Factors contributing to airline insolvency

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FACTORS CONTRIBUTING TO AIRLINE INSOLVENCY

by

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ABSTRACT

This study explores the problematic issues that caused Chapter 11 and bankruptcy filings during the period of March, 1989 to January, 1992. Unlike the approximately 85 airlines that went bankrupt during deregulation, 4 of the 6 airlines studied were original trunk carriers. The two remaining were, at that time, the only two surviving airlines born during deregulation. The data of these carriers was tracked over a thirteen year period. The tracking consisted of graphing financial / performance variables over time and then the construction of a matrix presenting the issues discovered in the literature search. In tracking their problematic issues over time, common factors present themselves as possible insights to their corporate failure. The following seven factors were found to have been common catalysts leading to insolvency:

1 - Effects of Deregulation
2 - Routes
3 - Jet Fleet
4 - Labor
5 - Hubs
6 - Mergers
7 - External Environment
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Chapter 1

Introduction

You have just finished four years of college and are waiting for a taxi to take you to the airport, where you will be flown to your first job interview. Your taxi is late, so you call the company back and find that they have not sent out a cab, but will dispatch one immediately. The taxi arrives and you explain to the driver the importance of making it to the airport on time. You arrive at the airport and begin running for the ticket counter. As you get closer you see that there are no lines, what a relief. You slow down and focus your eyes you read the sign over the counter, "Out of Business." Your airline has gone bankrupt. Knowing the importance of your trip, you go to the next ticket counter, only to find the same fate. Finally, you reach a ticketing agent of an airline company who is still in business. She is willing to sell you a ticket to New York City from Buffalo for $400. You cannot believe the price, but you learn this is the only airline servicing this route.

This story is not that unrealistic. Since 1991, six airlines have filed for Chapter 11 protection, and three of the six ultimately went bankrupt:


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For many years these airlines were untouchable, only small upstart airlines faced bankruptcy. Was it deregulation that caused their demise? Was it the economy that made these giants fall? Or are the strategies of these carriers becoming out dated thus leading them into insolvency?

The airline industry affects us all. Throughout the course of this study, many of these questions will be addressed. All the emphasis will be based on identifying problematic issues that caused airlines to go bankrupt in the 1990's.

**Background**

Before any study on the airline industry can take place, one must first take a brief look at the issue of deregulation. Airlines, like many other industries in the
United States, are privately owned. However, since these airlines use federal airways and are involved in interstate business, they are under the jurisdiction of the federal government. The first federal regulation of airlines began in 1925 with the Kelly Act. This act awarded contracts for air mail transportation to private carriers.

Government regulation of the airline industry began with the Civil Aeronautics Board (CAB). The CAB was formed from the Civil Aeronautics Act of 1938. The responsibility of the board was to oversee aviation matters affecting the public. This involved supervision of routes, passengers, and cargo fares. The CAB had the power to grant route authorizations, establish uniform rules and fares, rule on mergers and determine unfair competition.

With the expansion and growth of the industry, government officials felt that it was time to lift the controls on the airline industry. In 1978, the Airline Deregulation Act was passed. This gave the airlines the freedom of an open market system. Now airlines could compete on the basis of price, service, and routing. Deregulation brought about many positive changes. It lowered rates and allowed more people the opportunity to travel. Deregulation also brought service to new locations. With competition, came more services and increased quality. However, not all of the events following deregulation have
been positive. During regulation, airlines were faced with little competition. After deregulation, the industry was now faced with competition and airline bankruptcy.

What allowed some airlines to survive post deregulation and others to fail? More specifically, what caused the six airlines that this study will focus on to fail? In realizing the close proximity to their bankruptcy's (approximately three years), were there any common factors in their failure? In facing bankruptcy in the airline industry, many new issues are born. One of these new issues, according to Robert Crandall was, "Airlines cannot raise revenues sufficiently in a market place where bankruptcy laws allow failed carriers, whose activities grossly distort product pricing, to operate well past their natural economic lives." (Poling, 1991) This issue was also addressed in a July 1991 article titled, "Bankrupt lines account for 20% of U.S. traffic." (Poling 1991) With the loss of many airlines to bankruptcy, the travel industry faced the possibility of a monopolized airline industry. In April 1991, America West Airlines, an airline operating under Chapter 11, charged the "Big 3", Delta, American, and United with having a monopoly of the domestic airline industry. As one can see, bankruptcy is not only an airline closing it's doors forever, but it can have a much larger effect on the travel industry as a whole.
Problem Statement

When an airline files for Chapter 11 and/or goes out of business, it has a negative effect on the travel industry. Effects on the traveling public include such issues as: canceled tickets, delayed flights, and reduction in service to many cities. Failing airlines also cause unequitable competition among healthier airlines. Many airlines going out of business perform last ditch efforts by cutting fares so drastically that healthy airlines are forced to compete on a level in which they lose money.

What has caused these six airlines to falter in such a short period of time? By comparing each case, will this study provide the formula leading to failure for others to avoid? Determining what problematic issues existed that caused insolvency is what needs to be addressed.

Purpose of Study

The purpose of this study is to identify if there are similar problematic issues that caused bankruptcy in the six identified airline carriers. This research is of importance due to the diminishing number of major carriers and the alarming rate at which airlines have filed for Chapter 11 or have gone bankrupt. Since deregulation in 1979, approximately 85 airlines have gone bankrupt. (Dornheim, 1992)
By looking into the problematic issues surrounding the downturn of these six airlines, the intent is to determine a framework or pattern to their demise. In researching each airline over time and describing the events and activities that have caused internal problems, the study will attempt to discover common issues to their failures.

This problem needs to be addressed in order to determine if a particular course of action should be taken. Many argue that the industry should be re-regulated or that the way in which airlines use the Chapter 11 laws should be changed. While deregulation was put into effect in order to stimulate new airline growth and competition, we now see a steadily shrinking industry.

The main purpose is to provide a qualitative holistic view into problematic issues causing insolvency. Once common issues are identified the purpose will be for others to analysis the issues further, in order to apply them usefully to their own specific needs.

**Procedures**

Two major techniques were utilized during the collection of research for this study. These included the tracking of performance data over a thirteen year period and the creation of a matrix identifying the problems found in the literature review.
The performance variables chosen were: Available Seat Miles, Passenger Revenue Miles, Passenger Load Factor, Break Even Load Factor and Total Operating Income. These factors were selected for their depiction of performance in the airline industry. Available Seat Miles measures capacity supplied by an airline. Revenue Passenger Miles measures the output of an airline company's product. Load factor presents a percentage of capacity, thus measuring efficiency. Break even load factor demonstrates at what level an airline should be selling its product in order to break even. Operating Income represents what the airlines make from passenger transportation service only, giving a view of the profitability of the airline operation.

The objective of tracking these variables are to compare each airline's performance to each other and determine if any similarities exist. Also, by charting the change in performance year by year, a search for any cyclical patterns would be sought.

A literature search was conducted for each of the six airlines from their inception or from 1979, whichever was the latter. This review intended to find any possible internal or external changes, actions or events that caused change in each individual airline. The review revolved around changes that caused negative outcomes. The events
and activities were recorded over time, in a matrix scheme, in order to compare the findings of the literature.

Once the data from each method was collected and recorded, the findings were compared. This was done in order to compare events over time in each airline to their performance variable giving an insight into the possible relationship between these activities and performance.

The objective is to take a holistic looks into the possible group of issues and or factors that caused each airline to fall and file for Chapter 11 in such a short period of time.

**Hypothesis**

The assumption of this study is that there are common problematic issues that occurred amongst these six airlines that led to either their bankruptcy or Chapter 11 filing.

**Definition of Terms**

Airline Reporting Corporation (ARC) - the U.S. organization responsible for appointing travel agents to sell domestic tickets.

Available Seat Mile (ASM) - measures the capacity supplied by an airline, in terms of one seat transported one mile.

Bankruptcy - a company who has done any of the acts that by law entitle the creditors of the corporation to take any and all assets.

Chapter 11 - referred to filing a petition in federal court under Title 11 of the U.S. code, asking for the protection of the bankruptcy laws. Chapter 11 is for business reorganizations done by corporations. Chapter 11's primary function is formulation of a pay out plan as an alternative to liquidation of assets to pay debtors.

Civil Aeronautics Board (CAB) - the former United States government regulatory body designated under the Federal Aviation Act to consider aviation matters affecting the public convenience and necessity, including supervision of routes, passenger and cargo fares. Much of the CAB's role and authority was diminished under deregulation.

Deregulation - the act of deregulating the travel industry. This included phasing out the CAB by January 1, 1985, removing travel agency exclusivity, thus paving the way for carriers to appoint and pay commission to non travel agents, and removal of anti-trust immunity for travel agents.
Load Factor - The percentage of capacity, measured in seat miles sold by an airline.

Travel Agency - an establishment accredited by the Airline Reporting Corporation, international airlines travel agent network, and other conferences, which gives information, arranges reservations, and sell tickets to travelers.

Travel Agent - person, firm, or corporation qualified to sell tours, cruises, transportation, hotel accommodations, meals, transfers, sightseeing, and all the other elements of travel.

Revenue Passenger Enplanements - the total number of revenue passenger boarding aircraft in scheduled service, including origination, stopover or connecting passengers.

Revenue Passenger Mile (RPM) - measures the output of an airline in terms of one fare-paying passenger transported one mile.
Chapter 2

Literature Review

Overview

This study focuses on determining if any common problems occurred in the Chapter 11 and/or bankruptcy filings that took place in the airline industry from February, 1991 to February, 1992. In order to determine if any common problematic issues developed among the six airlines studied in this period, a historical analysis of their operations was undertaken from 1978 to 1992. This chapter will look at the articles and relevant literature in regard to the background of the following six airlines:

America West Airlines
Continental Airlines Holdgs.
Eastern Airlines Inc.
Midway Airlines
Pan American Corp.
Trans World Airlines Inc.

The year 1978 was chosen as a starting point of the literature search, but not as a limit or restraint, because it represents a point just prior to deregulation. This will give an overview of the airline's operation prior to deregulation, during the deregulation process, and under the present free market system. In the review of the literature, only information pertaining to problematic
issues that may have lead to reasons for the individual company failure will be addressed.

The following sections of this chapter will be divided into six sections, each section addressing a different airline. These sections will include the following: a brief history of the airline's founding, description of leadership and management, discussion of services, review of finance and cost issues, and will conclude on the topic of events surrounding their Chapter 11 and/or bankruptcy filing date. These areas were covered in each to present an overview of the carrier as it existed during the mid 1970's to it's insolvency.

**America West Airlines**

America West began it's planning and development in 1981 and provided it's first revenue service in August, 1983. Like many other carriers of the period, it was born out of the deregulation era - a low cost, regional airline ready to carve it's niche among the giants of the industry. America West began its operations with three Boeing 727-200 aircraft, serving five cities. In just five short months, America West was flying to 12 cities and operating a fleet of 10 aircraft.

This start-up airline was formed around the principle of developing a hub-and-spoke system with Phoenix Sky Harbor
Airport as their nucleus. This airport was selected for its central location, year-round good weather, and proximity to California. The airline founders also felt developing a site in Phoenix was an important decision, because its uncongested airport provided an excellent opportunity in maintaining a high standard of on-time performance and connecting flights reliability.

Employee involvement played a strong role in the foundation of America West Airlines. Once hired, each America West employee was required to purchase company stock equivalent to 20% of their first year's gross salary. "The transaction—which could be financed by America West over a five year period through a payroll deduction—was designed to promote employee productivity and corporate identity." (Randolph, 1983)

Cross-training was another area in which America West employees played a strong role in its design. All America West employees, except flight crew members, were rotated through several jobs. This created not only employee comprehension of most operating procedures, but helped create greater job satisfaction and productivity. This was achieved by giving employees the opportunity to experience different jobs, avoiding boredom in the work force.
The airline was founded by Edward R. Beauvais and Michael J. Conway in 1981. Michael J. Conway currently acts as both CEO and President, while company founder Edward Beauvais resigned his position as Chairman of the Board on July 31, 1992. (Dornheim, 1992) "Both Conway and Beauvais have financial backgrounds, but Beauvais is considered to be the long-range planner, while Conway is more involved with operations." (Dornheim, 1992)

Prior to establishing America West, Michael Conway served as Vice President and Controller at Continental Airlines. (10-K Report, 1992)

America West's route expansion began with three Boeing 737-200 and five cities. By 1991, they had added ninety-seven aircraft and were now serving over sixty destinations. The company began as a short-to-medium-range carrier serving destinations ranging 1000 miles from Phoenix. During 1987, America West began their long-haul service flying Boeing 757's, and by the early 1990's they were serving destinations as far away as Hawaii and Japan.

The company's initial markets were located in the Southwest. These included many cities along southern California, such as Los Angeles and San Diego. Many Midwestern destinations were also served, including cities in Kansas and New Mexico. By the end of 1991, America West
had penetrated the northern markets of Boston, Newark and Washington, D.C. Through this market expansion, America West dominated its two major hubs: Phoenix and Las Vegas, with 46% and 41% market shares respectively, in 1991.

America West passenger mix has always revolved around a 50/50 business to pleasure market mix.

With its attempt to open a hub in Columbus, Ohio the airline's strategy centered on gaining a more profitable consumer. The company has always served its markets through a multi-hub system. This includes the development of a hub in: Phoenix - 1983, Las Vegas - 1987, and Columbus - 1991.

Two key factors have kept America West's cost down are their workforce and aircraft. Throughout most of America West's history it has followed its founding philosophy of using a standard fleet of Boeing 737-type aircraft. These aircraft have only two engines and require just two pilots, reducing overhead dramatically. Due to the standardization of the fleet, these airplanes also reduce parts and maintenance expenses. America West also benefits from the age of their aircraft. They presently have an average age of 6 years, about half the current industry numbers.

By looking at the events and actions of America West, three areas point to probable cause in their Chapter 11
filing. These include: company growth, hub development, and the external effects of the economy due to the Persian Gulf Crisis.

One of the major reasons attributed to the lack of profits at America West has been the startling rate at which the carrier has grown. (Loeffelholz 1989) While having a non-labor work force is a plus, it's size has grown from 280 employees to over 12,000 employees in only ten years. (Vellocci, 1988) Along with employee growth came rapid route and fleet expansion. Their fleet size grew from ten aircraft in 1983 to one-hundred-four in 1992. The negative effect of this growth became apparent when in 1987, losses totaled $46 million. It is shown in Figure 1 that Available Seat Miles doubled from 1986 to 1987. America West's market niche has also outgrown its original intent. In the beginning, America West's markets were focused around short to medium-haul destinations surrounding its hub in Phoenix. From 1986 to 1990, the number of cities serviced doubled from approximately thirty to sixty. By the time they filed for bankruptcy in 1991, they had expanded their markets from New York to Hawaii and Japan. Now, in times of financial down turns the airline was unable to pay for the cost of it's expansion.
The last two issues together played the greatest role in American West's problems. These are hub development and the effects of the Persian Gulf War. With its debts totaling $624 million in 1990 at the beginning of the Gulf War, the airline was unable to handle the unforeseen change in fuel costs. Fuel costs for American West were on average $0.61.6 per gallon in 1989. In July 1990, just prior to the Persian Gulf Crisis, fuel costs were as low as $0.58.6 per gallon. During the next three quarters of the Gulf War, fuel costs rose first to $0.71.3, then to $0.75.7, and finally all the way up to $1.07 per gallon. Unfortunately during this period, American West was attempting to open a third hub in Columbus, Ohio. Due to a combination of these two events, American West reported a net loss of $222 million in 1991, and Figure 2 shows an operating loss of $104 million. These two losses exceeded totals of all losses in the past in these categories.

American West may have fared better if they followed the expansion plan of their closest competitor, Southwest Airlines. It took Southwest Airlines an additional ten years to achieve the size of American West.

Midway Airlines

Midway Airlines submitted its CAB application in October, 1976. Under strong pressure to increase
competition in the airline industry, and with growing notions of deregulation, the CAB granted an operating license. With it's inaugural flight on November 1, 1979, Midway was considered to be the first offspring of deregulation. Their flight operations started at the old Midway Airport in Chicago, using three, leased DC-9 aircraft. Initial service included flights connecting Chicago, Cleveland, Detroit, and Kansas City. The airline's choice of Midway Airport as its hub evolved from their belief that being closer to Chicago's Loop would attract those passengers flying to and from Chicago, not requiring connecting flights. (Business Week, 11/12/79)

The airline was founded by Irving T. Tague, who left Hughes Airwest in 1976 to found his Midway idea. In 1970, Hughes had hired Tague away from the airline consulting firm of Simat, Helliesen and Eichner, Inc. He then became General Manager and Chief Operating Officer of Airwest. Within thirteen months he had made Airwest profitable after it's loss of $20 million the year before. (Gross, 1981)

"Tague started literally at the bottom of the business at the age of 19. His first job was emptying Pan American toilets at the Fairbanks, Alaska Airport. After a steady rise to the top in the pedestrian planning and scheduling divisions of Pan Am and Northeastern, plus success at
Airwest," he became the founder of Midway Airlines. (Gross, 1981)

Midway's service began with the Cleveland and Detroit areas and then expanded into Washington, D.C., St. Louis, and New York. This initial service was considered "no-frills" and tended to attract the leisure market concentrated in the Northeast. After losing money in its first two years and making gains in the next two years--1981 and 1982 (see Figure 3), Midway decided it needed to change its service strategy. After price wars in 1982, Midway's management decided that competing as a carrier devoted primarily to tourist traffic was the wrong course, and it's future lay in competing for the frequent business traveler (Troxell, Jr., 1983) This shift was called Metrolink Service, which in its first phase consisted of a business-class DC-9 linking New York's La Guardia Airport with Chicago's Midway Airport. This was the beginning of an attempt to completely changing Midway's image from one of no-frills to one aimed at attracting the frequent business traveler requiring all the amenities. This new service was launched by Arthur C. Bass, CEO, who was recruited by the airline to replace the former President of Midway, Gordon Linkon. (Byrne, 1983)

With this transition came growing pains. Mr. Bass resigned as Chairman and CEO of Midway Airlines.
Figure 3
Speculation eluded to differences with the Board of Directors for the losses associated in 1983 and 1984, during the transition from a no-frills carrier to the Metrolink Services. (Byrne, 1985)

David R. Hinson, Director of the Board, took Bass' place in 1985. Mr. Hinson graduated with a Business Degree from the University of Washington. He then went to join the Navy and became a fighter pilot. After the Navy he went on to fly planes for Northwest and United. In 1963, he landed a job as Director of flight training at West Coast Airlines, where he met Irving T. Tague, the founder of Midway.

After taking over Midway, Mr. Hinson began to revert back to Midway's original style with the offering of a new discount fare to help boost load factors, called the Metromiser. Looking at Figure 4, passenger loads jumped above break even loads from 1984 to 1987 with consistent high levels, until their bankruptcy in 1991. He also began to redesign planes so they no longer were completely all business-class.

During this period of service and leadership transition, Midway purchased the assets of defunct Air Florida Inc. in July 1985. This changed Midway's standardized fleet by adding Boeing 737's to its fleet of Douglas DC-9's. Along with additional aircraft, Midway
took over Air Florida's routes in the Virgin Islands and Florida.

Midway's initial cost advantages were; it's low operating cost at Midway Airport and it's purchase of used DC-9 aircraft at one-third the cost than if new. Using this cost strategy, Midway was able to survive the 1980's, but by the end of 1989 their overall financial performance was changing in the midst of a rapid expansion. Midway placed and order for 37 MD-80 jets at $900 million and bid for Eastern's hub at Philadelphia for $200 million. Also during this year, Midway introduced its coast to coast service. With the approval of the Philadelphia Purchase from Eastern, service to this second hub began in November 1989.

In focusing on the performance and activities of Midway Airlines, several issues point to its bankruptcy. The three that surface the most often are corporate strategy and leadership, company growth, and the effect of the Persian Gulf Crisis.

Midway's corporate strategy changed about as often as its leadership did. Midway's original founder, Irving, T. Tague, Chairman of the Board, and Gordon Linkon, President, founded the company on simple principles. Their principles were low prices, and simplified service with a single type of aircraft (DC-9) flying out of the Midway Airport hub.
Tague felt he would provide the Freddie Laker approach to a regional airline. This approach revolved around the that air travelers wanted to fly as cheaply as possible, and would go out of their way to do so. (Gross, 1981) Midway remained a no-frills economy priced airline for the first three years of its foundation, until the year 1983.

In 1983, Arthur C. Bass, the former President of Federal Express Corp., began to switch the company's strategy from the low-fare strategy to one seeking the frequent business flier. Mr. Bass had been recruited in 1982 to help keep Midway aloft. Mr. Bass introduced an all business-class service called Metrolink, similar to Eastern's shuttle, but with all the amenities. Many changes were needed to revamp Midway's no-frills image. This became a very expensive transformation for Midway. Jets had to be reconfigured, and services added.

While this service seemed to work at first, its performance in 1983 and 1984 left Midway with widespread losses. Midway's operating losses jumped to $11 million in 1983 and then to $12 million in 1984, producing Midway's first major losses since its inception. (See Figure 3, p. 22) These losses led to the resignation of Mr. Bass in early 1985.
In order to help Midway get back on its feet again, the Board of Directors placed another man at the helm of Midway's falling ship. This was David R. Hinson, a fellow member of the Board of Directors since 1979. Mr. Hinson's first act was to scrap Bass' attempt at making Midway a total business-class airline. Mr. Hinson began by launching the Metromiser discounted fare in order to boost traffic. He also took the assets of Air Florida and converted them to a discounted service, while maintaining Midway's Metrolink aircraft for serving the business market. This market mix served Midway well as it posted continuous operating income growth over the next five years. Even after making small profits, Midway's leader Hinson eliminated all business-class sections and converted them to low-priced seats.

Through 1985, Midway's growth was steady and controlled. But in the long run, Midway Airport would not be able to withstand much growth at any level. Midway didn't offer the array of connecting flights, surrounding convention hotels and mass transportation that O'Hare had. "In addition, Midway's runways were too short for some large planes, making some long-distance routes uneconomical."
(Kolen, 1985)

By late in 1986, Midway's expansion began with it's first purchase of eight new planes, with an option to
purchase twenty-eight more. After a five-year period of success, CEO Hinson began his push for growth. He placed an order for $900 million in aircraft and spent another $200 million in the purchase of a hub in Philadelphia. Starting that year, Midway's operations produced record losses which continued until it's bankruptcy in 1991.

Unfortunately, Mr. Hinson's timing for expansion could not have predicted the effects that the Persian Gulf Crisis would have on his large capital commitments. Midway's operations lost $84 million in 1990. Midway was also forced to sell their second hub in Philadelphia to USAir. Figure 5 shows revenue passenger miles had peaked in 1990, but with the Gulf Crisis and loss of their second hub, Midway's RPM's dropped dramatically the next year. This caused over-capacity in Midway's supply of available seat miles.

Pan Am

It goes without saying that prior to Pan Am's financial difficulties in the early 1970's, Pam Am had been the premier airline. Pan Am was founded by Juan Trippe in 1927. Trippe was able to move unchecked throughout the world, serving almost every foreign market with little competition.

Throughout the 1950's and 1960's, Pan Am was the benefactor of trunk feeders, such as American and United.
MIDWAY AIRLINES
REVENUE PASSENGER MILES (000)

YEAR

16,337 168,380 461,354 646,394 648,275 747,565 1,071,436 1,947,256 2,568,074 2,990,562 3,485,191 3,400,910 4,850,046

Figure 5
Since Pan Am had such a hold on international markets, U.S. airline companies just simply fed their domestic traffic into Pan Am's. Pan Am was also recognized for moving the airline industry into the 'jet age' with its commitment to the Boeing 747.

Extravagance and grandeur were one of the unfortunate problems left behind by founder, Juan Trippe. In 1966 he set off a global capital-investment binge by placing an order for twenty-five Boeing 747's at a cost of $600 million. (O'Hanlon, 1974) Trippe's permanent tribute to his legacy was the building of the Worldport Terminal at Kennedy Airport. It had cost $126 million ($76 million over budget), considerably more than it cost to build the fifty-seven story Pan Am Building in Midtown Manhattan. (O'Hanlon, 1974)

Mr. Trippe did not prepare the leadership to follow him either. Harold Grey, who succeeded Trippe as CEO in 1968, purchased eight additional 747's within months of beginning his reign. Grey retired in 1970, due to illness, and was replaced by Najeeb Halaby, who had been recruited by Trippe. (O'Hanlon, 1974) Halaby knew little about the business, other than what he had picked up as head of the Federal Aviation Authority. Much of his time was spent lobbying in Washington for a domestic franchise or sounding out other carriers on the prospects of a merger. (O'Hanlon, 1974)
Najeeb Halaby left in 1972. His replacement was William Seawell.

Pan Am's performance began to suffer in the 1970's with the poor transition from Juan Trippe. From the end of Trippe's term as CEO in 1968, Pan Am had not posted a profit until 1977. This did not in any way provide the support or the preparation Pan Am needed to survive the deregulation era.

William Seawell, formerly Vice President of American Airlines, was the Pan Am leader charged with leading the airline into the era of deregulation. Seawell was very handicapped from the beginning. Heading into deregulation, Pan Am faced three major hurdles. The first one was the lack of an established domestic route system. The next was the age and type of their aircraft. The last factor was a reliance on an international route system developed in an era of very little competition and high demand.

While Pan Am provided full-service air travel, they were unable to obtain domestic route service needed to remain competitive. With more competition from domestic U.S. carriers on Pan Am's international routes, they needed a new feeder source from the U.S. for their foreign routes. In the past, Pan Am was able to sit back and be fed by other
domestic carriers, like American and United, who lacked international routes.

Seawell's two strategies for Pan Am's market were to discontinue service to remote destinations and conform the remainder of the routes around the advantages of his jet airplanes. At the time, Pan Am was flying to remote destinations, such as Belem, located in the jungle of Brazil, and Kelfavik, Iceland. He also continued his battle to gain ground in domestic markets. Pan Am had to redraw its route map around the capabilities of the Boeing 747, due to their overabundance from the Trippe era.

In order for Seawell to break into the U.S. domestic markets, Pan Am attempted to create a hub in Houston and purchase National Airlines. National Airlines would be the break. The merger occurred in 1979 at a price of $400 million, with the deal actually closing in January 1980. This merger that seemed to be the savior Pan Am had been searching for turned out to be just the problem they didn't need as the industry headed for deregulation.

The first problem associated with the merger was its purchase price and timing. After a long bidding war with Texas International Airlines Inc. (TIA), Seawell paid $50 per share—almost double book value for the stock. If it
hadn't been bad enough that Pan Am paid too much, the purchase occurred when the domestic routes were becoming free-for-the-taking under deregulation. As the merger began, the economy was producing sagging traffic due to the existing recession and fuel costs were soaring. As one Pan Am director stated, "If you could pick and choose your timing to go through the trauma and enormous extra expense of a merger you probably wouldn't want to do it just as the economy was heading into a recession and the prime lending rate was heading to 20%." (Staff Reporter, 1981) Two key factors that made the merger a disaster for Pan Am were their route structure and the poor integration of management and staff.

As the two airlines merged, National's CEO for the last 17 years, L.B. Maytag, declined to join the management team of the newly merged National. (Carley, 1980, Jan. 10) A little more than six months into the merger, Pan Am let go approximately 200 managers and nearly 2,800 hourly workers. (Carley, 1980, Jan. 10) This decision was based on cutting costs during a time of declining traffic. Since many people were let go through an early retirement program, the senior employees earning higher wages, left less experienced employees to run Pan Am. This caused serious service problems for Pan Am, unable to provide the same quality of service with less experienced employees.
The service problems were seen most in the area of reservations. Since most National reservationists were used to booking simple flight itineraries from Miami to New York, they were not accustomed to arranging trips to Abidjan and Hong Kong with connections in Pago Pago. Telephone calls for reservations began to take 15-20 minutes per call. At one point Pan Am was not answering one-third of the telephone calls made to its central reservations number.

Based out of Florida, serving the East Coast and routes extending out to the West Coast, the National merger could not feed enough traffic into Pan Am's international routes. Where destinations did merge, the flights were scheduled too closely together, causing delays in upwards of 40% of Pan Am's international flights. (Carley, 1981)

One of Pan Am's legacies was its commitment to the 'jet age', specifically to the Boeing 747. With this claim of being the "first on the block", Pan Am ran into problems as these new jets evolved into one of the oldest fleets in the industry. This caused a two-fold problem. The problem was not only the large capital required to purchase these aircraft, but the cash demand it required to attempt replacement.

In order for Pan Am to survive the heavy cash demand needed to run its aging fleet and to provide new aircraft
along the way, was through the sale of profitable assets and finding other financial backers. This is shown in Table 1.

**TABLE 1**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SOURCE</th>
<th>AMOUNT</th>
<th>YEAR END CASH BALANCE (MILLION)</th>
<th>NET PROFIT OR LOSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>Sale of headquarters building</td>
<td>$400.0</td>
<td>$16.7</td>
<td>$80.3</td>
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<tr>
<td>1981</td>
<td>Sale of hotel subsidiary</td>
<td>375</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deferral of pension funding</td>
<td>48.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Labor concessions</td>
<td>36.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sale of tax benefits</td>
<td>82.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sale and leaseback of 8 aircraft</td>
<td>200</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td>741.8</td>
<td>28.4</td>
<td>-18.9</td>
</tr>
<tr>
<td>1982</td>
<td>Sale of hotel subsidiary</td>
<td>125</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deferral of pension funding</td>
<td>133</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Labor concessions</td>
<td>146</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deferral of lease payments</td>
<td>18.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sale of tax benefits</td>
<td>50.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mortgages on 2 aircraft</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sale of 1 cargo plane</td>
<td>41</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td>544</td>
<td>47.2</td>
<td>-85.3</td>
</tr>
<tr>
<td>1983</td>
<td>Deferral of pension funding</td>
<td>63.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Labor concessions</td>
<td>115</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deferral of debt payments</td>
<td>82</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deferral of lease payments</td>
<td>14.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sale of 1 cargo plane</td>
<td>42</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Two public debt offerings</td>
<td>250</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td>567.4</td>
<td>365.7</td>
<td>-51</td>
</tr>
<tr>
<td>1986</td>
<td>Sale of Pacific Division to UAL</td>
<td>750</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


35
Through the sale of many of Pan Am's assets it was a very different airline by 1987. Employees unhappy with how the loss of these assets had changed Pan Am forced CEO Edward Ackler to leave as a condition of their wage concessions. From that point on, Pan Am searched for a company that they might be able to merge with in order to save what was left of the airline.

Pan Am's strong international route system was initially viewed as a positive factor, but as competition increased and world events evolved, this international based route system began to show signs of wear.

By the mid 1970's, Pan Am began to face an inordinate number of competitors in their foreign markets. Pan Am was faced with thirteen scheduled airlines across the Pacific, twenty-three in Central and South American and twenty-nine across the Atlantic. Many of these airlines were given less restricted flights into the U.S. while Pan Am faced foreign regulations. These competitors also benefited from being highly subsidized as the 'flag carrier' for their respective government.

Pan Am had been flying to over 70 cities and 38 countries on 6 continents in the early days of deregulation. Because these routes traveled to the farthest corners of the globe, something was always affecting it; strikes, civil
wars, terrorism, natural disasters. This problem was most prevalent in 1981 while Pan Am's international route structure was still large; they were losing $1 million per day. (Kraar, 1981)

These effects of Pan Am's vast foreign markets and the onset of anti-American feelings resulted in the Pan Am Flight 103 bombing in December, 1988 over Lockerbee, Scotland.

With the lack of success in making a hub out of their Houston facilities, the terminal at JFK became their workable alternative. This hub began development in 1982 in order to feed its worldwide foreign destinations.

Trans World Airlines

TWA was one of the first three major airlines to serve the United States when air transportation began in the 1910's and 1920's. These three airlines were United, handling routes along the northern tier, TWA through the middle, and American in the south.

In the late 1960's when Howard Hughes, TWA's infamous leader, was still a principle owner of Trans World Airlines Inc., TWA began a strategy towards diversification. The company's objective then and into the early 1980's, was to build non-airline businesses that would smooth the wild,
cyclical fluctuations common in the airline industry. (Staff Reporter, 1980, May 19) In the year 1967, TWA purchased $86 million of stock to buy Hilton's international hotel chain, Hilton International Co., and in 1973 they bought Canteen Corp., the largest purveyor of vending machines in the U.S. (Staff Reporter, 1980, May 19) By 1979 the strategy had reached full speed. TWA purchased Spartan Food System Inc., a fast food chain, for $82 million in cash, and Century 21 Real Estate Corp. for $92 million.

Unfortunately, this scheme didn't help smooth losses or compliment the airline service as well as hoped. In 1970, the company lost $93.2 million, and in 1975 another $91.9 million. By the first quarter of the deregulation era in 1980, non air profits only offset part of TWA's $59 million loss, leaving TW, the parent company, with a loss of $49.3 million. (Staff Reporter, 1980, May 19)

In reviewing TWA from just prior to deregulation to the present, several issues point to their need for filing for Chapter 11 on January 31, 1992. These included labor costs, age of fleet, domestic route system, and the hostile takeover by Carl Icahn.

TWA's management's inability to lower labor costs played a major role in its financial problems until Carl Icahn was able to gain concessions. In 1982 for example,
under competition from many nonunion airlines, TWA attempted to win wage concessions and work rules. This only resulted in a strike by the TWA machinists around midnight on December 26, 1992. "The strike was over in five minutes. Mr. Meyer [Pan Am CEO at the time], facing potentially devastating losses from a strike ordered his negotiators to give union leaders what they wanted: 30% pay raise over three years. With this deal, he wasn't even able to gain any efficiency work-rule changes." (Carley, 1984, Jan. 10)

Mr. Meyer made small progress in 1984 when the pilots union accepted a 10% wage cut and nonunion workers were imposed another 10% in reductions. This saved a total of $106 million. Still Meyer knew that TWA needed a union-wide wage reduction purchase. Nothing would come close to this until the union had to pick between Frank Lorenzo and Carl Icahn. They backed Icahn's takeover with wage concessions to avoid Lorenzo's union bashing style.

TWA inherited two problems coming into today's deregulated markets. The first was its reliance on an international route system, and the second the old age of it's fleet. It's international route system required a strong domestic market. This strong strong domestic feeder system was something TWA never had. Like its other international competitor Pan Am, TWA had required little need for a domestic route system. Since prior to deregulation carriers like American and United provided the
supply of passengers. To enhance it's domestic needs TWA developed a hub in 1980 in St. Louis. Even while TWA gained 87% of the market share in 1987 with the merger of Ozark Airlines, they still lacked the benefit of hubs located in larger market cities, such as Chicago and Dallas. While TWA may have made St. Louis a quality facility, it wasn't a strong enough location. Also, the airport itself had problems early on.

The first problem was that the runways were too close together, thus lacking maximum capacity early on. The second problem was that only one runway could handle instrument landings. The feeling that the hub was in the wrong location is stated below by an airline executive.

Looking at Chicago--it has always been a major connecting center for airline traffic; it also has a large local market. O'Hare, the nation's busiest airport, tends to draw connections northward, while Dallas pulls from the South. American has 271 daily, nonstop departures at Dallas/Ft. Worth to 75 destinations, while United at Chicago has 274 to 74 cities. TWA dominated operations at St. Louis, but it has only 178 daily flights from there to 50 destinations. "Neither the local population nor the airport at St. Louis is big enough to support enough frequency to compete against other hubs, of which there are plenty." (Popper, 1983)
TWA was in a constant battle to replace its aging aircraft ever since it entered the competitive era of deregulation. Even ten years after deregulation, it still had one of the highest average aircraft ages. (See Table 2)

TWA's last major event before its Chapter 11 filing was its Carl Icahn era. In 1985, Carl Icahn had been attending the annual junk-bond conference hosted by Drexel Burnham. During this conference he heard a presentation by Robert Perser, Chief Financial Officer of Trans World Airlines. (Steven, 1993) Carl, intrigued by the immense cash flow potential in airlines, set his mind on the possibility of buying TWA.

As he began to purchase stock in TWA and continue to gain a majority interest, Frank Lorenzo began to do the same. After a fierce battle with Lorenzo, Icahn won. Carl had paid Lorenzo over $50 million in compensation for his interest in TWA and won the Board of Directors approval of the sale by enticing the unions to back him. At first the unions didn't support Ichan, so they began to look into several 'white knights'- someone to come to their rescue. One such man was Frank Borman at Eastern. Frank Lorenzo's arrival on the scene had changed everything. As one author put it, "to them [labor unions] Frank Lorenzo was the devil incarnate." (Stevens, 1993) Ever since he had angered the unions by taking Continental Airlines into voluntary bankruptcy in 1983, he had been despised by organized labor.
As he prepared to take over TWA, the unions were determined to play the role of spoiler.

Carl Icahn's hostile takeover was able to foster wage concessions, merge Ozark Airlines and begin to bring financial performance back into the black. Unfortunately for Icahn and TWA, he had made his first major mistake with this particular takeover. He violated his own principal by getting emotionally involved with the idea of running an airline. "He became engrossed in the idea of commanding a global airline with an arsenal of jets and a small army of war trained pilots." (Stevens, 1993) Icahn also expected that if he turned TWA around, he would command the respectability of a true entrepreneur--like Andrew Carnegie, Bill Paley, Tom Watson, and Ross Perot--who had built enormous businesses and had become deeply ingrained in the American folklore. (Stevens, 1993)

While Carl Icahn believed he had engineered a dramatic turnaround by 1987 with operating income around $240 million. A deeper look proved otherwise. A good part of the profits revealed that many were based more on the financial engineering than his managerial abilities. (Stevens, 1993) This is stated below in excerpt from the biography on Ichan: "Consider the use of more liberal depreciation methods that enabled TWA to extend the useful life projections on the carrier's wide-body aircraft, producing savings of $44
million. And note that TWA gained roughly $50 million from a long standing lawsuit against Hughes Tool Co. Subtract these and other extraordinary sums, including tax loss carried forward, and TWA's result would have shown losses." (Stevens, 1993)

From this period in 1988 to the present Chapter 11 filing in January 1992, TWA's energies were focused on Icahn vs. TWA. Using TWA's funds, Carl purchased TWA and privatized it. The unions began to see that Carl was not going to invest his own funds or even TWA's funds into revising the airline. Union feelings for Icahn were expressed in two jokes that swept TWA's front lines: "Carl and one of his aides are walking down the street when a young blonde passes by. The aide says to Carl, 'Hey, why don't you screw her?' Carl replies, 'Out of what?'"

Saddam Hussein looks in the mirror and asks, 'Mirror, mirror, who's the meanest, most detestable son of a bitch in the world?' 'What! Who the hell is Carl Icahn?'" (Stevens, 1993) The nature of these corporate jokes give one the sense of how serious the negative feelings towards Ichan had grown.

It is during this time in which the airlines were battling a recession and the negative effects of the Gulf Crisis, that instead of focusing on operational matters,
Carl focused on ridding himself of his burden, TWA. And TWA focused on getting rid of its burden, Carl Icahn.

**Eastern Airlines**

Eastern Airlines was one of the four original trunk carriers (United, American, and TWA) to serve the United States. During its early years it was led by WWI flying ace, Captain Eddie Rickenbacker. Captain Rickenbacker served Eastern Airlines from the 1930's through the early 1960's.

It is during these early years, that the seeds for Eastern's future demise were planted. While United, American, and TWA were truly national in air service, Eastern, as its name implies, was a regional carrier. (Bernstein, 1990) Rickenbacker's early strategy was flying routes along the Eastern seaboard, especially from Florida to populated cities in the Northeast. The airline prospered in the early days as the tourist business in Florida grew, but as time would prove, this became one if its problems in the post-deregulated market.

As the jet age began, it was said that Eddie hated to buy new planes. It was this decision to stick with the old propeller-driven planes that would be the catalyst for many problems to come.
From the early 1960's through 1975, Rickenbacker's five successors played catch-up and bought jets as fast as they could. By that year in 1975, when Frank Borman became President of Eastern, they had $1 billion in debt. Just before deregulation, Borman ordered $1.4 billion worth of the Airbus A-300's and the efficient Boeing 757's.

Three issues arise in viewing the events and features surrounding Eastern's bankruptcy. These were the effects of deregulation on Eastern's route strategy, its purchasing of excess aircraft and labor-management relations.

With the onset of deregulation, Eastern's routes got a lift from the 'budget-conscious' leisure market travelers flying to its southern destinations. But with the introduction of new competition, like People's Express, Eastern began to lose market share. In the first couple of years of deregulation, they lost 5% of their New York-Washington, D.C. market share. "Soon Rickenbacker's Florida routes looked like the dumbest idea in the world: Eastern's flights catered to vacationers and retirees who could put off their trip if they didn't like the price." (Bernstein, 1990)

Frank Borman needed to find a potential partner for his north-south routes in order to gain West Coast route strength. This turned out to be an offer of more than $425
million for National Airlines. This merger never occurred, partly because the CAB regulators felt this would give Eastern unfair advantage in the East Coast to Florida route, where National had also been strong. Also, Eastern's debt burden would not have made it a wise financial solution. Borman began talks with Braniff's Chairman, John S. Casey, in 1981, in another attempt to gain a stronger national route system. The talks collapsed when Borman and Casey agreed that merging two airlines during a recession would be too disruptive. Also, they could never agree on how they would properly merge both work forces. About a year-and-a-half later, Eastern won the rights to purchase Braniff's internationals routes to South America for $30 million, but still lacked the strong nationwide route structure that its original trunk partners had.

While Borman tried to strengthen the route structure, he also led Eastern on a $3 billion fleet modernization program. In order for Borman to fund this program, he not only had to win bank approvals, but also gain concessions from the unions. It was this overzealous speed at which Frank Borman purchased aircraft that led to continuous problems with the unions. In over a decade as Eastern's leader, Borman purchased 142 new airplanes. This resulted in Eastern's costs far outweighing revenues. (See Figure 6) "In 1977, Eastern's long term debt shot up by 50%, by 122% in 1979, 200% in 1981, and a staggering 328% in
EASTERN
OPERATING INCOME (LOSS) (000)$

YEAR

OPERATING INCOME (LOSS) (000)$

111,000
1,900
(18,781)
(49,949)
(100,106)
189,631
221,618
65,012
58,898
(209,437)
(533,354)
(864,721)

Figure 6
1983." (Bernstein, 1990) The following chronology best demonstrates the events that began the war between Eastern's leaders and unions and ended Eastern's 62 year history:

1979............ Amid $100 million in wage losses, the International Association of Machinists' (IAM) District 100 hires 'militant President', Charles Bryan.

1981............ IAM District 100 creates a corporate research committee to help train the union's negotiating team.-- union wage contract expires.

1982............ unions continue to work without contracts.

1983............ machinists reject management's final offer and brace for strike.

March
Borman gives into unions with 17% wage increase over 3 years, retroactive January 1.

September
Eastern's income well below projections.
Borman declares in videotaped speech that the airline has three choices: to go out of business, "a la Braniff", to file for protection, "a la Continental", or to reduce labor costs drastically.

December
Upon review of Eastern's finances, unions acknowledge Eastern's condition and accept wage concessions totaling $300 million. The
agreement includes return to old wages in January, 1985.

1984......... Eastern turns profit mid-year--management says that they cannot afford a wage restoration and make a profit.

1985......... Eastern is technically in default of loans, Borman unilaterally extends the one-year wage cut into 1985.

February  Eastern in good faith pays employees rescinded wage cut from January. Eastern and IAM reach agreement that includes restoration of 5% of the 18% cut from wages.

April  Eastern reaches three-year contract agreement with machinists.

1986......... Even after making its first small profit since 1979, Borman believes they are on the verge of destruction and begins to pressure unions for more deep pay cuts. Unions indicate they would consider some concessions, but not without change in top management.

February  The pilots union reaches a tentative agreement with the firm following a threatened sale of the airline to Texas Air Corp. (TAC) if its three unions did not agree to contract concessions.
Company approves Texas Air acquisition bid, in spite of previous agreements.

June

Frank Borman resigns as CEO and agrees to become vice-chairman and a director of TAC.
Joseph Leonard becomes acting CEO.

September

Texas Air's acquisition of Eastern is approved by DOT.

October

Frank Lorenzo is named chairman. Phillip Bakes becomes president, CEO, and a director.

November

Eastern's employee unions file suit in U.S. district court to block Texas Air's pending acquisition of Eastern for $600 million in cash and notes. The suit alleges that Eastern's board of directors disregard employees' interests and also claims that Texas Air swayed the board to accept the bid. Shareholders approve takeover at a special meeting which ended early because union members shouted down management.

December

Eastern files suit against the company's machinist union seeking to enjoin it from 'unlawful proxy solicitation.'

1987............ TAC folds its New York Air and People Express units into its Continental Airlines unit. This move consolidated TAC's operations into two almost equal-sized units, Continental and Eastern Airlines.
TAC unveils a business plan that calls for sharp wage cuts.

February
Texas Air shifts six jumbo jets from Eastern Airlines to Continental revealing a willingness to move assets from its unionized subsidiary to its nonunion airlines.

March
A new Texas Air subsidiary, System One Holding, Inc., buys one of Eastern's biggest money makers, its computerized reservation system. Purchase price is $100 million (an estimated $100-300 million below value). Eastern then is required to pay to use what it once owned.

April
FAA warns Eastern not to make its pilots fly more than the federal limit of thirty hours in a seven day period. Federal administrators say that Eastern is currently not in accordance with FAA limits.

1988........... Pilots hire Touche Ross & Co., one of the country's largest accounting firms, to analyze Eastern's finances.

February
The AFL-CIO announces a broad campaign against TAC's chairman Frank Lorenzo, declaring that he has shown 'unprecedented contempt' for his employees at the Eastern Airlines unit.
April  Eastern's unions sue the airline and Texas Air, claiming the companies campaigned to denude valuable assets and misled stockholders—as part of a plan to drive organized labor out of Eastern.

Eastern Airlines is temporarily grounded after FAA inspectors find safety violations.

May  Texas Air sues pilots' and machinists' unions charging them with leading an illegal conspiracy to destroy Eastern Airlines unit.

July  Eastern pilots propose work-rule concessions to management while continuing to press for pay increases.

August  Eastern's machinists' union gives firm's latest contract offer to its membership for a vote. Union leaders refuse to endorse offer.

October  Donald Trump agrees to buy Eastern Airlines shuttle service from TAC.

1989......... A mediated negotiating session between Eastern Airlines and its machinists' unions halts without resolution.

February  Machinists back call for strike in March.

March  Eastern offers pilots a new contract that company claims satisfies demands for job security to encourage pilots to cross machinists' picket lines.

1989............ A group led by Peter V. Ueberroth and Eastern announces the $464 million buyout proposal has collapsed. Eastern says it intends to reorganize as a smaller carrier.

May

A group led by William Howard, former chairman of Piedmont Aviation, discloses that it is interested in making a buyout proposal for all of Eastern. Chicago businessman Joseph Ritchie already has expressed interest.

Eastern graduates its first class of new pilots hired since the start of the strike.

June

David Shapiro, bankruptcy examiner in the Eastern case, dismisses the Howard group's offer.

Eastern announces an austerity program for nonunion employees.

The Ritchie plan fails.
July  
Pilots return to the bargaining table in order to prevent Lorenzo from gaining permission to end the pilots' contracts. Eastern submits a reorganization plan to the bankruptcy court. Creditors approve.

August  
Striking pilots vote to continue sympathy walkout.

September  
The striking pilots throw out their leader, Jack Bavis, for proposing that they consider ending the walkout.
Lorenzo tells Texas Air shareholders that Eastern will turn a profit in 1990.

November  
Congress passes a bill to set up a bipartisan commission to recommend a settlement at Eastern. President Bush vetoes the bill.
Pilots vote to end the union's sympathy strike but are unable to return to jobs because they were taken by replacement pilots.
Flight attendants agree to end their strike.

December  
American Airlines announces it will buy Latin American routes from Texas Air for $471 million.

1990 ........  Texas Air proposes a reorganization that calls for paying creditors only fifty cents on the dollar.
Texas Air tells creditors it can only repay them at twenty-five cents on the dollar, with only five cents of it in cash. The rest would be in notes from Continental and Eastern.

Creditors file a formal motion with Judge Lifland asking for a trustee.
Judge Lifland appoints Martin Shugrue as trustee, stripping Lorenzo of power at Eastern.


(Saunders, 1992)

It is extremely obvious that the continuous labor-management clashes since pre-deregulation played an important role in its bankruptcy.

Continental Airlines

Continental was founded in 1934 as Varney Speed Lines. In 1936 Robert Six became the airline's general manager. (Weinberg, 1984) Working with a small route structure and only 16 employees, Six moved the airline to Denver in 1937 and renamed the carrier Continental. "By the mid-1970's under Six's leadership, Continental had become a medium-sized national carrier with revenues of more than $900 million and a reputation for impeccable service,
generous compensation and benefits packages for employees and high morale." (Weinberg 1984)

By the Deregulation Act in 1978, the tide was turning for Continental. In addition to dealing with new market competition, Robert Six announced in 1978 that he would like to retire. He also expressed his feeling that the new CEO would come from inside the company. This set off a wave of internal competition that left Continental's management wavering. To smooth out these organizational problems Six decided to hire someone from outside the organization. So, in 1980 he named Alvin L. Feldman CEO of Frontier Airlines to the job. This caused a "mass exodus" of top management at the same time Continental was beginning to feel the pressure of deregulation. (Weinberg 1984)

The year 1981 was a crucial year for future of Continental Airlines. During that year Continental experienced: the breakup of a desired merger with Western Airlines, a hostile take over bid by Texas International Airlines; two strikes and the apparent suicide of chairman Alvin L. Feldman. Not only did Continental Airlines feel the strong effect of these factors, but they were also dealing with the effects of the air traffic controllers strike.
During the rest of 1981 Texas Air's Frank Lorenzo continued his take over attempts of Continental Airlines. This would not be easy for Frank Lorenzo. Ever since he set up Nonunion New York Airlines in 1980 he had been the pilots' public enemy No. 1. (Staff Reporter October 17, 1983) The union did everything to try to stop Lorenzo. They even tried to buy Continental. The drama of this hostile take over occurred on October 12, 1981 when President Reagan sanctioned the deal allowing TIA to take control of 50.3% of Continental shares. On October 31, 1982 Continental and Texas International consolidated operations. This would only be the beginning of the labor battle that would evolve between Lorenzo and the union labor force.

Lorenzo, after trying to reach labor concessions with the unions of over 100 million, was unable to get all of the unions to follow suit. Thus, on August 12, 1983 the machinist union went on strike. On the first day of the strike operations were at 85% of capacity. In the interim Continental began hiring replacement workers. Within almost a month Continental was flying at full capacity. In September of that year Lorenzo proposed a new permanent labor cost reduction plan totaling $150 million annually. All but the flight dispatchers union rejected the plan. (Weinberg 1984)
On September 24, 1983, Lorenzo's Continental filed for restructuring under the Chapter 11 Bankruptcy Law. Following the filing Lorenzo's forces began labor restructuring as part of the corporate restructuring under the bankruptcy laws. Management cleared the payroll of 8,000 jobs, laying off 65% of the work force. All employees including top management took at least a 15% pay cut. Two days after the Chapter 11 filing, Continental resumed service of 27% of its' flights. Due to the drastic wage cuts, the average pilots salary of $78,000 was reduced to $43,000. The pilots and flight attendants went on strike October 1, 1983. Over night Lorenzo had forced the wage scale of the new non-labor airlines down his workers throats. He had reduced labor from 35% to 20% after bankruptcy. During this corporate rebuilding phase, Continental's management began to form the airline's niche as a carrier with twin hubs in Houston and Denver, providing low cost, high frequency full service flights.

While the unions tried to prove that Lorenzo's only reason for Chapter 11 filing was to reject union contracts; the courts dismissed the unions argument and sided with Lorenzo.

Lorenzo kept up his battle of lowering costs, expanding routes and increasing the size of the airline; and three years later Continental Airlines emerged from chapter 11.
This year and the next would prove to be the catalyst to ever greater changes in Continental. In February 1986, Continental's parent announced an agreement to acquire Eastern Airlines, Inc. Also by the end of 1986 Texas Air had acquired People Express, Inc. This lead to the strengthening of Continental's Denver Hub, since with People Express came most of frontier's asset out of Denver.

By the first of February 1987, Lorenzo merged New York Air and People Express into Continental, giving Continental a new hold in the eastern markets. Merging three airlines was far from simple. With this attempt Continental's service suffered immensely, causing Continental to attempt to compete on price alone with it's introduction of it's "rock bottom maxi-saver fares".

In order to help gain ground Lorenzo teamed up with Jan Carlzon of SAS (Scandinavian Airlines System) to incorporate SAS's renowned Quality Training Institute. With the losses that the company incurred in the integration of People Express, and New York Air the company was unable to handle the unexpected rise in costs and decline in traffic that occurred during the Gulf Crisis. By looking at Figure 7 it demonstrates that after Continentals large labor problem in 1983, it was able to exceed the Break Even load factor until it attempted to integrate Peoples Express and New York Air in 1987 - 1988. Continental was forced to file for Chapter
11 on December 3, 1990. It was the first year since 1983, when Lorenzo fought the unions, that Continental had an operating loss. (See Figure 8) This integration continued to weaken Continental's performance throughout its present Chapter 11 reorganization.
Chapter 3

Findings and Data Analysis

This study focuses on the identification of problematic issues amongst the group of six airlines that filed for Chapter 11, or went bankrupt between March 1989 and January 1992.

Several issues have been identified in each airline leading to their financial woes. These issues have been grouped into seven categories. These issues were then charted on a matrix to provide a tool for drawing conclusions. These common conclusions then were compared to their performance variables in order to see if any common relationship occurred. The common issues and their relationship to one another are described in Table 2.

Deregulation

The data collected was not intended to justify whether or not deregulation worked but what effect it had on the individual carriers. Deregulation left many of the original trunk carriers with outdated route strategies. For example, Pan Am and TWA were dependent on feeder traffic for their international route systems. At the same time they were turned down as they attempted mergers to strengthen their domestic system. This became a burden as domestic
<table>
<thead>
<tr>
<th>Airlines' Factors:</th>
<th>America West</th>
<th>Continental</th>
<th>Eastern</th>
<th>Midway</th>
<th>Pan Am</th>
<th>TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Deregulation Post-</strong></td>
<td>Last surviving carrier from this era</td>
<td>Realized need to strengthen routes to compete - bids for Western airlines. Merger Fails</td>
<td>In order to expand north south routes bids for National Airlines. Bid fails</td>
<td>- First airline in the deregulation era - Begins as no-frills carrier</td>
<td>Enters era w/poor domestic feeder routes faces increased competition in foreign markets</td>
<td>Survived early years on European routes, but international serviced began to loss ground to new competition</td>
</tr>
<tr>
<td>Routes</td>
<td>Switches from a regional carrier serving the South West to a national carrier serving place like NY and Japan</td>
<td>Not Applicable</td>
<td>Unable to gain domestic routes East coast routes take a beating from competition</td>
<td>Changes corporate strategy, begins catering to the business traveler in order to make its routes more profitable</td>
<td>Relying on strictly foreign markets in the past, forced to sell many of its assets in order to stay flying</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>Jet Fleet</strong></td>
<td>Begins with 10 jets, through rapid growth fleet size grows to 104 aircraft</td>
<td>Maintenance of fleet becomes expensive as airline absorbs New York air and Peoples Express aircraft</td>
<td>Bornan in attempt to prepare for the future purchase jets too fast too many. Suffers from over capacity and failure to address current problems</td>
<td>Deciding to purchase 37 new jets at a total of $900 million turned out to be too much for the airline to handle during it purchase of the Philadelphia hub.</td>
<td>Disadvantaged by being one of the first airlines in the jet era, original over purchase of large 757s cause problems - never able to replace aging fleet</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>Labor</strong></td>
<td>Along with rapid expansion labor size increase to 12,000 after beginning with 280 in 1983</td>
<td>- Battles take over by Texas Air - Strikes to fight Lorenzo's wage reduction - Continues war as merger of two nonunion lines occurs</td>
<td>- In order to fund jets labor is continually burdened with concessions - labor strife results in sale to Texas Air</td>
<td>Not Applicable</td>
<td>Labor becomes competitive disadvantage due to competition with nonunion carriers</td>
<td>Realization that Icahn is not going to commit to running the company unions work to remove him</td>
</tr>
<tr>
<td><strong>Hubs</strong></td>
<td>- Multi Hub Strategy - 1991 Attempts Hub in Columbus in order to switch to Business market.</td>
<td>Not Applicable</td>
<td>Hubs in Atlanta and Miami face strong competition from Delta who is able to out perform Eastern</td>
<td>- Midway becomes inadequate - Finds that in order to grow, a second hub is needed</td>
<td>Not Applicable</td>
<td>St. Louis hub dominance never able to provide traffic due to small host market</td>
</tr>
<tr>
<td><strong>Mergers</strong></td>
<td>Not Applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1984-spun off from TW. 1985- Carl Icahn take over 1986 -Purchases Ozark airline.</td>
</tr>
<tr>
<td><strong>External Environment</strong></td>
<td>Gulf Crisis causes havoc with new hub, record losses are recorded</td>
<td>-1981 air traffic controllers strike &amp; recession makes entry into deregulated market difficult</td>
<td>Congress ruling on deregulation makes Eastern's Eastern seaboard niche subject to intense competition</td>
<td>- Gulf Crisis cause sale of newly developed hub to USAir, unable to handle costs during period of high fuel prices</td>
<td>-1981 air traffic strike - Pan Am Bombing - Suffering from anti-Americanism</td>
<td>- Also effected by air traffic controller strike - TWA hijacking - Also suffering from anti-Americanism</td>
</tr>
</tbody>
</table>
carriers were allowed to serve their own markets. Eastern also lost its competitive East Coast-Florida dominance as they did not have enough of a domestic system to support the loss in this market share.

Deregulation also left management unprepared to deal with the labor problems that would arise. As non-labor forces grew, carriers were left with a union work force costing them an average of 13% more than their new competitors. Frank Lorenzo, an advocate of deregulation, summed it up best. "This is an industry which was handed a total dramatic change by Congress that came along and deregulated the revenue side but didn't do anything about the cost side." (Staff Reporter, 1983, Dec. 10)

Reviewing the operational income patterns of many of the carriers, there is a continuous drop in many cases since the year 1979. In the Michel-Shaked study on the probability of air carrier insolvency due deregulation, it showed that from 1974 to 1982, the probability of insolvency in Eastern, Continental, Pan Am and TWA had increased. The study results also closely predicted the failure of Pan Am. This study compared many of the same performance variables that this study did to determine the effects of deregulation.
Routes

Many common conclusions can be drawn from the route strategies that were used by these individual airlines. The first was that many original carriers; TWA, Pan Am, and Eastern had very narrow-oriented route structures. Once competition increased they were forced to compete with a weak route system. In order for these airlines to prepare themselves for deregulation, they sought mergers. Many of these mergers were discouraged by CAB because at the time it looked like they were already controlling too much of their present markets. These airlines continued to play 'catch-up' throughout deregulation.

The newcomers, America West and Midway, started off with a regional route strategy, but as they grew, their routes grew too rapidly. Unable to duplicate Southwest's strategy of controlled growth, both airlines expanded too quickly. As their debt burden increased, they were unprepared for the effects of the Gulf Crisis.

Today's stronger carriers, United, Delta, and American, survive because their vast route systems helped them outlive the downturn in seasonal and international travel.
**Jet Fleet**

Two scenarios are present in this area. One is the burden of revitalization of an old fleet, and the other is overzealous purchasing plans.

Pan Am, TWA, and Eastern were forced to spend money on planes in order to update their fleets and remain competitive in markets. Unfortunately, many airline leaders were unable to balance the cost of equipment with labor. For example, Frank Borman of Eastern purchased over 100 planes in his reign at Eastern, all along telling the unions that the airline was broke. Pan Am, one of the first to order the Boeing 757's, was never able to fund the modernization needed in the era of strict competition and went out of business with one of the oldest fleets flying in the industry. In looking at Table 3, one can see that on average, the airlines researched in this study, continued to have some of the oldest aircraft ten years after deregulation.

Midway and America West also suffered problems even though America West had one of the newest fleets in the industry. America West had increased its flights from 10 in 1983, to over 100 when it filed for Chapter 11. Midway had been conservative in its purchases until it ordered over 30 jets costing $900 million prior to the Gulf War. Their timing and speed of purchase became pit falls.
<table>
<thead>
<tr>
<th>AIRLINE</th>
<th>1988 AVERAGE AIRCRAFT AGE (YEARS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northwest Airlines</td>
<td>15.5</td>
</tr>
<tr>
<td>TWA</td>
<td>15.3</td>
</tr>
<tr>
<td>Eastern Airlines</td>
<td>15.1</td>
</tr>
<tr>
<td>United Airlines</td>
<td>14.9</td>
</tr>
<tr>
<td>Pan Am</td>
<td>14.6</td>
</tr>
<tr>
<td>Continental Airlines</td>
<td>12.1</td>
</tr>
<tr>
<td>American Airlines</td>
<td>10.8</td>
</tr>
<tr>
<td>USAir</td>
<td>10.2</td>
</tr>
<tr>
<td>Delta Air Lines</td>
<td>9.5</td>
</tr>
</tbody>
</table>

**Labor**

As these airlines faced competition from new carriers, they were forced to deal with lowering labor costs. Unions were forced to use concessions as their only asset towards achieving what they wanted. This resulted in long, drawn out labor wars between management and the unions of TWA, Continental, and Eastern. Frank Lorenzo, the chairman of Texas Air, played a consistent role in these labor problems. He was very unpopular for what some believe was his use of the Chapter 11 laws to avoid union contracts. He is the only leader ever to file an airline (Continental) twice for Chapter 11 protection. TWA's union used their power of concessions to side with takeover specialist, Carl Icahn, in order to avoid being purchased by Frank Lorenzo.

In comparing the two newcomers, Midway and America West, to the unionized carriers, there were no signs of labor/management problems.

**Hubs**

None of these six airlines had strong, fortress-type hubs. These are hubs that so strongly served by one airline, that other carriers serving the same hub are at a competitive disadvantage. All had high levels of dominance in their hubs, but many of their hubs were located in small or very competitive markets. Eastern faced Delta's strength in Atlanta and Midway face American's in Chicago.
TWA controlled St. Louis, while America West controlled Phoenix, but neither had the host markets to give them all the benefits a powerful hub should have.

**Mergers**

All the airlines but America West had been involved in a merger or hostile takeover to strengthen the airlines. All but Midway who merged with Air Florida, suffered severe service gaps and poor employee integration. This is best demonstrated in the Continental and Eastern cases.

**External Environment**

With the onset of the recession in the Summer of 1990 and the start of the Persian Gulf Crisis, the problems these airlines had been battling, greatly intensified. Over the 18 month period of the Crisis the Airline industry lost over 6 Billion dollars. With fuel cost almost double and air traffic slumping, this tended to be a further catalyst to the insolvency of these airlines.
Chapter 4

Summary, Conclusions, and Recommendations

Summary

By focusing on the six different carriers as they began to go bankrupt during the period March 1989 to January 1992, several issues appear to be similar in their fall. While these factors may not in all cases apply to all six, there is a definite pattern with several of them. This pattern can be divided into two cases; one for the airlines in operation before deregulation and one for the airlines born out of deregulation.

In the case of the four post deregulation carriers: Continental, Easter, Pan Am and TWA they had all attempted to merge with other carriers or they continued to expand into non-airline business. For example TWA and Pan Am expanded further into food and hotel companies. Eastern, Pan Am and Continental tried mergers with Western and National airlines.

Once they survived the 1980 recession and the effects of the airtraffic controller strike they were faced with labor and fleet costs. To fund growing aircraft needs and compete with the non-union labor; these airlines entered into tense labor battles and strikes. With situations weakening they were faced with one or more options:
liquidating assets or becoming easy prey to hostile takeovers. In three cases: Eastern, Continental, and TWA they became prey to takeovers. While Pan Am basically liquidated its assets over time till they were left with anything of value.

TWA and Continental did not likely go completely bankrupt, because their routes and services were not as limited as; Eastern's Shuttle and Florida routes, and Pan Am international system.

The remaining upstarts; America West and Midway had slightly different paths to insolvency. They both began as regional carriers out of small hubs. As they grew they both decided that survival meant expansion and larger route systems. Because their costs were low they both purchased planes liberally, and expanded beyond their original market strategies. During their decisions to expand into another hub they got hurt by the effects of the Gulf Crisis. This effect lead them into Chapter 11 and bankruptcy.

Conclusions

The largest and most common contributing factor to the problems in the four original trunk carriers is labor cost. Their was very little that these carriers could do to reduce labor costs without causing friction in the company. It has taken airlines almost the last thirteen years to come
up with the two tier pay scale and other measures to make their labor costs competitive. These carriers were also plagued with many problems before deregulation, that only became more intensified after they entered the open market system.

Corporate growth was the single most common problem leading to insolvency at Midway and America West. Each had attempted to become a large domestic carrier too soon. They had been very successful in their original regional market strategies. As they began to expansion they faced strong competition and high debt. Both, with their last two hub expansions, were forced back off by the effect of the Gulf Crisis. America West was most able to survive complete bankruptcy, because it all ready a multi-hub system. Midway was not able to survive - competing in one of the most competitive markets and lacking a second hub.

Recommendations

Taking into consideration all the talk of re-regulating the industry and the charges of unfair competition in the use of Chapter 11, two recommendations come out of this study. The first is that the industry should be re-regulated during times of uncontrollable crisis, like the Persian Gulf war. Next the ethical use of Chapter 11 should be reviewed in order to correct miss use.
Another consideration should be to apply quantitative research to one of the issues identified. For example a further study on the effects that labor relations had on the path to bankruptcy, would provide quantitative information on this issue.

Since this report was conducted Continental Airlines has come out of Chapter 11 on April 28, 1993. It also looks like TWA and America West may not be far behind. This leads to the further study into how they were able to use Chapter 11 and become healthy airlines again.
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