	86.5	415,737	1.9	1,455,828	6.7	27,681	0.1	1,033,313	4.8
1980	26,403,576	100.0	23,081,487	87.4	529,572	2.0	1,552,836	5.9	32,168	0.1	1,207,184	4.6
1981	29,013,691	100.0	25,491,015	87.9	608,233	2.1	1,617,705	5.6	36,183	0.1	1,258,055	4.3

*DETAILS MAY NOT ADD TO TOTAL DUE TO ROUNDING.

TABLE 7

OPERATING EXPENSES OF DOMESTIC OPERATORS,
CERTIFICATED ROUTE AIR CARRIERS: 1972 - 1981
(THOUSANDS OF DOLLARS)

YEAR	TOTAL OPERATING EXPENSES*		AIRCRAFT OPERATING EXPENSES						GROUND AND INDIRECT EXPENSE		NET OPERATING INCOME OR LOSS
			FLIGHT OPERATIONS		MAINTENANCE FLIGHT EQUIPMENT		DEPRECIATION AND AMORTIZATION FLIGHT EQUIPMENT AND OTHER				
	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT
1972	8,158,450	100.0	2,347,584	28.8	1,246,452	15.3	777,794	9.5	3,786,619	46.4	493,292
1973	9,200,212	100.0	2,638,061	28.7	1,407,618	15.3	839,218	9.1	4,315,314	46.9	493,795
1974	10,760,565	100.0	3,345,010	31.1	1,513,858	14.1	871,478	8.1	5,030,221	46.7	785,226
1975	11,902,956	100.0	3,919,059	32.9	1,610,751	13.5	891,217	7.5	5,481,929	46.1	117,103
1976	13,323,961	100.0	4,448,117	33.4	1,815,748	13.6	927,031	7.0	6,133,066	46.0	574,541
1977	15,165,899	100.0	5,287,884	34.9	2,001,329	13.2	966,846	6.4	6,909,839	45.5	656,529
1978	17,171,530	100.0	5,669,021	33.0	2,154,909	12.5	1,230,885	7.2	8,116,715	47.3	1,017,943
1979	21,522,972	100.0	7,998,440	37.2	2,457,497	11.4	1,372,944	6.4	9,693,961	45.0	129,433
1980	26,409,238	100.0	11,029,423	41.8	2,757,663	10.4	1,560,312	5.9	11,061,841	41.9	-5,662
1981	29,276,723	100.0	12,137,311	41.5	2,842,749	9.7	1,737,135	5.9	12,559,528	42.9	-263,032

*DETAILS MAY NOT ADD TO TOTAL DUE TO ROUNDING.

LABOR AND DEREGULATION

Needless to say, the loudest voices raised against deregulation of the airline industry were those of the leaders of major airline labor unions. John O'Donnell, President of the powerful Air Line Pilots Association, expressed the fears that:

1. Freedom of market exit by air carriers would result in many carriers reducing their operation to the detriment of labor forces.
2. Freedom of entry into markets would spawn the proliferation of new carriers. Most of which would utilize non-union pilots.
3. Utilization of non-union pilots would be detrimental to air safety.
4. Realignment of route patterns would place undue burdens on the air traffic control system.[27]

Captain O'Donnell was accurate in two of his predictions. Many of the major carriers have reduced the number of cities they serve. United Airlines have reduced the number of city-pairs served by 19 percent. Frontier in 1978 serviced 121 markets. In 1983 they serve 89 cities.

Table 8 indicates the effect of service changes and new carrier entries on unionized pilots.

TABLE 8

AIR TRAFFIC AND UNION PILOTS

1978 through 1982

Year	Enplaned Passengers	Aircraft Departures	Number of Certifd Carriers	Pilots Employed (Union)	Pilots Furloughed (Union)
1978	261,313,500	7,916,160	62	44,020	171
1979	296,132,661	9,252,037	73	45,121	120
1980	278,957,991	9,372,419	79	46,505	114
1981	263,685,857	7,677,703	77	44,400	621
1982	* *	* *	86	43,621	*1787

* Braniff pilots (3,020) not included in those totals.

* * Statistics not available.

Source: Airline Pilots Association

FAA Statistical Handbook of Aviation, CY 1982.

The number of aircraft departures, representing originating flights by certificated air carriers has dipped below 1978 levels, while the number of certificated carriers has risen by nearly 39 percent. The number of union pilots employed as of 1982, has dropped. Furloughs have risen dramatically. The decrease in the number of

union pilots employed is due in part to deaths and retirements which account for about .8 percent per year.

Of the 24 newly certificated carriers which have entered the industry since deregulation, only three have elected to unionize.

The number of Airline Transport Pilot (ATP) licenses has increased from 55,881 in 1978, to 70,311 in 1981, yet the membership in the Union has remained fairly static. The ATP license is required only for captains of certificated air carrier aircraft.

Captain O'Donnell's fears that safety would be jeopardized by use of non-union pilots has proved to be unjustified. FAA statistics show no evidence of safety deterioration because of use of non-union pilots. Indeed, air safety seems to have benefited. The fatality rate of .0009/100 million passenger miles is lower today than it was in 1978.

Table 9 illustrates this point.

TABLE 9

AIRCRAFT ACCIDENTS, CERTIFICATED AIR CARRIERS

1979 AND 1981

Class of Carrier	1979		1981	
	Accidents	Fatalities	Accidents	Fatalities
Certificated route air carriers	26	350 *	24 *	4
Supplemental carriers	1	3	1	0
Commuter airlines	—	—	28	35
Deregulated all cargo carriers	6	--	--	
General Aviat.	4,494	1,311	3,634	1,265

* 5/25/79 American Airlines, Chicago 271 killed
10/31/79 Western Airlines, Mexico City 71 killed

Balance of fatalities were ground accidents.

Source: FAA Statistical Handbook of Aviation, CY 1979 and CY 1981

The number of accidents is the significant figure in Table 6. The certificated air carriers, the supplemental carriers, the all-cargo carriers operate under rules of 14 CFR 121 and are the only class of carriers which have been deregulated.

John O'Donnell's assessment of undue strain on the air traffic control system is rather uncertain. He could not have envisioned the strike of 1981 which has caused disruption of the system.

No doubt, the added work load imposed on the controllers by the proliferation of new carriers and changing route patterns is a factor. However, there is simply no evidence that deregulation has had a major effect on operation of the air traffic control system. This is discussed in the section on effects on airports.

One of the provisions of the Deregulation Act authorizes financial aid to employees of companies who file bankruptcy, or who reduce work forces by 7.5 percent per year, if it can be established that the action was a result of the deregulation. This has been tested only in one instance.

Braniff Airlines filed under Chapter 11 of the bankruptcy laws on May 12, 1982. The affected employees have thus far been unable to qualify for financial aid under this provision because there has been no finding by the Civil Aeronautics Board that the bankruptcy action was a direct result of deregulation.

Relaxation of the economic rules governing control of air carriers has allowed some structural changes in management, and mergers. Pan American has been allowed to take over National Airlines. Texas Air Corporation (Texas

International Airlines) has purchased Continental Airlines outright. North Central and Southern merged and subsequently took control of Hughes Airwest. These airlines form Republic Airlines.

These mergers have resulted in reduction of labor forces by elimination of duplication of services and jobs. These consolidations are not caused by deregulation however, but rather are permitted by it.

A rather disturbing trend in the industry, from labor's standpoint, is the "spin off". Texas Air Corporation, owner of Texas International Airlines, is also the principal owner of New York Air, a certificated air carrier. New York Air is a non-union operator which entered the industry following passage of the Deregulation Act. The old regulations would not have permitted this type of business arrangements.

Before deregulation, holding company ownership of air carriers was permitted provided the other activities of the parent company did not involve "engaging in other phases of aviation, other than airports." The new language under deregulation inserts the phrase "substantially engaged", for "engaging in."

An example of what is now allowed, with its connotations for labor unions follows:

Frontier Holdings, Inc. now owns Frontier Airlines and Frontier Services. Frontier Airlines is a union

company, operating as a certificated air carrier. Frontier Holdings is a non-union company which owners Frontier Airlines, a bus line, an airplane mechanics training school, and an airline ground training school (formerly Braniff Airlines training department) among other things. Frontier Holdings, has entered into an agreement with Combs Airways, a non-union all-cargo carrier, under which Combs will operate as Frontier Commuter, flying routes formerly flown by Frontier Airlines and using Frontier Airlines aircraft.[28] Frontier Airlines will provide ticket agents, passenger check-in personnel and gate agents and will handle Combs flights out of their own boarding gates.

Frontier Services, (non-union) will provide training maintenance, and field sales support.

What is the connotation for labor? Frontier Airlines will provided union agents to operate a non-union airline. Frontier Services will provide union mechanics to maintain airplanes flown by non-union pilots. The author of this study has been told by people, so affected, that union mechanics have been furloughed from Frontier Airlines--only to be rehired by Frontier Holdings to work for Frontier Services with the express agreement that they would be non-union workers. This entire arrangement is legal, but would not have been allowed under the old regulations.

The author of this study can only conclude from the

evidence, that the effects of deregulation have impacted aviation labor greatly, and in an adverse manner.

ESSENTIAL AIR SERVICE

Deregulation can usually be called successful if the public benefits from it.

Essential service to small communities provided for by the Deregulation Act, has been instituted for many smaller cities which have not had air service or were served by air carriers, and service has been suspended. By June 1979, about 200 of these cities were receiving air service by commuter lines flying 8 to 19 passenger aircraft. The reaction of those communities which lost service by the bigger carriers, was at first negative. They enjoyed the prestige of being served by a major carrier. It was a status symbol.

They soon discovered, however, that their transportation needs could be better met by several flights a day, in smaller aircraft, than by the one or two flights they had received from the larger companies.

They also discovered the costs of operating an airport facility could be less with a reduction in aircraft size.

Many communities, after a period of adjustment, have become convinced that a commuter air service interested in developing new markets gives better service than a major or

national airline which is only interested in larger city markets.

Table 10 indicates the growth of the commuter industry. Passenger traffic from 1977 through 1980 has shown an overall increase of 37%, while the number of markets served is only 30% higher. This indicates an overall growth pattern.

The year 1979 reflects the pattern of expansion. The freedom granted commuter entry encouraged an influx of companies anxious to start service. Many failed and have dropped out of the industry.

TABLE 10

COMMUTER AIR CARRIER REPORTING TO CAB

SCHEDULED PASSENGER TRAFFIC, DECEMBER 31, 1977-81

Year	Originating and Deplaning (000)	Passenger Miles (000)	% Inc. (Dec)*	Arpts Served	Passenger Markets	% Inc. (Dec)*	Commuters Carrying Passengers
1977	8,505	946,179		764	1,594		179
1978	10,074	1,116,931		819	1,676		208
1979	11,054	1,324,267		824	2,105		227
1980	10,865	1,300,404	+37	816	2,087	+30	240

* Increase (decrease) over pre-deregulation levels.

Source: FAA Statistical Handbook of Aviation, CY 1981

Jamestown, North Dakota, offers an excellent example. Northwest Airlines was furnishing one trip east, one trip west each day with a large jet aircraft. When deregulation allowed, Northwest announced plans to drop Jamestown. The CAB established the level of essential air service to be two trips daily west to Bismarck, North Dakota, and two trips eastbound to Minneapolis, Minnesota. Air Wisconsin offered to provide the service with three trips to Minneapolis and two to Bismarck, using 19 passenger aircraft. In the first month of the new service traffic doubled.

On the negative side, many small companies have attempted to replace the certificated carriers with inadequate resources, and unreliable equipment. Without the certification process under the old law, all a carrier must show is that it is adequately insured, and "ready, willing, and able" to provide the service. All that is required for the "ready, willing, and able" requirement is a company structure which has been approved by the FAA General Aviation Division who then issues an Operating Certificate. At no point in the procedure is there an investigation of a company's financial condition or whether the management is knowledgeable in operating this type of service. As a result, on the average, about 50 of these carriers a year quit the business, and are replaced by new carriers who enter the business.

By and large, it is the small communities who have benefitted the most from deregulation. There is a network of air service which is beginning to develop and grow. Most of the larger commuter carriers are providing good air service, usually better service than the major airlines provided. The evidence indicates that if a market exists, and the community responds, then air service will be provided. The public interest will have been served.

The commuter industry's fares are nearly as high as those of the large carriers they replaced. Fuel costs per gallon are the same for all aircraft, both large and small. Labor costs are lower, as are seat mile costs, but so is yield. All of the commuters are engaged in short-haul routes.

The path to lower fares lies in increased load factors. As usage increases, fares should come down.

AIRPORTS AND DEREGULATION

Deregulation has caused problems for airports. Due to the freedom of entry allowed by the Act, many already crowded airports have been deluged with demands for landing rights, terminal and ramp space, maintenance facilities, and office space.

Many established carriers, who have made large investments in their airport facilities find they are being challenged by new companies whose equal access to airport

space is guaranteed by the Deregulation Act.

A portion of the deregulation act amended the Airport and Airway Development Act of 1970, to insure this equal treatment, and established airports are not allowed to deny access to the new entries if they wish to participate in Federal funding for construction of new facilities or repair of existing facilities.

Air carrier route patterns at hub terminals are based on peak traffic periods where arrivals from different destinations connect with outgoing flights. This causes peak traffic periods which tax the airports' capacity in good weather. If the weather turns sour, everything is delayed, and flight schedules are disrupted.

The entry of new carriers puts a further strain on this system. Obviously, an airport's capacity is limited by the amount of concrete it has in its runways, taxiways, parking ramps, and terminal space.

Starting with Deregulation in 1978, by 1981, many hub airports were over normal capacity, then further problems arose when the air traffic controllers went on strike. This led to the implementation of the "slot system" which may be the solution to limiting entry. The airport desires the new business, but they wish to regulate the time periods which new entrants may use.

"Slots" are allocated on the basis of the airport's ability to accommodate traffic (i.e. runway, ramp,

terminal capacity). The established airlines have concentrated their peak traffic into relatively narrow time periods.

Example: Denver's Stapelton Airport handles approximately 360 air carrier movements in a three hour time period, three times each day. This amounts to one every 30 seconds. A new entrant into the market must time his arrivals and departures to avoid these "rush hour" periods, connecting passengers are thus inconvenienced.

The established carriers have huge investments in terminal facilities at these major airports, and are naturally given preference in allocating "slots".

Slots have become a commodity. They can be bought and sold. A new entry must either spend money to buy a slot, or hope someone goes bankrupt (as is the case of Braniff). His other alternative is to take a less desirable time period, which makes him less competitive.

V. THE FUTURE

Recent news releases have indicated that while the air carrier industry as a whole is still in trouble, losing money and flying with relatively low load factors, there are signs that the economy of the country is generally improving.

An improvement in business conditions should be reflected in a rise in airline passenger traffic. This has been a historic trend. There is a long range view, however, that the development of new communication equipment and facilities will make much business travel unnecessary. This remains to be seen.

The leisure traveler or person traveling on personal business, will be the determining factor in how much increase there will be in passenger traffic.

Based on the historic background, and the effects of deregulation that have been presented in this study, the author here presents what he feels is in store for the air carrier industry over the next few years.

1. Competition

   Many of the carriers will find that they have overestimated the traffic potential or many routes. Many airlines now offer a wide variety of destinations, but there are also more airlines flying to the same destination. This dilution has lead to

many carriers now getting a smaller market share than they had before. There should be no more reduction in the number of carriers operating between many city-pairs. Strong carriers will survive, weak or under capitalized carriers will not. As fares stabilize, and they will-- the competitive edge will go to the airlines who provide the best personalized service, best food, most convenient schedules, and who fly the most comfortable aircraft.

2. Fares

There probably will be an extended period of fare differentials, but eventually fares should stabilize. There should be no more than 10 to 15 percent difference between the fares offered by different airlines operating between any two city-pairs.

Many of the major carriers today are adopting the fare structure developed by American Airlines. This fare structure is based on distance flown and will tend to level out the prices charged for travel. There will be a reduction in the number of fares. There will probably be no more than three or four classes of fare. The present system of first class, tourist, coach, excursion, weekend excursion, and other promotional fares is irrational and will not likely continue.

The Official Airline Guide lists 25 fare classes. Examples: F-First Class, K-Thrift; Q-Coach Economy Discounted; Y-Coach Economy Discounted; Y-Coach Economy; Yn-Night Coach in other than first-class compartment; Qn-Night Coach Economy Discounted.

None of these are based on distance. They are based on location in the aircraft, season, time of travel, meals served or not, positive reservations or not, and other services or lack of services.

Many of the newly certificated carriers who offer "cut rate" prices and "no frills" will be forced to raise prices and start offering more than simple transportation. These carriers will find costs escalating as they grow bigger. Their yield per passenger seat mile is low and their costs per seat mile are low. These costs, however, will escalate as they are required to raise salaries, provide fringe benefits for workers, increase in-flight services, expand ground and maintenance facilities, buy replacement aircraft, and provide retirement and pensions for employees.

3. Labor

Organized labor will find rough going in a deregulated industry. Cost conscious management will make it very difficult for unions to improve on labor contracts,

and labor must adapt to more flexible working rules and pay scales in order to survive.[29]

The relaxed rules allowing the companies to "spin-off" other operations, will prove troublesome for organized labor as we have already discussed.

Cooperation between unions and management will become absolutely essential.[30]

4. Marketing strategies

The use of ridiculously low promotional fares and "give-aways" will decrease. These had been forbidden under the old rules, but deregulation allowed them.

Today when costs are high, the food service has been improved on most airlines, and advertising emphasis is being placed on the convenience of schedules, personalized service, and comfort. The new generation of aircraft is a sales representative's dream. Safety will be a major selling point.

The smaller, new companies, with low overhead, and low ticket prices, are not really competing with the big carriers. Their prices and amenities are more competitive with bus lines. These companies admit this in their advertising and press releases. The bigger airlines will emphasize this difference.

These companies are too new in the business to have an established safety history, and the bigger airlines

should emphasize this difference also. Marketing surveys to determine traffic potential will determine what new routes will be flown.

5. Flight Operations

No significant changes are in sight. Fuel prices appear to be coming down a bit; flight crews are cooperating with the company by flying more hours; and the two-man cockpit is becoming a reality.

All these contribute to economy of operations but none are attributable to deregulation effects.

6. Mergers and Consolidations

Now allowed, there have been some mergers, there will probably be more.

All mergers and consolidations and interlocking relationships will be watched closely by the Justice Department for anti-trust enforcement.

There has been some pooling of reservations systems and exchange of equipment and these will continue, and even possibly increase.

7. Commuters

The commuter network will continue to grow as more and more population centers will qualify for air service. The number of companies will most likely decrease as more and more mergers will strengthen the companies. This too, has a historical basis, and there is no reason to believe that history will not repeat itself.

8. Regulation - FAA and CAB "Sunset"

The FAA has already proposed to amend its safety regulations to: (a) Eliminate the current specifics of 14 CFR 121, and 14 CFR 135. These are the safety regulations under which the certificated air carriers and commuters operate. (b) To initiate a program of "Regulation by Objective (RBO)". The FAA would state policy in a new regulation, 14 CFR 125. The details of how this policy is carried out will be up to each individual airline.

This writer predicts RBO will not be adopted, but if it is, it will cause many problems for air safety.

Historically, there has been a tendency for relaxation of safety with less regulation and supervision. This was dramatically illustrated by the experience of American Airlines who adopted their own method of engine removal on DC 10 aircraft, using a fork lift to remove the engine. These procedures, which were not approved by the FAA, resulted in structural failure which cost the lives of 271 people in a crash at Chicago in 1979.

Chances are that closer FAA supervision of maintenance would have prevented this accident.

The Civil Aeronautics Board will cease to exist on January 1, 1985, as scheduled.

Many of the Board's powers will transfer to other Departments of government.

In the opinion of this writer, history will repeat itself. An unregulated air carrier industry will eventually commit those excesses that brought about regulation in the 1930's.

Regulation gave the bankers the incentive to finance the airlines of the 1930s and 1940s. Today, the uncertainties of deregulation have the money lenders very concerned.

Unstable route patterns, unstable rate structures, fare wars among the carriers, poor service to the flying public, and financial instability, in the opinion of this writer, will cause some modified form of the Civil Aeronautics Board to eventually return. This new regulatory form would probably be more flexible, and would allow the carriers more participation in regulatory practices.

Is deregulation good or bad? Only time will tell.

NOTES

CHAPTER I

1 The Boeing 747-200F has a maximum gross takeoff weight of 775,000 pounds. Empty weight is 332,142 pounds, fuel capacity is 225,000 pounds, allowing 217,858 pounds for payload. Source: Boeing Airplane Company.

CHAPTER II

2 U.S. Department of Transportation, FAA. Bonfires to Beacons, 1926-1938. Washington, D.C.: Government Printing Office, 1978

3 IBID

4 IBID

5 Jackson, Donald D. ed., Flying The Mail (Epic of Flight), Chicago, IL.: Time-Life Books, 1981.

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CHAPTER III

9 Section 417, Added by Public Law 87-528 87th Congress, 2nd Session, Approved July 10, 1962, 76 Stat. 150

10 Section 418, Added by Public Law 95-163, 95th Congress, 1st Session, Approved November 9, 1977, 91 Stat. 1286. Air Cargo Deregulation.

11 Section 419, Added by Public Law 95-504, 95th Congress, 2nd Session, Approved October 24, 1978, 92 Stat. 1732.

12 Funk & Wagnalls Standard Encyclopedic Dictionary.

13 In 1950, Monarch Airlines, Challenger Airlines, and Arizona Airways were directed by the Board to merge, or face the loss of their temporary certificates of convenience and necessity. The resultant company is Frontier Airlines.

14 Walter Folger Brown is 1931 used the term "regulated competition".

15 Source: National Transportation Safety Board.

16 Hearings on oversight of Civil Aeronautics Board Practices and Procedures before the Subcommittee on Administrative Practices and Procedures of the Committee of the Judiciary, Senate, 94th Congress, 1st Session, Vol. 1 at 1-3 (1975).

17 Kane, Robert M., and Vose, Allan - Air Transportation Eighth Edition. (Dubuque, IA.: Kendall/Hunt, 1982), p. 14-4.

18 IBID p. 14-2.

19 Public Law 95-504

20 Based on class rates in effect as of September 10, 1977.

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21 Kane and Vose, Air Transportation, p. 14-6.

22 CAB Press Release, October 4, 1978.

23 Official Airline Guide

24 IBID

25 Corbin, David. "New York Air: Troubled Airline Fights Back" Airline Executive, September, 1982.

26 FAA Statistical Handbook of Aviation, CY 1981

27 O'Donnell, John J. "Presidential Viewpoint", The Airline Pilot, June, 1978.

28 Mayer, Kimberly, "Frontier Gives 5 Cities to Commuter Line", Rocky Mountain News, June 15, 1983.

29 A Boeing 737 Captain on United or Frontier Airlines earns about $84,000 per year for flying 70 hours per month. A Boeing 737 Captain on People Express or Air Midway, earns about $48,000 per year for flying 85 hours per month.

30 Mayer, Kimberly. "Frontier Pilots Agree to Pact with Lower Pay". Rocky Mountain News, June 11, 1983.

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