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THE IMPACT OF DEREGULATION ON AIRPORTS:

AN INTERNATIONAL PERSPECTIVE

David A. NewMyer, Ph.D.

ABSTRACT

The fourth key phase of the evolution of deregulation--globalization--is now underway. The U.S. experience with domestic airline deregulation offers some lessons for international airport managers about to experience deregulation in their nations (or in nearby nations). Airport managers in the international marketplace must be prepared for a new global airline situation which will change airport/airline relationships.

INTRODUCTION

With the passage of the tenth anniversary of the Airline Deregulation Act of 1978 (92 Stat. 1705) behind us, there have been numerous analyses of the results or impacts of deregulation. Among the results or inputs are those which have affected the operation and management of airports in the U.S.

One of the analyses concluded:

The U.S. deregulation experience has become a model for the rest of the world and we may, over the next decade, witness the gradual spread of airline deregulation throughout a large part of the free world. (Federal Aviation Administration [FAA], 1987)

Whether or not one agrees that the U.S. experience is a model for the rest of the world, there are ample examples of deregulation, privatization, and even globalization of the world's airline systems. As these and other similar events occur, there will continue to be impacts on the management and operation of airports in the international arena, as there have been in the U.S. Therefore, the purposes of this article are (a) to define deregulation, (b) to summarize the key results of deregulation in the U.S., (c) to review the impacts of deregulation on airports in the U.S., and (d) to conclude with some observations concerning impacts of deregulation on the international airports arena.

DEREGULATION DEFINED

Deregulation refers to the Airline Deregulation Act of 1978 (92 Stat. 1705). This law amended the historic Federal Aviation Act of 1958 in the area of economic regulation of airlines by the federal government. The deregulation legislation was the result of several years of industry and congressional debate over the role that the Civil Aeronautics Board (CAB) played in the economic regulation of the airline industry. Essentially, the CAB's role was to "protect the industry from itself" through government intervention. This protection included various CAB actions which limited competition among airlines, including pricing controls, route controls, and limits on the formation of new, large airline companies. By the mid-1970s, these restrictions seemed inappropriate to many (not all) industry observers, consumer advocates, and politicians. The resulting Airline Deregulation Act of 1978 was signed into law by President Jimmy Carter with an effective date of October 24, 1978. It included the following provisions:

1. Eventual elimination of the Civil Aeronautics Board.
2. Decontrol of domestic airline air fares and routes.
3. A 180-day limit on the response of the CAB to almost any issue (including requests for the economic certification of new airlines).
4. An "essential air service" program to provide federally subsidized air service to rural areas.
5. Labor Protection Provisions for the purpose of providing job protection for employees displaced by deregulations.
6. Changes in the final approval process for airline mergers (Wolfe & NewMyer, 1985).

These and other provisions combined to free U.S. airlines from most of the economic regulations which had controlled airline markets for decades. This new freedom, while tempered initially by a slow domestic economy in the early 1980s, resulted in many positive outcomes for domestic U.S. airlines and their consumers. However, it is important to note that domestic U.S. economic deregulation was just that--it did not apply directly to the international arena.

THE RESULTS OF DEREGULATION

There have been many analyses of the results of deregulation. The vast majority of them point to the dramatic growth of the airline industry since 1978 as one of the primary outcomes of deregulation. Table 1 points out one of the measures of deregulation's success, the growth of enplaned passengers from 1978 to 1988. Total enplaned (or departing) passengers grew 65.8%, or 180,435,000 passengers, from 1978 to 1988. Table 2 indicates 45.9% growth in total airline employment during the same period.

Table 1

Total Enplanements--U.S. Domestic Airlines 1978-1988

Year	Enplanements	% Change
1978	274,179,000	---
1979	316,863,000	+15.3
1980	296,903,000	-6.3
1981	285,976,000	-3.7
1982	294,102,000	+2.8
1983	317,905,000	+8.1
1984	344,683,000	+8.4
1985	382,022,000	+10.8
1986	418,946,000	+9.6
1987	447,307,000	+6.8
1988	454,614,000	+1.5
Cumulative Growth		
1978-1988	+180,435,000	+65.8

Note. From Air Transport Association.

Table 2**Total Employment--U.S. Domestic Airlines 1978-1988**

Year	Number	% Annual Increase
1978	329,303	---
1979	340,696	+3.4
1980	360,517	+5.8
1981	349,864	-2.9
1982	330,495	-5.5
1983	328,648	-0.5
1984	345,079	+4.9
1985	355,113	+2.9
1986	421,686	+18.7
1987	457,349	+8.5
1988	480,553	+5.1
Cumulative Growth		
1978-1988	151,250	+45.9

Note. From Air Transport Association.

In the ten year period of 1978-1988, the airline industry has gone through distinct phases, according to the FAA:

1. Expansion (from 30 large air carriers in 1978 to 105 in 1985).
2. Consolidation (11 mergers and 16 buy-outs of smaller regionals/commuters in 1986-1988) to 61 active carriers at the end of 1988.
3. Concentration (four largest carriers accounted for 60.4% of traffic in 1988--up from 52.5% in 1978).
4. A fourth, and conceivably the final, phase of the deregulation process (globalization) may have begun in December 1987 when United Airlines announced a marketing merger with British Airways,

whereby the two carriers would begin code-sharing operations in the Seattle-Chicago-London and Denver-Chicago-London markets (FAA, 1989).

Since 1987, many other international airline marketing and ownership combinations have been either proposed or consummated. These include marketing agreements between Texas Air/SAS, British Airways/United, Singapore Air/Delta and ownership ties between American West/Ansett-Australia, Hawaiian/Japan Air, Northwest/KLM (proposed), United/British Airways (proposed), etc. (FAA, 1989). This active international phase of deregulation has significant implications for the airports involved in serving these airlines, both in the U.S. and in other nations.

IMPACTS OF DEREGULATION ON U.S. AIRPORTS

The impacts of deregulation on U.S. airports essentially mirror the general impacts of deregulation. That is, during each of the phases of deregulation mentioned earlier, there have been impacts on U.S. airports.

Impacts on Airports During the Expansion Phase (1978-1985)

In this phase, there were significant additions of new airlines into the domestic U.S. markets. Table 3 lists the new entrant airlines started in the U.S. since deregulation.

Table 3**Impact of Deregulation on Airlines and Airports****New Entrant Airlines (Passengers Only)**

Airline	Year Begun	Still in Operation
Midway Airlines	1979	Yes
New York Air	1980	No
People Express	1981	No
Muse Air	1981	No
Jet America	1981	No
Pacific Express	1982	No
Northeastern Int'l.	1982	No
Hawaii Express	1982	No
Best Airlines	1982	No
Sunworld Int'l.	1983	No
Air One	1983	No
America West	1983	Yes
Regent Air	1983	No
Frontier Horizon	1984	No
Air Atlanta	1984	No
Florida Express	1984	No
Midwest Express	1985	Yes

Note. From "From Buses to Yachts: The Problems and Prospects of New Entrant Airlines" by D. A. NewMyer, 1984, *Proceedings of the University Aviation Association*, p. 85.

These new airlines in turn needed gate space, counter space, and ramp space to operate at key airport terminals throughout the United States (NewMyer, 1984). In addition, already existing airlines were feeling the benefits of route freedom under deregulation and were attempting to add as many new routes as possible to their systems. The result of this "one-two"

punch was extreme pressure to expand key airport terminals in the early years of deregulation. While a boon to many airports' long-term expansion plans, deregulation was a short-term disaster in terms of terminal congestion problems.

Another key airport impact of this early phase resulted from the move by most major and national airlines (former trunk and local service airlines) to individually adopt a hub and spoke strategy. This strategy was adopted as both a competitive, marketplace response to competition and an economic response to deregulation. That is, hubs and spokes allowed the airlines to feed themselves rather than the competition. The idea of the hub airport is for an airline to bring banks of flights into a single hub airport three or four times a day, interchange passengers during a limited layover period, and then depart these flights back out along the spokes. A list of key airline hubs is provided in Table 4. It is important to note that there are both advantages and disadvantages of being an airline hub airport. Among the advantages are good levels of air service, high levels of airline-related employment, excellent economic impacts on the local area, etc. Among the disadvantages are the potential for higher noise levels around the airport due to greater airline service frequencies, the pressure of dealing with one or two dominant airline tenants (at the expense of new entrants which may wish to obtain gate space at the hub airport), and exacerbated peaks and valleys in runway and terminal use because of the hub bank scheduling of the airlines. What happens to an airport's traffic when a hub is started at an airport is illustrated in Table 5.

Table 4**List of Major Hubs for Major U.S. Domestic Airlines**

Airline	Hub	Airline	Hub
Alaska Air	Seattle	Midway Airlines	Chicago Philadelphia
American	Chicago O'Hare Dallas-Ft. Worth Los Angeles Miami Nashville Raleigh-Durham San Jose San Juan	Northwest	Detroit Memphis Milwaukee Minneapolis/St. Paul Tokyo-Narita (Int'l Hub)
America West	Las Vegas Phoenix	Pan American	Berlin (European Hub) Miami New York-JFK (Int'l Hub)
Braniff (bankrupt 11/89)	Kansas City Orlando	Trans World	New York-JFK (Int'l Hub) St. Louis
Continental (part of Texas Air)	Denver Houston Newark	United	Chicago-O'Hare Denver San Francisco Washington, DC- Dulles Tokyo-Narita (Int'l Hub)
Delta	Atlanta Dallas-Ft. Worth Cincinnati Salt Lake City Orlando	US Air/Piedmont/ PSA	Baltimore Charlotte Dayton Philadelphia Pittsburgh San Francisco Syracuse
Eastern (part of Texas Air)	Atlanta Miami (Int'l Hub)		

Note. From "U.S. Carrier Market Share at Leading U.S. Airports the Year 1987," 1988, *Aviation Daily*.

Table 5**Nashville (TN) Metropolitan Airport****Enplaned/Deplaned Passengers--Total Operations Figures**

1985	Monthly %	Aggregate %	1986	Monthly %	Aggregate %
200,709	14.1	14.1	217,902	8.6	8.6
181,548	3.2	8.6	214,622	18.2	13.2
241,208	10.2	9.2	266,512	10.5	12.1
233,899	12.9	10.2	338,884	44.9	21.1
263,586	16.6	11.6	416,235	57.9	29.7
261,690	13.8	12.0	415,980	59.0	35.3
265,335	21.8	13.5	426,517	60.7	39.4
273,288	20.6	14.5	462,021	69.1	43.6
230,273	11.3	14.1	402,340	74.7	46.9
257,778	9.6	13.6	478,663	85.7	51.1
230,372	9.8	13.3	439,904	91.0	54.5
<u>249,666</u>	25.8	14.3	<u>464,864</u>	86.2	57.3
<u>2,889,352</u>		14.3	<u>4,544,444</u>		57.3
AIRCRAFT OPERATIONS			1985	1986	
Air Carrier			58,725	91,754	
Commuter			31,540	47,480	
General Aviation			117,300	106,313	
Military			<u>7,208</u>	<u>6,822</u>	
TOTAL			214,773	252,369	

Note. From Nashville Metropolitan Airport Authority, 1987.

Table 5 reflects the 1985 and 1986 enplaned/deplaned passenger and total aircraft operation figures for Nashville Metropolitan Airport, Tennessee, in 1985 and 1986. American Airlines decided to begin hub operation there in April 1986. While passenger enplanements and deplanements were already

growing at Nashville, the monthly growth figures jumped tremendously after the start of the hub operation in April 1986. And, even with a partial year of operation, passenger figures increased 57.3% in 1986 over 1985 and airline aircraft operations increased 56% in the same period.

Another impact of this expansion period, and the resulting use of hub and spoke strategies by the larger airlines, was the increasing need to focus regional and commuter airline service on feeding these hubs. By the mid 1980s, 29 of the 30 top regional airlines had some sort of marketing or ownership agreement with an airline operating a hub and spoke operation. This tended to focus air service to and from small community airports on those regional airlines with such agreements. If an airport was not served by an airline with such an agreement, the airport might lose airline service. While the Essential Air Service program was created under the Airline Deregulation Act of 1978 to avoid such small community air service losses (Brenner, Leet & Schott, 1985), the program did not always work. As a result, some airports lost air service. Others lost large airplane service because the Essential Air Service program was designed to subsidize small aircraft, rather than large aircraft, service. Therefore, an important impact of deregulation in rural, small community airports was changes in the nature of, or outright loss of, air service. And, even if service was not lost, the destabilizing influence of frequent airline name changes, aircraft size changes, and/or service interruptions had negative impacts.

Impacts on Airports During the Consolidation and Concentration Phases (1986-1988)

These two phases are combined because of their sequential relationship. That is, airline concentration in the marketplace (including at airports) is a direct result of the consolidation, or merger, of airlines. Also, these phases occurred in a very short time with quick results. Table 6 reports the larger airline mergers of 1986-1988.

Table 6**Expansion/Consolidation of Prederegulation Passenger Airlines**

Carrier Grouping and Name	Date and Carrier Involved in Merger/Acquisition		Date Carrier Ceased Operations	
<u>Trunks</u>				
1. American (AA)	11/86	Announced intent to purchase AirCal	5/82	Chapter 11
	1989	Acquires all but one American Eagle Commuter Carriers		Ceased operations
2. Braniff (BN)	5/88	Purchases Florida Express	5/82	Chapter 11
			3/84	Ceased operations
			11/89	Resumes service
				Ceased operations
3. Continental (CO)	10/82	Acquired by Texas Air Corp		
	11/82	Acquires Texas International		
	4/86	Acquires Rocky Mountain Airways		
	9/86	Acquires Eastern		
	9/86	Acquires People Express/Frontier		
4. Delta (DL)	5/86	Acquires Atlantic Southeast		
	5/86	Acquires ComAir		
	12/86	Acquires Western		
5. Eastern (EA)	9/86	Acquired by Continental		
6. National (NA)	1/80	Acquired by Pan American	1/80	Ceased operations
7. Northwest (NW)	10/84	Acquires Mesaba Airlines		
	9/86	Acquires Republic		
8. Pan American (PA)	1/80	Acquires National		
	2/86	Sells Pacific Routes to United		
	4/86	Acquires Ransome Airlines		
(table continues)				

Carrier Grouping and Name	Date and Carrier Involved in Merger/Acquisition	Date Carrier Ceased Operations
9. Trans World (TW)	9/86 Acquires Ozark	
10. United (UA)	1/86 Acquires Pan Am's Pacific routes	
11. Western (WA)	12/86 Acquired by Delta	
<u>Local Service</u>		
12. Allegheny (AL)	10/79 Name changed to US Air 10/85 Acquires Pennsylvania Airlines 4/86 Acquires Suburban Airlines 12/86 Announced intent to purchase Pacific Southwest Airlines 9/89 Merger with Piedmont Airlines is final	
13. Frontier (FL)	10/85 Acquired by People Express	9/86 Ceased operations
14. Hughes Airwest (RW)	10/80 Acquired by Republic	10/80 Ceased operations
15. North Central (NC)	7/79 Merged with Southern to form Republic	7/79 Ceased operations
16. Ozark (OZ)	9/86 Acquired by Trans World	10/86 Ceased operations
17. Piedmont (PI)	10/83 Acquires Henson Airlines 10/85 Acquires Empire Airlines 7/86 Acquires Jetstream Int'l. 9/89 Acquired by USAir	
18. Southern (SO)	7/79 Merged with North Central to form Republic	7/79 Ceased operations
19. Texas Int'l. (TI)	11/82 Acquired by Continental	11/82 Ceased operations
(table continues)		

Carrier Grouping and Name	Date and Carrier Involved in Merger/Acquisition	Date Carrier Ceased Operations
<u>Regional</u>		
20. Air Midwest (ZV)	6/85 Acquires Scheduled Skyways	1/85 Began operating as Part 135 commuter
21. Air New England (NE)		10/81 Chapter 11 Ceased operations
<u>Alaskan</u>		
22. Alaska (AS)	9/86 Agrees to purchase Jet America 10/86 Acquires Horizon Air	
23. Kodiak (KO)		12/82 Began operating as Part 135 commuter
24. Munz (XY)		8/84 Began operating as Part 135 commuter
25. Reeve (RV)		
26. Wien Air (WC)		11/84 Ceased operations 9/85 Resumed service 10/85 Chapter 11 Ceased operations

Note. From "FAA Aviation Forecasts Fiscal Years 1987-1998," 1987, FAA, pp. 28-29, Washington, DC: FAA.

As can be seen, every major airline was affected by the airline merger movement of the mid-1980s. In addition to these large airline mergers, many smaller regional airlines were either merging among themselves or being bought by larger airline companies in the same period. The result has been a reduction in the number of operating airline companies in the U.S. Consequently, airports now have fewer airline companies to deal with. Therefore, some airports' terminal-use agreement bargaining position is quite difficult because only one or two airlines are interested in long-term gate agreements at each individual airport. Also, the passenger business of some hub cities has become concentrated around only one or two airlines. Table 7

summarizes some of the percentage concentrations of business at selected airports which were affected by mergers.

Table 7

Percentage Concentrations of Airline Service at Selected Hub Airports

Hub Airport	Merger	1987 % Concentration
Charlotte	US Air-Piedmont	90.3
Detroit	Northwest-Republic	61.9
Memphis	Northwest-Republic	84.9
Minneapolis-St. Paul	Northwest-Republic	80.2
St. Louis	TWA-Ozark	83.1
Baltimore/Washington	US Air-Piedmont	60.7

Note. From "U.S. Corner Market Share at Leading U.S. Airports the Year 1987," 1988, *Aviation Daily*.

As airlines concentrate their services after merger, service adjustments among the merged carriers will occur, sometimes benefitting airports and sometimes not. In September 1988, Eastern Airlines decided to stop its Kansas City hub operation due to a decision by parent company Texas Air Corporation to focus more attention on its Denver hubs, and reduce the size of Eastern overall. Another hub operator, Braniff Airlines, began operating at Kansas City in Fall 1988, after a brief hiatus. However, in November 1989, Braniff declared bankruptcy and stopped all operations, leaving Kansas City without a major hub operator for the second time in a little over a year. With three large passenger terminal buildings in operation, the result is financially disruptive to the airport operation at Kansas City.

On the positive side, consolidation and concentration has allowed American Airlines to add a new hub at San Jose, California, after its merger with Air California. Air California had a major presence at San Jose before the merger, and American simply matched its marketing and aircraft fleet

presence to Air California's and created a larger mix of longer and shorter range flights, including some to Mexico. This consolidation obviously helped the San Diego airport.

Impacts on Airports during the International Phase (1986 to Date)

The international phase of deregulation includes the expanded international operations of U.S. domestic airlines. Much of this international interest has grown out of two interrelated reasons: (a) the development of strong, single airline domestic U.S. hub and spoke operations since deregulation, and (b) the development of twin-engine wide body aircraft such as the Airbus A-300 and the Boeing 767 which can more economically connect these hubs to long-range international destinations. The result has been the addition of international airline service by traditionally domestic U.S. airlines:

1. American-DFW to Tokyo and the Far East; DFW to Europe; San Juan to South America and the Caribbean.
2. Delta-Atlanta to Europe and Tokyo (via Portland).
3. Piedmont (now U.S. Air)-Charlotte to London.
4. Continental-Pacific routes (via Hawaii).

All of the cities which have new international services have had to adapt to the special facility and service needs of international airlines (customs, immigration, etc.). In addition, a traditionally domestic airline, United, has purchased the Pacific routes of Pan American, thus entering the international marketplace with a bang. Finally, there are three traditionally international airlines in the U.S., all of which are attempting to maintain and improve their international services. They are Northwest, Pan American, and Trans World. Trans World has shifted some of its international service focus to St. Louis, especially since developing a stronger domestic hub there since deregulation (Trans World Airlines, 1986).

Another, less direct, impact on airports is resulting from marketing and/or ownership arrangements between U.S. domestic and international airlines. Selected combinations of airlines are summarized in Table 8.

Table 8

U.S. Domestic/International Airline Ownership and Marketing Combinations

A. Ownership

American West/Ansett-Australia
Continental/Scandinavian Airline System
Hawaiian/Japan Airlines

B. Marketing Agreements

Delta/Singapore
TWA/Air India
United/British Airways

Note. From "Global Airlines, Inc.," 1987, *Airline Business*, p. 5; "FAA Aviation Forecasts Fiscal Years 1989-2000," 1989, FAA, p. 62, Washington, DC: FAA.

The results of such agreements are greater volumes of international passengers on the domestic U.S. airline route systems, and domestic U.S. airports must respond with improved services for such passengers. The deregulation of the U.S. airline industry has therefore had the following impacts on airport/airline relationships in the U.S.:

1. Airport requirements of airlines change with traffic demand, airline strategy, economic conditions, and competition.
2. Before U.S. deregulation, change was a slow process because the CAB took such a long time to approve route changes. Now, the airlines can change domestic route structures as fast as they want, but airports must be more flexible.
3. Airports and airlines formalize their relationship through airport use agreements--with terms as much as 25 years long in older agreements. Now, with deregulation and its rapid changes, both carriers and airports want shorter agreements to better adapt to change.

IMPACTS OF DEREGULATION ON INTERNATIONAL AIRPORTS

OUTSIDE THE U.S.

Before analyzing the impacts of deregulation on international airports outside the U.S., there should be a clarification of terms. First of all, U.S. domestic airline economic deregulation of airports has been loosely followed in such nations as Canada and Australia. Yet other forms of liberalization have affected, or will affect individual nations in Europe, Asia, and Africa. However, immense barriers to economic deregulation exist in many parts of the world due to the national ownership of most nations' airlines and the small size of the airline market in many nations. An International Air Transport Association (IATA) report on International Aviation Deregulation found the following. First of all, deregulation as a concept in the U.S. cannot necessarily apply to international situations. The IATA report identified six barriers to international deregulation:

1. Sovereign state control is a basic principle of international aviation (150 sovereign states/countries regulate international aviation).
2. International regulation of aviation is by bilateral treaty.
3. Airlines are chosen instruments of public policy rather than as just a means of transport.
4. Concern is growing that free competition may not be feasible in all world markets.
5. The international system as a whole lacks many of the features the U.S. system had before deregulation (there is no one, oppressive regulatory body--there are 150!).
6. U.S. deregulation efficiencies are difficult to replicate on an international basis.

Therefore, IATA concluded:

1. Deregulation is entrenched in the U.S., but re-regulation is being discussed.
2. U.S.-style deregulation has some problems as already noted.

3. There are other possibilities of liberalization of economic regulation besides U.S.-style deregulation that might affect international aviation (IATA, 1983).

The result is that there will be three kinds of deregulation or liberalization for airport managers to watch for in all parts of the world:

1. The deregulation of U.S. airlines and the resulting impacts due to increased U.S. domestic airlines in overseas markets. The impacts of these expansions have already been felt in European, Pacific, Asian, and South American/Caribbean airports.
2. The deregulation or liberalization of airline economics of individual nations or regions--Canada in 1988, Australia in 1990, and Europe in 1992 (Ott, 1988; Whitaker, 1989)--and their impacts on airports in or near those nations. As in the case of U.S. experience, airports in deregulated nations may have a competitive advantage due to hubs and spokes, mergers, etc., while airports in nearby nations or areas suffer because of a lack of a hub operator.
3. International Multi-lateral Deregulation. Considered the least likely by the International Air Transport Association due to national airline ownership and other issues, this avenue may never open. However, the liberalization of air service agreements on a bi-lateral basis may open up new airline service possibilities for airports not now served on an international basis without actually deregulating anything. The bilateral treaty signed between the United States and Japan in November 1989 may be an example of this possibility.

Regardless of the form that international deregulation (or liberalization) takes, the following lessons can be applied to airline and airport managers in other nations from the U.S. experience with deregulation:

1. Deregulation demands greater flexibility on the part of airlines in terms of:
 - a. Response to the marketplace/consumer needs.
 - b. Pricing.
 - c. Relationships with aircraft manufacturers, banks, and airports.

2. Deregulation also demands greater flexibility on the part of international airport managers in terms of:
 - a. All agreements with airline tenants.
 - b. Finance of development projects.
 - c. Use of terminal space.
 3. International airport managers should be prepared to deal with rapid growth or decline in terminal gate requirements. Such preparation may include:
 - a. Mobile lounges as a method of quickly adding gate space.
 - b. Gate sharing as a way to obtain airport access without building new gates.
 - c. Increased airport control of gates to avoid single airline dominance of gates.
 - d. Expansion/addition of gates as a longer term approach to increased terminal space needs.
-

CONCLUSIONS

Pressures are already being felt in the international airport system outside the U.S. due to economic deregulation in the U.S., combined with international airline passenger growth. Airports at London, England; Tokyo, Japan; and Sydney, Australia (among others), already have significant capacity limitations with little current ability to handle more traffic from additional U.S. carriers wishing to use these airports. If the airlines of competing nations wish to respond to U.S. deregulation or to deregulation or liberalization in their own nations, these pressures may rise to impossible levels.

The added specter of globalization of the world's airlines adds fuel to the fire. Globalization is currently taking the path of shared operations, marketing agreements, or even partial ownerships of other nations' carriers. Eventually, large multi-national airlines may evolve. All of these evolutions mean that airport managers at international airports in all nations must be prepared for a new, competitive atmosphere in international aviation. Airports themselves can be no less competitive than the airlines serving them.

Furthermore, they must be prepared for a new global airline picture which will dramatically change the airport-airline relationships as we know them today.

Dr. David A. NewMyer, Associate Professor and Coordinator of Aviation Management and Airway Science in the Division of Advanced Technical Studies at Southern Illinois University, earned the Ph.D. in Education Administration in 1987. He has held several positions directing transportation studies in the Chicago area.

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