HE TRANSPORTATION CENTER

Eight Years of U.S. Airline Deregulation: Management and Labor Adaptations; Re-Emergence of Oligopoly

by

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and
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RESEARCH
REPORT

NORTHWESTERN UNIVERSITY EVANSTON • ILLINOIS

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PREFACE

In an earlier paper (Spencer and Cassell, 1985) we pointed out that although U.S. airline deregulation initally spawned more competition in fares and in number of competitors, the quality of service and the returns to labor decreased. The former dominant airlines were beginning to fight back by consolidating and instituting innovative marketing practices that enabled them to return as a major force in the airline industry. We suggested that the trend toward consolidation would continue and result in an oligopoly under which prices would stabilize and move upward; services would become more uniform, and labor would recover some wage and benefit concessions that had been made in the early days of deregulation.

This paper continues our research. History suggests that time has verified the above analysis. On October 14, 1986, the Wall Street Journal reported that 80 percent of the passenger traffic was in the hands of seven large carriers. By the end of 1986, the number of passengers traveling at a discount rate rose to more than 90 percent. A stronger economy was further bolstering air travel. Airlines began to raise fares, first over a limited number of less competitive routes and then with an "across-the-board" increase in discount fares.

Although during the initial years of airline deregulation the labor movement suffered major losses in wages, work rules, and representation rights because of nonunion competition and lack of union solidarity in honoring picket lines, by 1986 there were signs that some recovery was taking place. The non merging two-tier pay scale was disappearing; some cutbacks had been partially restored; and a pilot shortage, particularly highlighted in the regional/commuter area, was increasing wages. The tight labor market predicted for larger airlines as they expand together with large-scale retirements will influence the pay and working conditions of both union and nonunion pilots, with some return of union concessions. Greater operational efficiencies have reduced unit costs, improving management's ability to pay.

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Eight Years of U.S. Airline Deregulation:
Management and Labor Adaptations
Competition, and Return to Oligopoly

Overview

The 1985-1986 accelerating pace of airline mergers and acquisitions and the consequent reduction in the number of carriers suggest that deregulation proponents erred in reasoning that low fares and free entry into the industry under the Airline Deregulation Act of 1978 would transform the government-regulated airline oligopoly into a multi-carrier industry which would no longer be dominated by a few large carriers.

Since the deregulation act, nearly two-thirds of the new entrants have disappeared, and 36 carriers have declared bankruptcy or gone out of business with an attendant loss of employment by thousands of workers. In addition, there have been 32 mergers or acquisitions, with 13 of these mergers involving prominent airlines (The Airline Quarterly, Fall 1986). The U.S. Department of Transportation (DOT) is expected to approve the most recent proposals. Although this restructuring has many losers, the shrinking number of carriers has left some of the former industry trunk lines (United, American, Delta, Northwest, and Continental--the latter having grown through mergers to include Eastern, Frontier, New York Air, People Express, Britt, and PBA) larger and stronger than ever.[1]

It appears, therefore, that the 1978 Airline Deregulation Act, as administered contrary to the intent of its proponents, may have become merely a vehicle for transforming a publicly regulated oligopoly into a private oligopoly or cartel. In effect, the oligopoly lost in the initial years of deregulation has been regained in recent years, and the consolidation of resources into fewer companies continues.[2] Some authors of the Airline Deregulation Act, including Alfred Kahn, suggest that the administration has

been lax in its interpretation of the anti trust laws. Previous administrations, they suggest, would not have permitted, at least in their present form, mergers such as TWA-Ozark, NWA-Republic, and possibly United's acquisition of Pan Am's Pacific routes. And would have taken a much stronger stand against the Texas Air-Eastern merger.

Deregulation can be divided into five distinct stages.

1. Route expansion by pre-deregulation established airlines and the rapid entry of hundreds of new entrant airlines brought about a period of intense competition, even anarchy, in the establishment of wages and prices.

2. Competitive tactics were developed by established carriers to preserve or increase their market share and by new entrants to gain market share. Tactics included exploitation of heavily traveled and profitable routes, changes in fleet equipment, introduction of acquisition plans and personnel cuts, elimination of work rules, and introduction of variable wages via profit sharing and stock ownership.

3. Structural change and shake-out occurred through mergers, acquisitions, and bankruptcies. This stage was characterized by a move toward a return to an oligopoly dominated by a few mega-carriers and the development of regional monopolies through control of gates and "hubs."

4. With the ascendency of mega-carriers in establishing the ground rules of the now clearly oligopolistic industry, the shake-out is nearly complete: Passenger choices are reduced, fare wars are abating, and prices are edging upward.

5. First suggestions of re-regulation are now occurring. They arise out of public concern that deregulation might have <u>degraded</u> safety.

In the eight years of airline deregulation, labor-management relations have been subject to three broad environmental forces, acting at times in

tandem at other times in consort. The main environmental influence was, of course, government. Government influence included deregulation in 1978, which set off intense competition and brought on an influx of "instant airlines" that challenged the established carriers. Deregulation ended a government-approved oligopoly, freed up access to routes, and permitted prices to be established without government approval. Industry-wide wage practices began to dissolve and were superseded by individual firm bargaining. At the same time, government relaxed enforcement of the antitrust acts and opened the gates to unlimited mergers and consolidations, leading to the re-creation of an oligopoly--this time one that was dominated by the industry. This non-action also set in motion forces that will likely lead to reregulation.

As a result of government's uncritical acceptance of the market economy, wages were thrust into competition with the interests of consumers, with government coming down hard on the side of the consumer. Government was in fact less than accommodative to the idea of unions. This factor helped sap the unions' strength and encouraged union avoidance and other efforts by employers to weaken the unions. The ability of unions to act as a check on safety practices and other employer actions that adversely affected workers and consumers was effectively neutralized. Government regulation became the only remaining means to assure air safety.

A second major factor that influenced entrance into and out of the various stages of deregulation was the business cycle that coincided most closely with the second and third stages of deregulation. This cycle began with a weakening economy, followed by a deep recession during which demand for transportation and labor fell, and ultimately a sluggish recovery from the recession. This situation helped to drive down wages. Worker militancy dropped to near zero as a nation-wide unemployment rate of eight percent

provided an unlimited supply of replacements, inducing workers to place job security ahead of pay increases.

The third major influence was the reality of competition itself. Two oil shocks, double-digit inflation, high unemployment, and two recessions combined to give the new entrant airlines a supply of cheap labor and equipment. Thus the newcomers could challenge the major unionized airlines and for some time virtually dictate the parameters of collective bargaining in the industry.

Though the environmental conditions noted above were common to both new entrants and established major airlines, they also contributed to changes in the environment. The majors responded to the new entrants and the threat they posed to control of the market by creating a defense in depth. They chose to wait out the newcomers, depending on professional management and a critical mass of resources, finances, planes, routes, and gates to ride out the storm. The majors' tactics included cost reduction, averaging down or cutting wages and modifying or eliminating work rules. The stronger airlines emphasized internal growth, including reliance on sophisticated computerized reservations systems that enabled them to make selective price responses to the new entrants' across-the-board price cutting. They supplemented internal growth with acquisitions that strengthened their market positions. To do this, the majors increased control of gates in the various regions of the country and of an increasing number of "hubs" ("hub-and-spoke" systems) that channeled passengers from feeder airlines into the majors' internal systems. The majors also strengthened their associations with the regional or feeder airlines that provided a supply of traffic to the "hub-and-spoke" system. These actions served to protect markets and, as time passed, became the most effective way to acquire gates, take over another airline, or merge into another one.[3] This was a long step toward a return to oligopoly.

Weaker airlines among the majors, such as Eastern and Pan Am, were driven to survival tactics that included wage cuts in exchange for variable income plans, such as stock and profit sharing and even membership on the corporate boards of directors. Bonuses instead of pay increases were instituted to prevent wage and benefits costs from pyramiding. Such actions merely delayed mergers with stronger airlines or sale to venture capitalists, such as occurred in the case of Trans-World Airlines. Some airlines resorted to Chapter 11 bankruptcy in order to cut wages as much as 50 percent, and in the case of Continental Airlines to preserve the viability of that airline. These actions contributed further to industry consolidation.

In short, private enterprise, with the aid of unlimited competition, effectively returned control and power to a limited number of firms in the industry. The likely re-emergence of regulation, however, resulted less from public awareness of this concentration than from public concern for airline safety. The public recognized that after the firing of more than 11,000 airway controllers in August 1981, the air control system had been slow to return to its pre-firing safety level. Though many travellers were pleased with below-cost fares, in general the public was slow to realize that such low fares eroded profits and led to cost cutting. Employee layoffs initially took the brunt of this action. But the public began to have concern that the new low-cost replacements were less qualified. Furthermore, evidence showed that supervision was stretched thin. The FAA levied large fines against a few airlines for infractions of maintenance regulations. Even as the fines were being levied, some airlines cut their maintenance staffs to reduce costs. The airlines themselves began to complain and sue one another, alleging that the used aircraft they had purchased had not been properly maintained.

A more important contributor to the perception of decline in airline

safety was, perhaps, the rapid entry and disappearance of numerous entrepreneurs, some with no airline experience at all and most lacking managerial skill. In fairness, however, some people argue that the lessening of airline safety, if there has been any, is the product of recession-induced cost cutting, not deregulation. Airline labor management relations consequently have been on a roller coaster--the victim of a highly erratic environment, which is only now, after eight years, returning to some degree of stability as the industry reverts to the structure that prevailed before deregulation.

U.S. Airline Industry Shocked Into Change

The airline industry was shocked in the late 1970s and early 1980s by a series of events, the most important of which was deregulation. These events profoundly altered power relationships, none more so than labor-management relationships.

The specific events were (1) the first oil shock in the early 1970s, (2) deregulation, (3) a second oil shock in the early 1980s, (4) inflation, (5)recessions, (6) government estrangement from labor, and (7) competition from new nonunion, low-cost airlines that triggered moves by established carriers to reduce their controllable costs--especially wages.

The first oil shock in 1973, brought on by the OPEC oil cartel, raised fuel prices by more than 200 percent. Legislative deregulation of the airline industry that followed in 1977 (air cargo) and 1978 (passenger) initially spawned intensive competition. Thirty-six previously established regulated carriers invaded each other's territory and established new domestic routes. Deregulation also permitted and encouraged numerous new carriers to enter the industry. In the eight-year period following deregulation, 193 new airline companies were formed. By 1986, some 100 of the new carriers had been

eliminated through bankruptcies, mergers and stopping of operations before bankruptcy. Nevertheless, by 1986, 100 airlines flew interstate routes in contrast to 36 before deregulation.

In one fell swoop, airline deregulation removed government protection of oligopolistic route and pricing practices. The new competition was accompanied by intense fare competition designed to gain or retain business. The result was a decrease in average yields[4] over particular routes that often reduced profits or caused losses, increasing pressure on management to reduce costs. Wages, no longer tied to an industry pattern, were the most readily available cost variable and became the key element of each firm's efforts to become profitable and to gain or prevent the loss of markets. Wages had thus been thrust into competition contrary to traditional union philosophy to "keep wages out of competition."

Following deregulation, fuel prices increased another 200 percent. Double-digit inflation ensued and the country descended into a three-year recession, the worst since the depression of the 1930s. The impact of deregulation became much sharper as the 1980-1983 recession deepened. Fewer and fewer passengers were available to fill more and more seats. The resulting lower passenger load factors[5] required higher yields per passenger mile to maintain carrier profitability, and pressure on wages increased. Government policies were instituted to bolster the economy through expansionary fiscal action called "supply side economics." The centerpiece was an unprecedented trillion dollar military buildup in peace time, accompanied by a restrictive monetary policy designed to reduce double-digit inflation. These dual and contradictory policies only gradually and painfully reduced double-digit unemployment, the highest since the 1930s.

During this recession, carriers laid off thousands of skilled workers and

disposed of surplus aircraft at "fire sale" prices. As unemployment persisted, personnel, often highly skilled, took jobs at a fraction of their previous salaries. Numerous "instant" airlines entered the industry at the bottom of the business cycle. The new entrants were able to acquire capital equipment and surplus aircraft at bargain basement prices and skilled labor at wages half that paid by the established airlines. As a result, both the older airlines and unionized labor were pressured to reduce their wages and loosen work rules to preserve their competitive positions and jobs. The recession made jobs more important than pay raises, which were in fact traded for jobs.

Modifications in labor-management agreements began with a slowdown in the rate of pay increases. (see Table 1 p. 9 for a detailed list of bargaining modifications) Temporary wage freezes and actual wage cuts with "snapbacks" followed.[6] Two-tier wage scales were devised to "average down" carrier pay costs. These scales provided substantially lower wages to new employees who were doing the same work as more senior employees--either for a specified period of years or during the employee's entire career with the company. Such pay schemes were a key piece of the carriers' cost reduction programs.

In exchange for union wage restraints, financially threatened companies were sometimes compelled to share their jealously guarded managerial authority with labor -- agreeing to place as many as four employee representatives on corporate boards of directors. This provided workers financial oversight and a voice in strategic decisions together with stock ownership that gave them as much as one-third interest in the company. Employees' stock ownership cut two ways: For the troubled firm, it was a variable wage that reduced costs in times of adversity; for the union and workers, it was a gamble that might pay off in restored income levels and at least temporarily maintained jobs and income flow, if at a diminished rate. Employee representatives in these firms

TABLE 1

Bargaining Outcomes in Response
to Low Wage Nonunion Competition

A. WAGE AND COMPENSATION ADJUSTMENTS
1. - Reduction in the rate of increase in wages
   - Two-tier "A" and "B" scales
2. - Deferral of increases
3. - Wage freezes
4. - Wage cuts (present and deferred)
5. - Lump sum payments to reduce pyramiding of future pay increases and benefits costs
6. - Adoption of "flexible wage plans: Employee Stock Ownership Plan (ESOP) and Employee Stock Purchase Plan
7. - Adoption of common pay scale for two or more aircraft
8. - Standby pay
9. - Profit sharing

B. BENEFIT ADJUSTMENTS
1. - Pension changes: reduced accrual, changed interest assumptions
   - "Early out" retirement incentives
2. - Vacation reduction
3. - Holiday reduction
4. - Sick leave reduction
5. - Insurance reduced coverage or amount
6. - Medical and dental reduction

C. ALLOCATION AND UTILIZATION OF THE WORK FORCE
1. Crew Size Reduction: 2-man cockpit crew; reduced flight attendant requirements

2. Cross-Utilization or Multiple Tasking

3. Relaxation of Limitations on Hours of Work
   a. Monthly, weekly, daily
   b. Duty time
      1) Daily duty time pay and credit
      2) Time away from base (TAFB): pay credits & flights credits

4. Increased Ability to use Part-Timers: Among unionized personnel, mechanics and attendants granted flexibility

5. Agreements to Reduce Number of Reserve Crews

6. Scheduling to Reduce Costs
   a. Company assignment and reassignment rules revised to minimize employee manipulation of rules. Also revision of flight credits and pay to minimize the former.
   b. Limitations on employees trading assignments which would increase wage costs or add manpower.

7. Stiffer Prerequisites for Entitlements to Training Longer "Lock In" Requirements After Training Induced by Employee Bidding for Job (better return on human capital investment).

thus became involved in corporate decision-making, not merely on the shop floor as in the case of "quality circles" or other participation schemes, but in decisions that affected participation well beyond the Chrysler formula of placing a union president on the board but not as extensive as General Motor's Saturn project of union partnership in every phase of production and planning. The scope of collective bargaining was thus enlarged.

Product and labor markets and the business cycle worked their wills. In 1985 and 1986, a healthier economy and the improved financial health of some airlines led to a marked shrinkage in the surplus of cheap, skilled workers. This statement is supported by evidence (1) that low-wage carriers experienced an undesirable quit rate; (2) that some "sweetening" of low-wage rates began to appear among new entrant airlines; (3) that in February 1985 one major airline (Pan Am) dropped its demand for a two-tier pilot scale; (4) that airlines progressively reduced their hiring qualifications to attract pilots; (5) that the initiator of the nonmerging pay scales, American Airlines, found it prudent in mid-contract term to invite its pilots' union to the bargaining table to renegotiate its earlier scale to make it competitive with current "market rates." Further evidence surfaced in November 1986 when American Airlines acquired AirCal even though it would increase its wage costs. American, now very profitable, was also negotiating wage increases for its pilots and flight attendants.

Additionally, TWA announced in December an agreement with its pilots to extend their contracts and provide a 15 percent wage increase. As firms pressed for greater concessions from their unions, the unions increased their resistance to the trend. Each side sensed an advantage -- the union in the improved economic climate and the carriers in the favorable political climate. Privately, some airline executives and their boards of directors

viewed the 1985 negotiations between United Airlines and the Airline Pilots Association as a chance to break the powerful pilot union. Efforts of management to weaken or destroy the union not only failed, but awakened a long-dormant militancy among airline workers.

Labor Versus the Consumer

Under deregulation, Civil Aeronautics Board/Department of Transportation (CAB/DOT) policy pitted labor's interest against other interests. This was reflected by the Board's refusal to protect labor from the adverse effects of mergers and acquisitions. It focused instead on the public interest (presumably consumer) by relying on the marketplace to govern the airline industry, including conditions of employment. Before the 1978 Airline Deregulation Act, the CAB had imposed Labor Protective Provisions (LPPs) as a matter of equity whenever it approved a route transfer or merger. After regulation, supply and demand and mergers took precedence over equity.[8]

Controllers' Strike Signals Government's Changed Attitude Toward Unions

A critical piece of this mosaic of events was set in place with the failed controller strike of August 1981. The subsequent firing of more than 11,000 controllers established clearly in the minds of business and union leaders a pro-management stance by government.[9] It emboldened trucking employers to resist union organizing and hire nonunion workers to replace strikers. It intimidated union workers and leaders alike. This stern action, together with 8,000,000 unemployed persons waiting in line and willing to take employment under almost any conditions even if it meant crossing picket lines, decisively shifted collective bargaining power to management. High unemployment, in effect, defanged union leaders whose members were more anxious to preserve their jobs than to strike for increases or to support the

interests of other unions or future employees. Failure of other unions to effectively support the air traffic controllers suggested that American unions may have become less a "movement" than a collection of unions seeking individual survival in a hostile political environment. This shift has been reflected in concessions (often termed "givebacks") regarding wages and working conditions made by unions, by the willingness, particularly of airline pilots, to cross picket lines, and by the massive influx of nonunion workers and employers who, in effect, became a critical mass that significantly influenced wage and work rule bargains made by unionized carriers. Using a cost/benefits rationalization the Pan American pilot union decided to urge its members to return to work after "weighing the cost" of a prolonged strike against the value of those "few potential gains" still left to be achieved (New York Times, March 7, 1985).

As the recession abated, however, and the job market began to tighten, unions displayed somewhat greater solidarity. In the 29-day United pilot strike that began in May 1985, United's flight attendant union voted to honor the pilot picket lines. Although many flight attendants failed to follow the Union's leaders, the action of the union had a significant public relations effect in bolstering a feeling of union solidarity among union groups. Only a few of United's union pilots crossed the picket lines and of its 570 nonunion "pre-hires" that the company had counted on to form a nucleus of strike breakers, only four crossed the picket lines. Even APA (Allied Pilots Association), a rival pilots' union, contributed more than $160,000 to the United pilots' cause. United's unexpected inability to operate more than 15 percent of its flights and its difficulty in finding and quickly training replacements contributed to the end of the strike.

Wages Are Thrust Into Competition

Sharp competition between new entrants and old operators for passengers and routes, high unemployment that weakened the bargaining position of both union and nonunion employed workers and a favorable political climate for management encouraged carriers to shift their cost reduction strategies away from difficult to control costs (such as OPEC-established fuel prices and inflation driven interest rates to pay for expensive equipment) to the reduction of wages and benefits. Wages thus became the prime competitive element among the airline firms.

Deregulation removed wages and conditions of employment from the security of an oligopoly that had grown up under government regulation. Airline wages were now in competition with all wages, not merely those paid to employees of the airline industry. Aided by high unemployment, wages and working conditions became unhinged from a 40-year industry pattern. Instead, wages often became idiosyncratic to the individual firm and its philosophy. Wages came to be governed mainly by economic conditions peculiar to the individual carrier and its relationships with its employees. Occupational wage rates for pilots, co-pilots and attendants diverged increasingly from carrier to carrier. This disparity was reflected in the widening inter- and intra-occupational divergence of pay as individual carriers introduced and unions reluctantly accepted two-tier pay systems and other schemes to reduce pay or make costs variable through pay reductions in exchange for profit- or stock-sharing or promises of recovery ("snap backs") in better times.

Two-Tier and Three-Tier Wage Systems

Because of the many types of multiple wage and benefit systems, and the complexities of advancement under each, a brief treatment leaves much unsaid. However, two-tier systems are hardly new.[10] Two-tier wage have been

rationalized on the basis that new employees are not fully ready but are apprentices or learners who need additinal training and experience to merit the regular scale. However valid this rationalization may be for other crafts and skills, it is flawed when applied to the craft of airline pilot. For safety reasons, airline management, government regulations, and the public demand the highest levels of skill and experience for new pilots.

Every entry level copilot in scheduled operation is qualified to take over operation of the plane in the case of incapacitation of the captain. Additionally, in normal operations, the copilot and the captain often alternate in performing each other's duties. Historically, the hiring requirements included several thousand hours of previous flight time (some of it multi-engine), the acquisition at the applicants expense of such professional qualifications as an Instrument Rating, Air Transport Rating (ATP), preferably experience in military aviation, a flight engineer written (FEW), 20/20 vision without glasses and a college education. Age preference was in the middle twenties. Under deregulation, the expansion due to new entrants, new routes, and discount fares has caused companies to sometimes loosen the age limitation, the without glasses requirement, and minimum flight hour experience. Nevertheless, current applicants have made substantial investments in time and money -- not dissimilar to that of a surgeon.[11] It can be argued that the magnitude of a disaster caused by pilot error in a crash is higher than an error by a surgeon. Hundreds of lives are at stake in the case of the pilot.

Over the long run, pay levels are a function of supply and demand. Indeed, as the skill required increases, there are fewer persons capable of performing without significant errors. Those that have the capability have made large investments in their training and education. That such costs must

be amortized to ensure continued qualified supply suggests the inapplicability of pay systems that attempt to differentiate among job characteristics and requirements that are too much alike to be differentiated by such great differences in compensation.

A two-level employee compensation plan establishes lower pay rates and/or benefits for newly hired employees while maintaining a separate and higher wage rate and/or benefits package for current employees. First, this system has been saleable to unions because current workers are not affected, and thus union leaders' jobs may not be in jeopardy at the time. Second, such plans are more readily ratified by the membership, the affected are the "unborn" who have no votes.

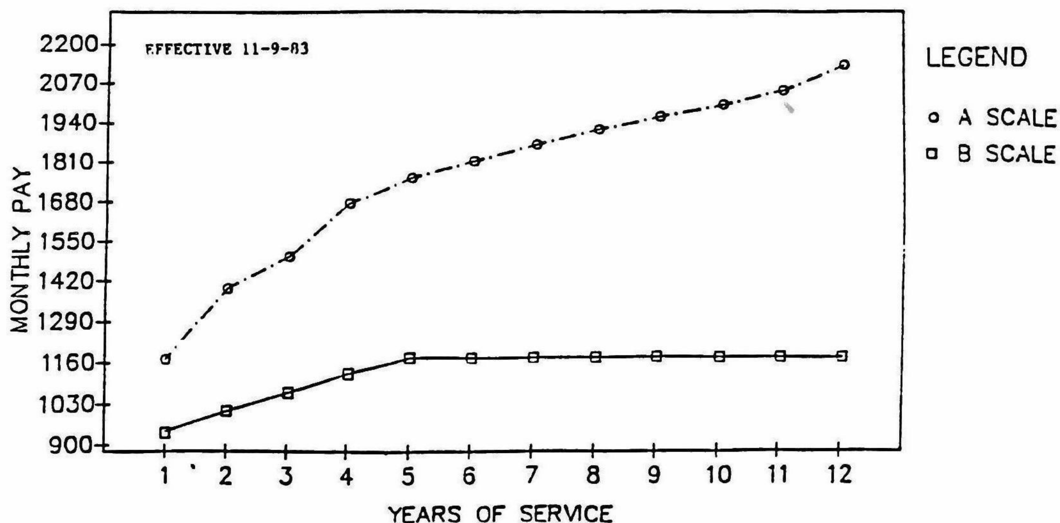
For managements of companies not in immediate need of relief, a two-tier system has special appeal. It offers a permanent "averaged-down" pay structure that aids the firm's cost position. Friction will develop between new and old employees, resulting in dissatisfaction among lower seniority employees. Some managements, however, may view this as a strategy to help unions destroy themselves. Finally, the lower pay structure seems to curry favor with lenders of money and the Wall Street investment companies.

A brief view of sample two-tier scales shows their varied nature. Some purists argue that only nonmerging scales are true two-tier scales and others are "progression scales." Chart I, based on the American Airlines flight attendant contract effective November 9, 1983, shows a nonmerging scale with dramatic reductions in pay for attendants. If the scale remains unchanged (unlikely since there will be periodic negotiations), a flight attendant in the 12th year of service would receive less than half that of his or her "A" scale counterpart.

The second diagram, Chart II, for Northwest flight attendants, shows a

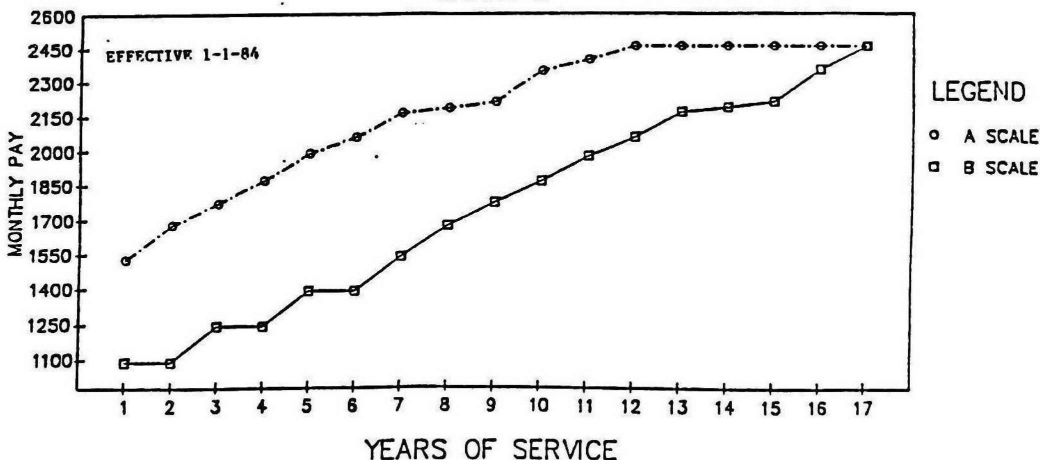
AMERICAN FLIGHT ATTENDANTS

CHART I



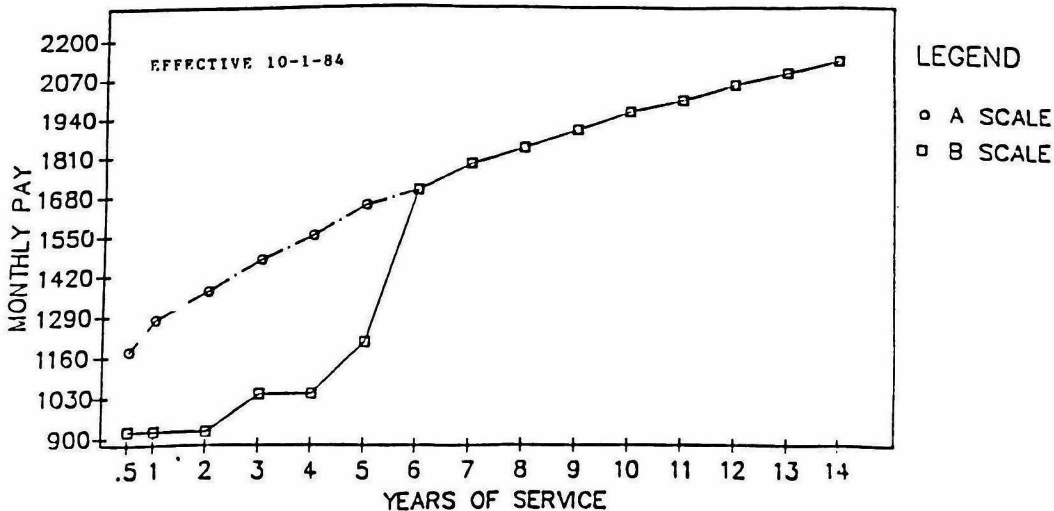
NORTHWEST FLIGHT ATTENDANTS

CHART II



UNITED FLIGHT ATTENDANTS

CHART III



two-tier scale that became effective less than two months after American's. Under Northwest's system, the "B" scale merges with the "A" at the end of 16 years -- an improvement from the attendants' point of view over the nonmerging American scale.

United Airlines' scale of October 1,1984, Chart III, reflected changes in the economy. It shows a "B" scale merging, at the end of five years, much earlier than that of Northwest. In theory, this gives a company several years to recoup from a poor earnings period.

During the height of the recession of the 1980s, (November 1983), a period of massive layoffs and intense competition from new airlines and actual bankruptcies, American and its pilots negotiated a nonmerging two-tier pay scale that can be schematically illustrated by two parallel lines. The company calculated that if the scale held until all current pilots retired, the wage savings would amount to 40 percent. By spring of 1985, however, the company had begun to experience difficulty in recruiting pilots with satisfactory qualifications and in retaining those recently hired. Concluding that it was not paying competitive "market rates," American negotiated with its pilots union in mid-contract for a $300 to $700 per month increase in the early years of the "B" scale, a four percent pay raise for all pilots, and a "B" scale for captains that would merge with a 12th year "A" scale captain after 17 years. The company also gave a "commitment to parity" (meaning that in the future it would negotiate an earlier point at which the two scales would meet).

Long Run Viability of Two-Tier Pay Systems

The preceeding section pointed out the issues surrounding two-tier systems. However, the massive restructuring of pay in favor of one class of employees against another almost immediately set in motion efforts to modify

the two-tier system. Paying two people substantially different amounts to perform the same work creates friction between the lower paid and the higher paid. In the extreme case, the nonmerging American scale could cause employees to feud in the cockpit.

As the 1984-1985 economic recovery developed, the restructured wages did not work out as well as management had anticipated. The new "B" scale wage sometimes fell below "market rates" for pilots. Consequently, some companies were compelled to lower hiring qualifications to hire sufficient pilots to maintain the companies' market positions. In later cases, as previously noted, increases in the "B" pay scale became necessary before the end of the contract term.

The "parity issue" (when does the "B" scale merge with the "A" scale) became important in the United Airlines pilot strike. The negotiated settlement included a "B" scale for newly employed pilots for the first five years. A negotiation over pay for succeeding years would follow. If necessary, arbitration would settle the point. Finally, when a co-pilot is promoted to captain, he or she is transferred to the "A" scale.

A current question yet unsettled is whether the existing "B" scales will attract a sufficient supply of pilots or if managements will have to reduce entrance qualifications to the point that new pilots will not be fully qualified to become command pilots. Furthermore, the traditional attraction, namely high pay and benefits, for military pilots to shift to civilian airlines has been considerably diminished by better military pay and such perks as employment security. The prospect of lower pilot pay scales now being negotiated by the airlines for new pilots entering their rosters further discourages military cross-overs.

Before deregulation in 1978, wages negotiated by pilot, mechanic and

flight attendant unions with the various carriers were relatively uniform for each group. With the entrance of new nonunion carriers, wage divergence increased dramatically. By 1983, pilots with the major and national airlines received an average compensation of $111,000, compared with $36,200 for pilots with new jet airlines (Air Transport Association, October 1986) The widest disparity in wages occured between Boeing-747 captains of new entrant People Express and the old-line United Airlines. People's captains, who earned no more for flying a jumbo 747 than for flying its smallest Boeing-737, at one point were paid $65,000 annually. In contrast, United's most senior Boeing-747 aircraft pilots could receive annual wages of more than $150,000. Difficulties in retaining pilots by nonunion People Express and Continental have led these firms to adjust wages upward, thus narrowing the gap between them and the established carriers.

By 1986, two-tier pay systems were in serious trouble. Airline unions placed a high priority on minimizing or eliminating the differential. Some carriers were less than enamored with their two-tier experiments. American abandoned its two-tier mechanic scale and publicly announced that it proposed eliminate them for flight attendants and pilots. No nonmerging scales were being negotiated and the two-tier systems being established usually merged after five years. A critical settlement occurred in the summer of 1986 when Delta finally negotiated with its union a two-tier pilot scale that provided higher wages than the American and United settlements and merged with an "A" scale after five years.[12]

Firm-Specific Bargaining Replaces Industry Conformance Patterns

As the preceding section has shown, old-line carriers tried to match more closely the pay of nonunion new entrants. They abandoned their coordinated wage scales and instead each firm pursued its own interests in

whatever way it thought would be most beneficial.

Continental Airlines, for example, took the most draconian measure when on September 24, 1983, it declared Chapter 11 bankruptcy, abrogated its labor contracts, and started anew three days later with nonunion new hires at pay rates 50 percent below the former scale. Other carriers, such as Republic and Pan American, initially believing that their problems were short-term, began with temporary wage cuts. Firms with more serious financial problems, such as Eastern and Western, traded large wage reductions for ownership of from 25 percent to 33 percent of the company's stock together with representation on the board of directors. One strong company (American) and its union, elected to long-term slow wage growth by negotiating wage increases and job security for existing personnel in exchange for substantially lower wages and less job security for future hires.

Other Cost-Cutting Efforts

Meanwhile, carriers' cost-cutting efforts created an upheaval in work rules. People Express and similar carriers abandoned specialization of skill in favor of generalized occupation. This system called cross-utilization requires the individual to perform several skills and tasks and to fully utilize his or her time at work.[13] It was viewed as a way to achieve autonomous job performance and presumably increased cost efficiency. Cross-utilization was supplemented by wage incentives to stimulate higher worker performance and changes in work rules that were designed to facilitate rather than impede productivity. Management was aided in this enterprise by the absence of union work rules and by the ready availability of large reserves of skilled airline personnel who had been laid off during the 1980-83 recession, as well as recent college graduates, who were willing to work for low pay and replace workers who were unwilling to accept the new conditions.

Economies were sought in other ways. Lump-sum and bonus payments became popular in the airline industry (American, Northwest, Pan Am, Piedmont, and United), in the airframe industry (Boeing, Lockheed, McDonnell Douglas), and in the automobile industry (Chrysler). Such programs were sold to airline industry leaders as productivity enhancers, though their motivational effect has yet to be empirically demonstrated. Lump sum payments along with profit and stock sharing, increase the amount of wage that is variable; increase the amount of wage that is based upon "ability to pay"; and decrease the amount of the wage that feeds into the cost of benefits--some 40 percent of the total wage--or into future pay increases. By maintaining at a stationary level over time, the amount of wages upon which benefits are based, the real wage allocated to benefits declines as the cost of living rises. Thus benefits are not likely to keep up with rising health-care costs. Such managerial focus on cutting pay and increasing productivity was brought on by product market competition and experimentation of small entrepreneurs unhampered by the bureaucracy of large organizations.

Reshaping the Character of Labor-Management Relations

Labor-management relations were conditioned by a number of developments during the transition from oligopoly to competition. First, numerous firms employing nonunion workers entered an industry that was powered by owners and executives having virtually a religious vision of the free market. Their entry led to a critical mass of nonunion workers who were paid lower wages and received less advantageous benefits and working conditions than those within the unionized sector of the industry. During the early years of deregulation, these conditions served as a management goal or lever in collective bargaining in the unionized sector. American, Eastern, TWA, Delta and United are examples of carriers who have made wage demands based on attempts to achieve

labor costs competitive with nonunion Continental, Southwest and People Express. Such conditions, together with deregulation of rates and routes, encouraged new firms to enter the industry and challenge both management and labor in the unionized sector. A more detailed compilation of the responses of unionized labor and management of the established airlines appears in Table 1 (page 9).

The 1985 United Airlines' pilot strike was itself, according to United's chairman, an outgrowth of deregulation that had unleashed nonunion low cost competition on the company and its employees. Earlier, American Airlines had obtained a concessionary two-tier pilot pay agreement. These developments seemed to stimulate an already profitable United Airlines to try to obtain dramatic wage reductions for its new hire pilots to match American's wage costs. United's chairman underlined his seriousness by stating that he was prepared to wait out the union and defeat it with his superior financial resources.

The previously docile Air Line Pilots Association (ALPA), believing its wage levels and the union itself were in jeopardy, surprised United not only by striking but by successfully persuading the company's pre-hire pilots and the flight attendants' union to honor the picket lines. This factor kept the company's strike operations at an unexpectedly low level.[14] Although United's pilots finally agreed to a two-tier scale, it was not of the American nonmerging genre once proposed by United. ALPA emerged with a new reputation for militancy; in the long run, however, it must live with the threat of internal disunity. Although United obtained substantial wage reductions for new hires, the 29-day strike cost it market share[15] and the chance to reach its planned schedule expansion goals in 1985.

A second shaping influence on airline labor-management relations (as well as labor-management generally) was a large and persisting supply of unemployed persons who were ready to replace employed persons at whatever price the employer offered. Moreover, many unionists were willing to break ranks with their unions to retain or gain employment. This, not infrequently, was the case with pilots, co-pilots, cabin attendants, and, to a lesser extent, mechanics.

Thus a critical mass of nonunion low-wage competitors, a government unfriendly to organized labor, and high unemployment combined to enable employers to make pay and labor productivity the cutting edge of their competition. The elimination of work rules and task specialization gave management latitude to compel a full day's work as well as the freedom to assign work, deploy physical resources, reduce costs, and thereby maintain or increase profit margins.[16]

Absence of unions weakened the position of the worker and increased managers' power. Managers were not held accountable through grievance procedures for actions that affected work assignments, performance standards, and other arrangements. Weaker work rules increased the interchangeability of the work force and decreased its bargaining power. Labor lost the power to withhold a specialized skill as a counter tactic to management. High unemployment and a deep recession seemed to have made this bearable to the worker. Any job was better than no job.

The growing mass of nonunion employers competing with older unionized employers dissolved pattern wage bargaining[17] of the past and conditions of particular employers. Nonunion employers with the aid of the unemployment line were free to demand conditions of employment that suited their purposes. Aided by labor market conditions, unionized major airlines felt

freer to match these nonunion wages and conditions.

Flexibility of wages and working conditions thus became a key element in the maelstrom of competition characterized by takeovers and bankruptcies. How key is illustrated by the experiences of Braniff and Continental. Braniff, suffering from untimely over-expansion, attempted to solve its problems by reducing and simplifying fares. Too late, it discovered that this tactic did not work and instituted significant wage and benefit cost reductions. Continental, in contrast, moved quickly to lower labor costs dramatically once it was unable to reach agreement with its unions. It declared Chapter 11 bankruptcy, abrogated its labor contracts, and started up anew within 72 hours. These actions of Continental and Braniff, as well as the initial success of "instant" nonunion People Express and low-cost former intrastate airlines (Southwest, Pacific Southwest, and Air Florida) focused the attention of established high-cost airlines on reducing wage and benefit costs and gave them a rationale to use in bargaining with their unions. This began a short-term shift of the pattern setting influence away from the majors to the new entrants. The industrial relations result was increased innovation in the utilization and allocation of workers and a significant growth in the number of nonunion employers and workers who would become a critical force during the "shake-out" or second stage of the transition from oligopoly to competition and return.

Divergence and Convergence of Wages and Service Options

As previously noted, the immediate consequence of deregulation was a profusion of new nonunion airlines, which caused the disintegration of the oligopoly that had existed for 40 years under the aegis of federal government regulation. This occurrence was accompanied by an initial divergence in wages and working conditions between new entrants and established airlines and in

product prices and services to consumers. But by 1986, both had begun to converge. Additionally, mergers, acquisitions, and bankruptcies began to restore industry concentration that had the power to set patterns in the same way as the pre-deregulation dominant carriers.

During the early years of deregulation, individual airlines took numerous measures to cut costs, improve productivity, and make wage levels variable through profit-sharing and variable bonus plans. These efforts occurred in a labor market in which the supply of labor exceeded demand. Such efforts were increasingly less successful, however, as the economy emerged from the recession and the excess labor supply began to dry up.

The new entrants for a time set the pace for major airlines in wage, work rules, and even innovative styles of management.[18] As noted, wage divergence occurred through outright cuts in wages by some carriers (Braniff and Continental), and through the institution of two-tier pay scales by other carriers (American and United). The outright cuts were geared to the needs of the more financially hard-pressed airlines to survive. The two-tier pay scale addressed the needs of the more financially secure airlines who merely wanted to slow the pace of wage growth in order to remain competitive in the labor market. Some carriers with long-term contracts maintained relatively high wage scales. As the industry and the country emerged from the deep recession, divergence of wages and product market prices slowed until such wages and prices began to converge.

New entrant airlines and the deep wage cutters now had to face labor market realities. They had to raise wages and improve employment conditions to retain and attract pilots and other skilled personnel. The major airlines found that they had to cut fares to compete with their stripped-down new competitors. This fare-cutting was limited, however, by the product market--

passengers--that said it was not satisfied merely with "Model T" service; it wanted something better--not merely lower fares--but not "cattle-car" treatment either. The newer carriers concluded that to survive they had to provide multiple levels of service as the major carriers had been doing all along. Thus the convergence.

Divergence of Wage and Work Rules

In the early days of airline deregulation new entrants cut costs by taking advantage of high unemployment, a surplus of labor willing to work at low wages, and the availability of excess aircraft at bargain prices. To reduce their costs per seat mile even further, they added more seats to each airplane. Finally, the new entrant managers also reduced costs by "unbundling" their services so as to charge only for the no-frills service offered.[19]

Initially, established airlines viewed the "upstart" or "instant" airlines with disdain, reasoning that they would soon fail and go away. However, new entrants such as People Express, which began operating in April 1981, grew rapidly and took market share from major and national airlines. This further increased the latter's losses, which had initially resulted from a decrease in the number of passengers during the 1980-1983 recession. By 1981, managements of established airlines began serious planning to obtain more competitive wages and work rules. Two significant events took place contemporaneously to accelerate wage concessions by unions of established carriers. In August 1981, United Airlines negotiated its "blue skies" (the idea that the concessions permitted United to fly against the low-cost competition without financial clouds blocking the "blue skies") pilot agreement that restructured pay scales, staffing requirements and work rules to obtain greater productivity in exchange for job security. Second, in the

same month, President Reagan fired more than 11,000 air traffic controllers who were striking over pay and work rules. The government's steadfast refusal to rehire strikers inspired airline managements to take a firmer stand for pay cuts and work rule changes in subsequent negotiations with their employees.

A third major trend-setting event occurred in August 1983 when Continental Airlines, unable to reach a labor agreement with its mechanics, took the then unusual step of filing for bankruptcy, abrogating its labor contracts, and resuming full-service operations three days later. Many of its labor costs were unilaterally reduced by 50 percent. Subsequent amendment to the bankruptcy laws outlining specific procedures that must be followed before a company can act as Continental did prevents a similar action from being taken in the future. About the same time Braniff declared bankruptcy. The new Braniff emerged with negotiated wages 50 percent below previous levels. Braniff's negotiated wages and the unilaterally imposed nonunion rates of Continental were comparable. A fourth major influence on labor costs was a series of agreements reached by American Airlines with its major labor unions in 1983. At that time, American obtained major wage concessions that allowed the airline to create a nonmerging two-tier pay structure. Thus by this time, the conformance of wages and work rules of pre-deregulation labor contracts disappeared, as each management and each labor union group looked only to its own short-run interests.

In efforts to secure worker acquiescence to wage and benefit cuts and loosened work rule restrictions, financially weak airlines sometimes extended representation on boards of directors to unions and job security and a variable wage in the form of stock ownership and profit sharing to workers. Some labor agreements constrained managements' options regarding future buyers of the company. By 1986, most established airlines had negotiated two-tier

scales, substantial across-the-board wage cuts, and/or variable wage schemes. As this fact suggests, the gap was closing between high-paying established airlines and the entrants. In addition, the lower wage-scales of the new entrants would soon begin to move up and narrow the gap between the two.

Convergence of Wage and Work Rules

By 1985, the trend toward lower wages had begun to slow. The labor market had changed and with it the ground rules of bargaining. Low fares instituted by new entrants and copied by the major airlines to gain market share showed that travellers were more price-elastic than had been supposed. As a result, traffic rose, requiring more workers from the surplus pool. This hiring surge was enhanced by a more robust economy that provided the public with more disposable income for air travel. Traffic increased still further. Enough surplus labor from the labor market was soaked up so that job applicants had more employment choices. Established airlines also expanded. Pilots left low-wage, new entrant airlines for higher wage employment with the established carriers (the latter's average wages, though reduced, were still far above the former's). Low-wage regional airlines became "feeders" of major airlines for both passengers and personnel.

New entrant carriers facing a pilot drain found it necessary to adjust wages upward. Even industry giants, the mega-carriers, were not immune to wage competition. In 1985, a 29-day strike by United pilots prevented the company from achieving its bargaining objective of permanent lower wages for all classes of pilots. In order to attract quality pilots for a projected major expansion of the carrier, the airline agreed to a compromise settlement that established "A" and "B" pilot scales, both of which were higher than the widely publicized American two-tier scale. American, finding that its new "market-rate" lagged behind United's and was really below the market price for

pilots, hastened to negotiate an interim agreement to match United's scales. "Market rate" in this case was mainly what the chief competitors were paying, not the pay of low-wage new-entrant airlines. Wage leadership was being contested. It was further contested in the July 1986 Delta pilot agreement, in which Delta negotiated a two-tier scale that merged in five years at rates significantly higher than United's.

Toward the end of the eight years of deregulation, newly bargained two-tier scales merged around the five-year service level, a factor that pressured companies with longer merging scales to eliminate or shorten them. American had already abandoned its two-tier scale for mechanics and proposed to abandon it for pilots and flight attendants. A forecast increase in air travel, together with large numbers of pilot retirements in the coming years and a shortage of recruits from the military, suggested that the demand for pilots would cause two-tier systems to converge earlier until they would ultimately be abandoned. In addition, long-term skill shortages would likely contribute to convergence of employment and pay practices.

Divergence and Convergence of Service Options Under Deregulation

The other side of the divergence-convergence coin is service and amenity choices. In the pre-1978 regulatory period, airlines generally charged uniform fares, used similar types of aircraft, and provided the same or similar range of passenger services (reservations, meals, baggage, interlining,[20] clubs for business travelers, hotel and car reservations, and boarding passes). Competition existed mainly in frequency of service, passenger comfort and amenities (luxurious service in meals, magazines, entertainment -- even including pianos and bars aboard). To reach the lowest cost operation, "no-frills" new entrants deleted or "unbundled" a number of services (meals, advance reservations, free baggage, boarding passes at time

of ticketing). They also reduced seat size and leg room. Tickets were sold at one or two low prices.

Established airlines began to ape some of the features of their new competitors. They reduced the quality of meals, increased the number of seats per aircraft, and began using innovative "yield management" based on elaborate computerization of the percentage of occupancy of each flight. Having determined that X percent of the capacity was daily (or even at a certain time of day) unused, a company set up fares with advance purchase and other limitations that matched or beat the low-cost carriers. By obtaining higher fares on much of its capacity, the company could afford to sell the remaining seats at low marginal cost. This fare policy coupled with the normally "bundled" services proved attractive to a public that would rather travel on a well-known large carrier with extra services than on a low-price carrier with no services.

Beaten at their own low-fare game, the "no frills" carriers began to fight back by adding back, at a small fare increase, the very amenities previously avoided. Examples of this convergence were New York Air, Muse, and People Express. For example, when People Express purchased Frontier Airlines, it first attempted to remake Frontier in the People Express no-frills image; however, the experiment was a failure and People shortly abandoned the effort. Later, during serious financial trouble in 1986, People Express sought to change its own image by instituting first-class service, reservations, and the entire panoply of amenities. However, the airline found it was too late to reverse its rapidly deteriorating financial condition and was forced to seek out a buyer--Texas Air Corp. Before the year was out, People Express was merged into Texas Air Corp.

Although some analysts had forcast an airline system consisting of a few

mega-carriers and a much larger number of low-cost, price-oriented airlines, the failure of the largest and for a time the most successful exponent of no-frills service suggests that "no-frill" airlines had not made it in the market place. Even new entrants now shy away from the no-frills concept. A recent new entrant, Presidential Airways, formed by former People Express executives, began with a full range of services. It failed to be profitable. In any event, the convergence of services between those of the established carriers and the new entrants is well advanced.

Convergence is also taking place in the regional/commuter area. See Appendix A for background on regional airlines. In efforts to feed traffic to themselves as well as to obtain gates and slots at airports, established carriers have been making increasingly tight arrangements with regional and commuter airlines. Under these agreements, the "host" airline provides a wide range of services, including special code-sharing computerized reservations, logos, and management assistance to integrate, supervise, or arrange schedules, train personnel, and improve standards of service. The affiliate all but loses its identity and freedom of choice. By proxy, the size of the host carrier is, in fact, increased, posing potentially serious labor and economic problems for both parties.

On the one hand, the host may find its costs increased as it spends money to supervise its affiliate. The host's employees may fear that some of their jobs will be taken by the employees of the lower wage affiliate or that their wages will be negatively affected by the lower level of the affiliate's wages. On the other hand, the affiliate's employees see every reason why their wages and work rules should match those of the host whose colors they fly. Additionally, if the affiliate is merged into the host, stressful problems of merging seniority lists and job classifications are likely to

occur. Finally, the owners and managers of the affiliates may see their costs rise and their profits fall as they strive to meet the demands of the "host" carrier without whose efforts the affiliate could not survive. In sum, not only had initial movement toward wage divergence been halted and reversed, the same could be said of price and service options.

Competition, Shake-out, and the Return to Oligopoly

Although the airline industry has experienced increased competition and a shake out during the early deregulation years, it has again coalesced into a few major carriers whose size, intensive use of "hub-and-spoke" route systems, dominance in the use of gates, slots, and market devices (such as code-sharing computerized reservation systems (CRS) and frequent flyer programs) may raise insurmountable entry barriers for some aspiring new airlines.

By November 1986, the emerging top five mega-airlines flew 72.8 percent of industry's revenue passenger miles compared with 54.7 percent in January before the wave of takeovers engulfed the industry. For the year 1970, before deregulation became an issue, the top five airlines flew 68.5 percent of the revenue passenger miles. Table 2 shows comparisons between 1970 and the first nine months of 1986.

In general, under deregulation, the dominant carriers are essentially the same core carriers of the pre-deregulation oligopoly, albeit with some restructuring and name changes. Airline deregulation and lack of enforcement of the antitrust laws, has permitted the industry to re-form into a privately controlled oligopoly. This private oligopoly has replaced the 40-year government-regulated oligopoly that deregulation was designed to eliminate.

That the overall market share of the largest carriers has remained relatively constant both before and during deregulation suggests merely the stability of the oligopoly and that observers have been diverted by the

TABLE 2

TOP TEN AIRLINES MARKET SHARE COMPARISON

1970			1986*		
Airline	RPM Billions	Percent	Airline	RPM Billions	Percent
1. United	23.8	18.1	Texas Air Carriers	54.6	19.5
2. Trans World	18.6	14.1	United	44.2	15.9
3. American	16.6	12.6	American (AA/OC)	38.3	13.8
4. Pan American	16.4	12.5	Delta (DL/WA)	32.2	11.6
5. Eastern	14.7	11.2	Northwest (NW/RC)	28.0	10.1
6. Delta	9.7	7.4	Trans World(TW/OZ)	23.0	8.3
7. Western	5.1	3.9	Pan American	16.4	5.9
8. Northwest	4.5	3.4	USAir (AL/PS)	11.6	4.2
9. Continental	4.4	3.3	Piedmont	7.6	2.7
10. Braniff	4.3	3.2	Southwest (WR/MC)	5.4	1.9
Subtotal	**118.1**	**89.7**	**Subtotal**	**261.3**	**93.9**
Total System	**131.7**		**Total System**	**278.3**	

* First nine months. Includes all scheduled traffic.

Source: Douglas Aircarft/I.P. Sharp.

shuffling of actors on the stage -- numerous "bit players" entering and leaving -- while the basic airlines pursued carefully designed policies to preserve their pre-deregulation dominance.[21]

Ironically, regulation was first applied to the U.S. airline industry in the 1920s to address the problems of widespread bankruptcies, anti-competitive practices, fare wars, and safety concerns that appeared related to cost cutting. Regulation was initiated to solve these problems, but over time it also appeared to produce distortions in service as well as higher costs.

The current contest between the new entrants and majors is almost over as the majors return to dominance. The short-lived fierce competition of the initial deregulation period has led back to conditions that brought on regulation in the first place (Cappelli, 1986).

In the early stages of deregulation, new entrants challenged established

carriers by using the tools of low fares, no frills, low wages, inexpensive aircraft, and low management overhead to increase profits. In the ensuing period, fierce competition drove wages down and marginal operators out of business, leaving traffic to the surviving established carriers and to a few successful new entrants.

The major airlines used their superior managerial and marketing skills to establish fares and route networks. These moves allowed the majors to compete successfully with the fledgling airlines and contributed to eventual reconcentration of the industry. The major factors contributing to this reconcentration included:

(1) Hub-and-spoke development by major and national airlines
(2) Marketing alliances between large and regional/commuter airlines
(3) Control of traffic by such mechanisms as CRS (Computerized reservations System) and code-sharing
(4) Innovative marketing plans such as bonus miles for frequent flyers
(5) Control of airport access -- gates, slots, ticket counters, hangars
(6) Mergers and acquisitions
(7) Bankruptcies

See Appendix B for a more detailed description of these elements.

Although the majors initially made significant cuts in fares and service-quality, these moves were not sufficient. Mega-carriers then developed methods of yield management that permitted them to segment the market so that less price-elastic travellers (businessmen and others forced to travel on short notice) were assured last-minute reservations at regular fares. The carriers marketed the remaining seats to price-elastic passengers who paid marginal cost fares that were hedged with various conditions (including advance purchase, day of week, and length of stay). The low fares plus the wide range of services offered resulted in passenger preferences for the "mega-carriers."

The movement toward corporate concentration was capped by at least 20

mergers and acquisitions that further reduced the number of competing carriers. Table 3, Merger/Acquisition Activity 1980-1986, catalogues the more important mergers and shows the increasing growth of concentration in 1985 and 1986. If the mergers shown in Table 3 are implemented, concluded, a total of more than $5 billion will have been spent in pursuing consolidation.

The decisive tool in reconcentrating the airline industry was, however, the "hub-and-spoke" system, which discouraged and restricted market entry and became a driving factor in the merger trend. A merger was often the most efficient way to enter a market dominated by a competitor's hub. This enabled carriers to obtain market share by gaining access to gates and slots which often were controlled by a dominant carrier at a hub. New entrant executives such as David Hinson, Chairman of Midway Airlines, and Edward Beauvais, Chairman of rapidly growing America West, complain that most of the infrastructure (airport gates, slots, ticket counters and other airport facilities) have already been consumed by the "big boys."

By the end of 1986, those who thought that deregulation would result in increased competition by many new entrants as well as a wide range of service options seem to have been in error. As Table 4 indicates, of the 36 scheduled carriers operating at the start of deregulation in 1978, 19 have either declared bankruptcy, merged, or become subjects of acquisitions. The four former intrastate carriers have been reduced to one. All ten former supplementals, an entire segment of the industry, have disappeared. Of the 38 former commuters, two-thirds are gone. Finally, only one of the six all-cargo lines remains. The merger of Texas Air into a combination of Continental, New York Air, Eastern, People, and Frontier displaced industry goliath United Airlines from first place as the largest airline in the free world. It also gave the newly merged carrier more hubs from which to integrate its traffic.

TABLE 3

Merger/Acquisition Activity 1980-1986

	Companies	PRICE (millions)	MERGER NUMBER
1980	Pan Am-National	$373.7	1
1980	Republic-Airwest	38.5	2
1981	Texas Air-Continental (50 percent)	80.8	3
1985	Southwest-Muse	61.8	4
1985	Carl Icahn-TWA	405.0	5
1985	People Express-Frontier	309.0	6
1985	United-Pan Am Pacific Routes	750.0	7
1985	Piedmont-Empire	40.0	8
1985	Texas Air-Continental (19 percent)	81.1	9
1986	Northwest-Republic	884.0	10
1986	Texas Air-Eastern	607.5	11
1986	TWA-Ozark	224.0	12
1986	People Express-Britt	36.0	13
1986	People Express-PBA	?	14
1986	Delta-Western	860.0	15
1986	Alaska-Jet America	19.8	16
1986	Texas Air-People/Frontier Sept 16*	298.0	17
1986	American-AirCal (NOV)	225.0	18
1986	Alaska-Horizon	68.0	19
1986	USAir-PSA	400.0	20
	TOTAL	**$5,726.2**	

*Note: Texas air later reduced its offering for People Express from $138.4 million to $113.7 million, a decrease of about $25 million. A proposed $146 million merger of Frontier and United Airlines was aborted because of lack of agreement on Frontier pilot pay after absorption into United.

Source: USA TODAY, Feb. 28, 1986, updated by <u>Wall Street Journal</u> and <u>New York Times</u> periodic merger announcements.

TABLE 4

Airline Attrition Under Deregulation October 1978 -- December 31, 1986

(1)	(2)	(3)	(4)	(5)
Category	Total	Merged Liquidated Decertified or Not Operating Under Certificate	Currently Operating Under Certification	Percent Currently Operating
Certified prior to Deregualtion	36	19	17	47%
Former Intrastate	4	3	1	25%
Former Supplemental Charter	10	10	0	0%
Former Commuters	59	38	21	36%
New Entrants	119	84	35	29%
Former All Cargo	6	5	1	17%
TOTAL	234	159	75	32%

Source: Airline Economics, Inc.

Delta's acquisition of Western moved Delta from sixth to third in size behind American. In addition to acquiring west coast and Hawaiian routes, Delta added a western hub, Salt Lake City, to its major hub at Atlanta.

Acquisition of Republic (itself a combination of Southern, North Central, and Hughes Air West) by Northwest Airlines represented additional industry concentration as did TWA's acquisition of Ozark. Finally, such once-familiar names as Air Florida, Air New England, National, Ozark, Western, Frontier, and People Express have disappeared or will. Even Eastern may be absorbed soon. Former round-the-world airline, Pan American, in an unsuccessful move to reverse years of losses, sold its Pacific routes to United -- a move that added to the latter's already massive power. Pan American's contraction was but one step toward gradual disappearance. By the end of the third quarter of 1986, only three major large well-managed airlines (American, USAir and Piedmont) had not joined the expansion by acquisition or merger craze.

However, in November 1986, American Airlines, in what it termed a "tactical modification" of its "growth from within" policy, acquired AirCal (ACI) to fill a "hole" in American's west coast operations in order to achieve greater access to west coast and Pacific markets. Just a few weeks later, in December, USAir (AL) altered its non-acquisition policy by acquiring Pacific Southwest Airlines (PSA). So, by the end of 1986, of the large carriers, only Piedmont had not been involved in significant merger activity.

It appears that the very act of merging to achieve market advantage provides the fuel for more mergers. Furthermore, the merger engine is fueled by the need to prevent gain or loss of initial mass. The contest, thus shifts from fare competition to domination of market competition.

The definition of domination of markets, however, sharply changed in the 1980s from that of pure deregulation in that "critical mass" now has new

meaning. Former domestic airlines are becoming increasingly involved in international operations which have not been deregulated. Thus airlines now seek a larger mass through obtaining gates and hubs to channel both domestic and international passengers around the globe on a merged or aggregated integrated airline. The new involvement is causing concern among foreign carriers who see the former domestic carriers using the domestic feed to fuel their international operations and their international operations to feed their domestic operations. Thus foreign carriers with few U.S. gateways and no cabotage feel the competition is unfair.

The implications of this massive restructuring are far reaching. First, each oligopolist is likely to recognize the advantage of not disturbing a stable price environment with fare cuts and other competitive practices. Such tactics would merely provoke fellow oligopolists to retaliate to the advantage of none. Second, because airlines aim to maximize return on investment, the tendency will be toward higher fares. In the fall of 1986 fare increases began to be announced in local markets where competition had been reduced. These were followed by across-the-board increases on discount fares at the time when fall and winter traffic historically slowed down. Third, assuming a future shortage of skilled personnel, the increased profits from limited competition should make managements less resistant to labor's attempts to retrieve some of the wages and benefits it lost during the eight-year shake-out. Price making in the labor market can again be expected to follow price making in the product market.

Epilogue

At the beginning of commercial aviation in the 1920s, entrepreneurs were free to start airlines and fly wherever and whenever they wished. However, the cost of providing service soon began to exceed revenues. The Post Office

Department then helped the airlines by paying a subsidy to carry the mail.

Not only was there free entry into the airline industry, but corporations either in or out of the airline or aircraft or engine manufacturing industries could have interlocking directors, merge into or buy airlines without restraint. An aircraft manufacturer that owned an airline could gain competitive advantage by tying up deliveries of its latest technology aircraft for its own airline. In fact, the largest aircraft manufacturer, Boeing Air Transport, owned the largest airline, United, and was accused of doing just that. As large non-airline companies gained power in the airline industry through acquisition via holding companies, a fear arose that giants like General Motors might lead to an oligopoly. Charges were made that when new entrants came in with low fares and low wages, the big contract carriers used their mail subsidies to undercut the new entrants and drive them out of business. After this, fares would go back up.

In 1934 a so-called "spoils conference" was held, at which, it was later alleged, profitable airline routes were divided up among favored carriers while other, airlines had not been invited to attend. Partially as a result of this action and the following allegations, the Air Mail Act of 1934 was enacted to establishe route franchises and mail ratemaking under the Interstate Commerce Commission (ICC). The Act, ceteris paribus, separated airframe and engine manufacturing from any airline affiliation and gave the ICC other limited economic powers. In addition, airline executives were prohibited from being paid more than $17,500 annually.

The Air Mail Act was interim legislation while a full public utility act was being drafted. The resulting long-term statute, the Civil Aeronautics Act of 1938, along with its subsequent amendments and the later Federal Aviation Act, established a five-member board that granted route applications on the

standard of "public convenience and necessity." The Board had the power to grant or disapprove mergers or acquisitions and to fix passenger fares and air mail rates. It had other economic controls, including the power to permit or prohibit an increase in labor's wages being included in allowable costs. It could and did provide labor protective conditions in the case of mergers.

From time to time, the Board disapproved some mergers and acquisitons on anti-competitive grounds; overall, the Board approved very few mergers. This limited competition and, coupled with the refusal of the Board to permit new entrants into the industry during the 40-year period of regulation, provoked complaints from entrepreneurs who wanted to enter the industry and critics who argued that the industry had developed into an oligopoly that charged consumers higher prices than were necessary and offered them few price/service options. As proof, free-market academics and other proponents of deregulation cited profits being made by smaller unregulated intra-state operators in Texas and California that charged significantly lower fares and paid lower wages (Southwest Airlines, Air California and PSA).

The established airlines, fearing the loss of valuable route franchises, initially unanimously opposed deregulation. However, United, the largest airline, had been repeatedly thwarted in its efforts to obtain new routes from the Civil Aeronautics Board and saw the benefit that free entry could provide. One by one the airlines fell in line behind United until all at least publicly espoused deregulation. They saw free entry as a way to secure routes they had always wanted. They also saw merit in being able to price their product as they saw fit.

Competition under the deregulation act of 1978 brought about dramatic restructuring both in the management of airlines and in labor management relations. New airline firms rushed in, established new routes, trod on the

turf of the major carriers, and with the aid of a deep recession recruited experienced airline personnel and purchased aircraft that had been jettisoned by the major at bargain prices. This enabled the new entrants to cut fares below those of the majors and make successful entry into the industry.

To keep wage costs and fares competitive, the established carriers fought back by cutting wages. The ensuing "racheting" down of wages represented a transfer of wealth from employees to the passengers taking advantage of the lower fares. This transfer was accompanied by a disruption of labor relations in the form of strikes. However, the federal government's negative attitude toward labor and labor's failure to unite as a movement tilted the balance of power against labor. A portion of labor employed by profitable carriers protected their interests by agreeing to two-tier wage scales in which new employees were forced to accept wages as low as 50 percent below those formerly in effect.

Only after economic recovery was well under way in the mid-1980s did industry expansion change a labor surplus into a tight labor market and permit labor to begin to modify or eliminate the two-tier system. This tighter market also forced new entrants to increase wages to retain their personnel.

The expected permanent increase in number of carriers as a result of deregulation has not materialized. Of the 34 instant airlines, 23 have failed, and all six supplemental charter services have disappeared. Of 541 non-hub airports, 150 have lost all service. More than half of the airlines in business in 1978 and two-thirds of the new carriers have failed.

The merger movement that swept the United States in the 1980s also dominated the developments in the airline industry. As few as five mega-carriers control more than 70 percent of the passenger business. They have become "host" carriers to some 66 regional commuter airlines or "feeders,"

further concentrating the industry. This concentration has been abetted by a laissez-faire government policy that has turned over some control of access and entry to airports as well as to the industry itself. Slots, gates, ticket counters, maintenance facilities as well as "feeders," together with the cost of matching the enormous capital resources of integrated, merged majors is fast making "free entry" more a shibboleth than a reality.

Deregulation has resulted in reduced fares but at the cost of labor's compensation. In effect wealth has been transferred from workers to consumers. Service to some segments of the passenger market has improved, but some less heavily traveled routes have suffered. Price competition forced wage and maintenance economies that together with deterioration of the flight controller system has resulted in a public perception of safety problems. That this is the likely case is suggested by recent (1986) efforts to restaff the air controller system and to reestablish strong maintenance systems of individual carriers after they have been fined by the FAA for safety violations.

Instability of labor-management relations has characterized the eight years of deregulation. In 1987, the signs point toward reestablishment of stability as de facto re-regulation in the form of a revived oligopoly begins to appear.

Chief among those signals is a slow but perceptible convergence of pay rates by occupation among the largest carriers--with the low pay carriers edging upward in their scales and the decline of pay levels of high pay carriers virtually stabilized, "racheting" down has virtually ceased.

Two-tier pay systems are less and less frequently being negotiated; and the pay gap between the lower and upper tiers is gradually being narrowed as the demand for pilots increases, driving the second or lower tier toward the

upper tier. Efforts to drive down attendant and mechanic pay levels have slowed despite the large supply of staff available in the labor market. The incentive ot drive down wages further having presumably weakened.

It can be said that as this is being written, the airline oligopoly has regained sufficient strength--this time a product of the market rather than of government regulation--to pass on pay increases to the consumer without harming demand, a cost that assures a flow of high quality staff and attendant improved quality of service.

A dramatic reversal is in the process: labor demand is becoming less price elastic than during the key day of unrestricted laissez-faire; passenger fares are increasing as are pay and expenditures for maintenance and safety; and, above all, some airlines are even considering restoring quality of service as a competitive element.

Employment stability though heavily dependent upon the state of the economy--both domestic and foreign--is returning; there is less macho talk in the ranks of airline management as the new entrance, laissez-faire ideologists are replaced non-ideological bureaucratic oligopolists and as the supportive machisimo political environment in the larger society rapidly wanes. Thus one can expect greater stability in labor-management relations; even in some cases a return to accommodations of unions rather than outright hostility toward them as has been the case during the Reagan era. Some internal instability of human relationships is undoubtedly to be expected as the merged firms attempt to achieve accommodation among their various workforces, each of which bring with them a variety of often conflicting customs and practices. Imagine the problems merging of the work forces of Continental, Eastern, People Express, Frontier, and New York Air. The financial problems may be nothing compared to merging the work forces. In this regard much of labor's future rests on Frank

Lorenzo's success or failure in driving Eastern Airlines' union wages down to the level of his nonunion Continental. Should he be successful, airline labor in major unionized airlines will be faced with further pressure to reduce wages and benefits. If he is unsuccessful in integrating his carriers into a coordinate mass, the industry and its workers may find a degree of stabilization in profits and employment.

APPENDIX A

REGIONAL AIRLINES NOTE

Although the text dealt with regional/commuter airlines in the context of affiliates and code-sharing, constraints of space and the small percentage of industry passenger miles (one percent) these carriers operate, prohibited fuller treatment. Historically, these carriers have flown small planes in short-haul (50 to 200 miles) feeder service. More recently the regional/commuter carriers have become tools in the hub-and-spoke system of major and national carriers.

To be classified as a major, a carrier must have annual revenues of at least $1 billion. The bracket for a national carrier is $75 million to $1 billion. These are known as Section 401 carriers. Regional airlines include those with annual revenues less than $75 million per carrier. The regional/commuter category was licensed under part 298 of CAB regulations.

Commuter airlines were exempt from many restrictive features of section 401 but were limited to planes weighing less than 12,500 pounds and seating no more than 19 passengers. By 1986 the seating limit had been raised to 60 passengers, and the weight to 18,000 pounds. In recent years, the average seating size of regional aircraft has increased and further increases are expected as the government eases the regulations to permit more economical operations and encourage domestic aircraft manufacturers to build commuter aircraft. When such aircraft arrive, they will blur the distinction between commuter planes and the next tier of aircraft. Undoubtedly, labor problems will result as the pilot unions of the host seek to prevent their employers from substituting commuter aircraft and personnel on routes previously flown by them. Regionals as affiliates are under pressure from their hosts to upgrade their service. Also crews of the affiliate will seek the elimination of the substantial differential in pay.

Subsidy payments formerly paid to regionals have been decreasing to almost zero. The government predicts their complete elimination.

At the time of deregulation in 1978, there were 228 regional/commuter airlines. The number peaked at 246 in 1981. By 1986, however, failures, mergers and acquisitions reduced the number to between 160 and 170. As indicated in the text, many of the regionals are rapidly losing their independence to their larger hosts who dictate the terms by which their affiliates oeprate. With their planes repainted in their hosts colors, their identity blunted by code-sharing and the host's frequent flyer program and his CRS system, the visibility of the regional/commuter as an entity is fading. The possibility that a new company can make a successful entry is complicated not only by financing problems but by major and national carriers' ability to obtain scarce airport facilities as well as desirable landing and takeoff slots.

APPENDIX B

FACTORS THAT CONTRIBUTE TO RECONCENTRATION OF INDUSTRY

1. Hub-and-spoke development by large major and national airlines. Since deregulation, national and major airlines have adopted the hub-and-spoke systems pioneered so successfully by Delta Airlines. These systems feed traffic to their longer haul routes thus retaining the pasenger on the company's systems and leaving less of a role for smaller carriers.

2. Proliferation of marketing alliances between large carriers and regional carriers. Another quick and inexpensive way to enlarge control over the market, not dissimilar to a wholly owned hub-and-spoke system, has been to arrange an alliance with a regional ("satellite" or "feeder") carrier under which the regional form may repaint its equipment with the host logo, use the host's baggage and ticketing facilities as well as its airline code designator (code-sharing). The smaller carrier also agrees to integrate its schedules with that of the host and subscribe to certain standards. Small carriers fear that they will lose their independence and even identity. By the end of 1986 about 66 such tie-ins were in existence.

   Although these alliances have increased traffic for the major companies, and thus job opportunities, they are causing concern among labor unions of the major firms who fear that as these appendages (usually lower wage and nonunion) grow, they will acquire larger aircraft similar to that flown by the host carrier. They worry that the host companies will turn expansion over to low pay, low cost "feeders." Union "scope" clauses often state that all flying of the host will be done under the union contract. However, if alliances become so tight that planes and services of the satellite are indistinguishable from those of the major company, the unions fear that satellites or feeders will determine the level of wages and working conditions for entire systems.

3. Control of traffic through such mechanisms as CRS (Computerized Reservation System) and travel bonus via such plans as Frequent Flyer Mileage Plus, and the like.

   Major airlines, particularly American and United, sensing the marketing advantage of making their trip information easily accessible to travel agents and displayed to their advantage, spend hundreds of millions of dollars to develop their CRSs. The two alone account for over 70 percent of all reservations. The uses of these CRSs are alleged to contribute to

a concentration of power in the industry and to the development of a new oligopoly.[1]

Eleven competitor airlines objected to the Department of Justice that the host companies used these systems anti-competitively to enhance their market share to the disadvantage of the complainants. The primary complaints were that the schedules and fares were displayed to favor the host airlines, and that discrimination occurred when different carriers were charged dissimilar amounts for using the system. Although the defendants argued that under a free market system they had a right to develop a more efficient marketing tool (CRS) and should not be penalized for their superior planning, under government pressure they acceded to a plan to modify their computer screen displays to avoid bias and also to charge each carrier the same amount for use. This solution did not satisfy the complainants who then alleged that the owners of the CRS systems employed monopolistic high prices for the use of CRS and consequently reaped excessive profits. The complainants (now 12 with the addition of Continental's suit) are pressing for divestiture of each CRS from its host airline.

4. Marketing innovations that may contribute to the concentration of power in the industry are the development of incentive programs (Frequent Flyer and Mileage Plus) under which trips on the host airline entitle the participant to upgrading or additional transportation.[2] Large carriers with destination favored for vacations and leisure activities attract not only repeat, but new, largely corporate customers to their lines. Smaller carriers seek to make a tie-in to join such plans as a means of survival.

5. Control of slots and gates and other airport access facilities. Large carriers are the critical mass controlling a major portion of the landing and takeoff slots, gates, ticket counter facilities, and hangars. Because these are increasingly in short supply, and because the slots are allocated under antitrust immunity by "schedule committees" composed primarily of old line carriers, this situation may be perceived as the means to prevent entry of new carriers. To the extent that this becomes

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1 For a comprehensive treatment of the CRS controversy and its antitrust implications see: Competitive Market Investigation, CAB Docket 36, 596 (Dec. 16, 1982). Also Beane, "The Antitrust Implications of Airline Deregulation," Journal of Air Law and Commerce, Vol 45, p.1001 (1980) and Saunders, Derek "The Antitrust Implications of Computer Reservations Systems (CRS's)," Journal of Air Law and Commerce, Vol 51, p. 157 (1985).

2 No effort is made in this paper to assess the income and tax effects to the individual or his company, or the possible discriminatory bias in the travel programs. It is likely that the IRS will seek to tax some of this travel to the individual thus lessening the advantage.

a fact, it contributes to the growth of an oligopolistic industry. A recent FAA rule to permit airlines to buy and sell slots[3] is an attempt to address this problem. But there is legislation pending in Congress to invalidate the rule.

6. Mergers and acquisitions. Clearly, absent substitution by viable new airline replacements, a spate of mergers and acquisitions occurred (Pan American-National, Republic-North Central-Southern-Hughes Airwest, Air Wisconsin-Mississippi Valley, and Piedmont-Empire). United's purchase of Pan Am's pacific routes and Texas Air Corp's merging of Continental, Eastern, New York Air, People Express and Frontier point to a further shrinking number of players for the major share of industry traffic.

7. Increasing bankruptcies among regional carriers leading to a reduction in access to capital markets and hence to a reduction in number of carriers. A leading financial analyst recently pointed out that 19 of 32 airline bankruptcies in 1984 were regional carriers.[4] He noted also that increased size of replacement aircraft involved per seat unit costs about the same as for major carriers. Since regionals have low daily utilization of aircraft in comparison with majors, they will be unable to operate such aircraft profitably at fares affordable to the public.

   Though managments were slow to react, the debacle of Braniff, the bankruptcy and rebirth of Continental, and the early success of People Express spurred old line firms to reduce labor costs. The building of new low-cost airlines within an airline, together with the preceding six factors does much to explain the growing concentration in the indsutry.

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3 For a detailed analysis of the "buy/sell" situation, see Hardaway, R. M., "The FAA "Buy-Sell" Slot Rule," Journal of Air Law and Commerce, Vol 52, No. 1, pp. 1-75 (1986).

4 Robert J. Joedicke, "Equity Research -- From Deregulation to 1990," Shearson Lehman Brothers, October 10, 1985.

REFERENCES

The Airline Quarterly, Fall 1986.

Aviation Daily, October 16, 1986, p. 82.

AVMARK NEWSLETTER, October 1986 pp. 5-6.

AVMARK NEWSLETTER, October 1986. p. 9.

Beane, "The Antitrust Implications of Airline Deregulation," Journal of Air Law and Commerce, Vol 45, p. 1001, 1980.

Cappelli, Peter, "Settling Inexorably Into an Oligopoly," New York Times, Sept. 7, 1986.

Competitive Market Investigation, CAB Docket 36, 596 (December 16, 1982).

Hardaway, R. M., "The FAA 'Buy-Sell' Slot Rule," Journal of Air Law and Commerce, Vol 52, No. 1, pp. 1-75, 1986.

Joedicke, Robert J., "Equity Research -- From Deregulation to 1990," Shearson Lehman Brothers, October 10, 1985.

Salpukas, Agis, New York Times, 10-1-86.

Saunders, Derek, "The antitrust Implications of Computer Reservations Systems (CRS's)," Journal of Air Law and Commerce, Vol 51, p. 157, 1985.

Spencer, Frank A. and Frank Cassell, Airline Labor Relations Under Deregulation: From Oligopoly to Competition -- and Return? Evanston, Ill.: Transportation Center, 1985.

Weintraub, Bernard, "The Reagan Legacy," The New York Times Magazine, June 22, 1986, p. 16.

END NOTES

1 Two former local service lines, USAir and Piedmont, by successful expansion have become major lines (revenues exceeding $1 billion). Although they are currently very successful, some analysts suggest that they too are vulnerable to increased competition and to a takeover by one of the mega-carriers.

2 It is not clear that mergers and acquisitions (bigness achieved through consolidating assets) result in lower costs (or impart efficiency). For example, in his Industry Letter of March 17, 1986, airline analyst Edmund Greenslet of Merrill, Lynch, Pierce, Fenner and Smith, states that "...no one had ever found that mergers and acquisitins reduced unit costs. Somewhere along the line a strong carrier is liable to merge itself into weakness." As an example, the merger of National Airlines with Pan American only weakened Pan American. The combined company was unable to use its assets efficiently.

3 Abatement of fare wars have been attributed generally to mergers and business failures and specifically to the impact on "hubs" where traffic was strong but capacity was lacking.

4 Yield is the fare over a route divided by the route miles covered. Its importance is that the lower the fare, the higher the nmber of passengers needed to "break even." For example, a carrier that can obtain 40 cents a passenger/mile (Air Wisconsin) can be profitable with only 40 percent of its seats filled. Carriers with promotional fares of five cents per mile often fly at a loss even with 100 percent of their seats filled. The average yield for some large carriers in 1985 was 11 cents.

5 Revenue passenger load factor in percent is found by dividing the number of revenue passenger miles by the total available seat miles. Available seat miles are the number of available seats in the aircraft over the route times the route miles flown. In 1985 and 1986, industry passenger load factors have ranged from 55 to more than 65 percent. This, of course, masks the fact that flights at times when most passengers want to travel have much higher load factors.

6 In a "snapback," the wage or work rule concession automatically terminates when some particular event takes place or does not take place.

7 Under the law, the CAB was abolished and many of its functions were placed under the Department of Transportation.

8 After deregulation, CAB policy called for LPPs only when necessary to avoid a labor strife that could disrupt the entire nation's air transport system. In a recent District of Columbia Court of Appeals case involving Transamerica's takeover of Central American International, the Court agreed with the CAB that a strike by the employees of a single carrier would not threaten the country's air transport system because other carriers, nonunion and union, would provide alternate services. The focus was on consumers. In

sustaining the CAB marketplace policy, the Court trenchantly remarked that although the Act cited the need to encourage fair wages and equitable working conditions, it did not require the CAB to give this factor more weight than others such as the availability of efficient low-cost services, reliance on marketplace forces, and the encouragement of new entrants. The CAB maintained that employees interests could be adequately protected by the collective bargaining process so that no labor protective provisions were needed. (122LRRM Air Line Pilots vs. DOT, Court of Appeals, District of Columbia, 85-1178, May 16, 1986.)

The Board exhibited naivete in relying on collective bargaining and the marketplace. Deregulation spawned numerous new entry nonunion airlines whose workers had no bargaining power to compel equitable treatment in a merger or acquisition. In addition, although competition theory holds that a wage equilibrium would be reached (perhaps as low as a subsistence level), this requires an unlimited number of buyers and sellers as well as mobility in the labor market and perfect knowledge of the market by both buyers and sellers. (One major airline succeeded in lowering wages for flight attendants in international operations to $784 monthly. Rents at some bases such as New York equal or exceed this pay). When there are but a few airlines, with power concentrated in the hands of industry giants, and many unorganized job applicants, the necessary ingredients for ensuring fair treatment of employees in mergers and acquisitions are hardly present.

The court's logic is supportable if genuine competition exists and if workers have viable labor organizations to protect them. But by 1986 a growing spate of acquisitions, mergers, and marketing devices, described in the section on concentration and mergers, had reversed the increased competition originally envisioned by deregulation toward a private cartel-like operation dominated by few very large agglomerated mega-carriers.

9 Murray L. Weidenbaum, Chairman of the President's Council of Economic Advisers in 1981-82, said that the break-up of the air traffic controller's union was the "single most important event in American labor relations in more than a decade. Mr. Reagan's ability to crush the strike undoubtedly will make future Presidents far less inhibited about similar moves" (Weintraub, 1986).

10 The history of two-tier wage scales suggests that they are far from new and may not be successful over the long run, at least in a pure nonmerging form. The 40th Annual Report of the National Mediation Board reports that Edward Gibbon in his History of the Decline and Fall of the Roman Empire found that in A.D. 271 the Roman Emperor Macrinus established a two-tier system for new recruits for his army. The recruits were dissatisfied because they felt cheated. Also, the experienced soldiers became apprehensive that they would be displaced by cheaper soldiers or that their wages would be cut. One year later there was a revolt. Macrinus was deposed and slain on the spot. So much for history.

11 One agency surveying qualifications of new hires for major airlines, Future Airline Pilots of Americ (FAPA), stated in its December 1986 Piloting Careers, that the training expenditures are from $25,000 to $50,000. This would seem to be conservative because pilots must pay about $50 per hour for flight time, and courses such as for instrument, flight engineer and air transport pilot ratings cost many thousands of dollars each. Four years of

college at a first class institution now can cost $60,000. Four years at a "flight" university may cost as much but is not considered the academic equal of top rank universities.

12 When United Airlines proposed to buy Frontier Airlines in August 1986, it also proposed to maintain the Frontier pay scale. This would have been in reality a "C" scale or third tier below United's "A" and "B" scales. This action would have opened the way for United to propose in negotiations with its pilots a three-tier pay scale that would further "average down" United pay scales. The merger fell through when United pilots refused to agree to this third tier for Frontier pilots.

13 How radical this change was can be appreciated in light of the fact that the industrial engineering movement of Frederick W. Taylor and others, assiduously promoted and followed by American management since the turn of this century, espoused specialization of skill as its intellectual centerpiece. See Louis F. Davis, "The Design of Jobs" in Industrial Relations, Berkeley, October 1966, p. 42, and Jack Barbash, "The Tensions of Work," Dissent, Winter, 1972, p. 247. With the demise of People, in August of 1986 -- sale to Texas Air in progress -- analysts pointed out that the President, Don Burr, had created a management religion not a rational system of management. It simply could not handle baggage or on time schedules.

14 Because new hires and union members who crossed the picket lines were provided more than sufficient staff to operate the company's limited schedules, the attendants' action appeared to have greater public relations value than economic force. Their support of the strike, however, strengthened the pilots' resolve as well as airline unions image in the labor movement.

15 United saw arch-rival American Airlines rise to first place in revenue passenger miles carried. The company did not fully recover for more than a year following the strike settlement.

16 Fare wars have eaten away most of this advantage, as well as the advantage of markedly lower fuel costs. The operating results of schedule airlines showed an $800 million loss in the recession year 1982, a rebound to an operating profit of $2.2 billion in 1984, a reduction to a profit of $1.4 billion in 1985, a record loss of $459 million in the first half of 1986 followed by a strong rebound that may result in a $1.4 billion operating profit for the year. The year 1986 also saw TWA, Pan American and Eastern in serious financial difficulty. They asked employees and their unions for further deep concessions. When Eastern could not obtain them, it was forced to merge with Texas Air Corp., for example. Even after obtaining labor concessions, TWA's Carl Icahn said he was looking for a merger situation.

17 Pattern bargaining is a result of followership or imitative bargaining, given coherence by common industry price structures and union rules.

18 The People Express style of cross-utilization with each employee carrying the title of "manager" and being required to purchase stock in the company is a striking example.

19 "Bundling" refers to conventional airline services such as meals, free baggage carriage, advance reservations, hotel and car reservations, and choice of class. In "unbundling," these services were either deleted or made the subject of separate charges.

20 Interline agreements between carriers enable a passenger to buy a ticket from one airline to use over its routes and connect with other airlines. The fare is then pro-rated to the carriers involved via interline agreements. Baggage is interlined so that a passenger does not have to retrieve his baggage when changing planes.

21 If there are no economies of scale as sometimes asserted by proponents of deregulation, how does one explain the strong and persistent urge of airline carriers to merge or expand? One answer seems to lie with the particular advantage of hub-and-spoke systems that channel passenger traffic from feeders and other dependent airlines through the hubs of the major airlines. This factor, together with control of access to gates and landing slots and computerized reservation systems, encourages the aggregation of hubs as a means to reserve more business for the carrier or to make entry into the industry so costly as to significantly inhibit it. Economy of scale is thus redefined as the ability to control entry and competition rather than size.