

GAO

Testimony

Before the Subcommittee on Aviation, Committee on
Commerce, Science, and Transportation, U.S. Senate

For Release
on Delivery
Expected at
2:15 p.m. EDT
Thursday
June 4, 1998

AVIATION COMPETITION

Proposed Domestic Airline
Alliances Raise Serious
Issues

Statement by John H. Anderson, Jr.,
Director, Transportation Issues,
Resources, Community, and Economic
Development Division



Mr. Chairman and Members of the Subcommittee:

We appreciate the opportunity to testify about the U.S. domestic airline industry in light of the alliances proposed by the nation's six largest airlines. Our prior work has shown that the deregulation of the airline industry in 1978 has generally been successful, resulting in lower fares and better service for most air travelers, largely because it increased competition, with both the entry of new airlines into the industry and the movement of established airlines into new markets. Now, the six airlines that carry about 70 percent of domestic passengers have announced plans to form three alliances. These airline pairs are Northwest Airlines and Continental Airlines, Delta Air Lines and United Airlines, and American Airlines and US Airways. The airlines say that these alliances will produce such consumer benefits as expanded route networks and combined frequent flier programs. Critics, however, say that this consolidation will undermine the benefits of deregulation by decreasing competition, which will ultimately reduce passengers' choices and increase fares.

Because of their concerns over the potential anticompetitive impacts of these proposed alliances, the departments of Justice (DOJ) and Transportation (DOT) are reviewing them, and you and other Members of Congress have announced your intention to review them as well. To evaluate these alliances, decisionmakers will have to determine whether the potential benefits to consumers from these alliances will exceed the potential harm.

At your request, we have just begun to evaluate the potential impact of these alliances, and today we can offer some preliminary results of our work. In my testimony, I will describe the competitive implications of the proposed alliances, including (1) their potential benefits to consumers, (2) their potential harm to consumers, and (3) the issues that policymakers need to consider in evaluating the net effects of the proposed alliances. We will continue to study the competitive implications of these alliances for the full Committee and this Subcommittee and report on the results of our review in more detail later this year.

In summary:

- The primary potential benefits of the proposed alliances for consumers, according to airline officials, are the additional destinations and frequencies that occur when alliance partners join route networks by code-sharing. With code-sharing, an airline can market its alliance

partner's flights as its own and, without adding any planes, increase the number of destinations and the frequency of the flights it can offer. For example, under the proposed alliance between United Airlines and Delta Air Lines, passengers would be able to fly under one airline's code from Sioux Falls, South Dakota, to Bangor, Maine, even though Delta does not fly from Sioux Falls and United does not fly to Bangor. Airline officials also predict that increased frequencies and connection opportunities will spur additional demand, allowing for even more frequent flights and additional destinations. All the proposed alliances plan to allow consumers the opportunity to acquire and use frequent flier miles on both partners, which airline officials say will increase their benefit to consumers.

- The primary source of potential harm to consumers from the proposed alliances is the possibility that they will reduce competition on hundreds of domestic routes if the alliance partners do not compete with each other or compete less vigorously than they did when they were unaffiliated. We analyzed 1997 data on the 5,000 busiest domestic airport-pair origin and destination markets—markets for air travel between two airports—to determine how these markets could be affected by the proposed alliances. If all three alliances occur, we found that the number of independent airlines could decline on 1,836 of the 5,000 most frequently traveled domestic airline routes (which account for over 90 percent of the total U.S. domestic traffic) and potentially reduce competition for about 100 million of the 396 million domestic passengers per year. These potentially negative impacts would be partially offset by potential benefits to about 30 million passengers on the 338 routes where two alliance partners could combine to compete with other airlines on those routes. However, the potential for reduced competition may be particularly acute for one-stop (connecting) routes because hundreds of such routes are currently served by airlines that would join the same alliance. Furthermore, operating barriers, such as takeoff and landing constraints, at 10 major airports make entry by new competitors difficult on routes to and from these airports, and, as a result, any increase in concentration may lead to an increase in airfares. Our prior work has shown that fares at these airports tend to be higher than at airports not similarly constrained. The proposed alliances would likely increase the barriers at two of these airports—Washington's Reagan National and New York's LaGuardia—where the alliances' market share would increase substantially.
- In weighing the net effects of the proposed alliances, policymakers in DOJ and DOT have a difficult task because each alliance varies in its level of integration and in the scope and breadth of the combined networks.

However, we believe that if several key issues are addressed, policymakers will be better able to determine whether an alliance benefits consumers overall. The first issue is whether airline partners' assumptions concerning the additional traffic and other benefits generated by the alliance are realistic. Second, it will be critical to determine if an alliance retains or reduces incentives for alliance partners to compete on price. If an alliance agreement reduces the incentives for partners to compete with fares in markets they both serve, then policymakers may want to examine the overlap in the alliance partners' route structures to determine whether that alliance would lead to a significant number of routes with fewer independent airlines. In addition, we believe that a number of other issues will be important to an analysis of these proposed alliances. These include whether the alliances may exacerbate or ameliorate fare and service problems being reported by business travelers and certain small and medium-sized communities; the impact that the proposed alliances may have on international travelers; and, should some combination or all of the proposed alliances go forward, the overall implications for competition in the airline industry from this substantial restructuring.

Background

Six major domestic airlines have proposed alliances in 1998. These alliances are significant in scope but vary in extent, and their details are still emerging. In sum, the three alliances would control about 70 percent of domestic traffic, as measured by the number of passengers that board a plane—enplanements. Table 1 summarizes the size and characteristics of the proposed alliances. A key characteristic of two of the alliances is extensive code-sharing. According to officials at DOJ and DOT, code-sharing agreements are forms of corporate integration that fall between outright mergers, which involve equity ownership, and traditional arm's length agreements between airlines about such things as how they will handle tickets and baggage.

Table 1: Summary of Airline Alliances—Size and Characteristics

Airline or alliance	1997 domestic traffic (total passengers enplaned, in millions) ^a	1997 market share (percent of total passengers)	Nature of relationship		
			Combined frequent flier programs and club facilities	Code-sharing	Equity ownership
Delta	97.3	17.6			
United	72.9	13.2			
Delta-United	170.2	30.8	x	x	
American	66.1	12.0			
US Airways	57.4	10.4			
American-US Airways	123.5	22.3	x		
Northwest	47.1	8.5			
Continental	34.2	6.2			
Northwest-Continental	81.3	14.7	x	x	x
Alliance subtotal	375.0	67.8			
All other majors^b	107.6	19.5	majors^b		
Other large airlines^c	70.2	12.7	airlines^c		
Total	552.8	100.0			

^aPassenger enplanements^a represent the total number of passengers boarding aircraft. Thus, for example, a passenger that must make a single connection between his or her origin and destination counts as two enplaned passengers, because he or she boarded two separate flights.

^bThe other major passenger airlines are Alaska, America West, Southwest, and Trans World.

^cThis category includes such airlines as Reno, Midwest Express, and AirTran. We are excluding commuter airlines because they tend not to compete for the same passengers as the larger airlines and carry a relatively small percentage of the total number of passengers that fly domestically within the United States.

Source: GAO's analysis of DOT's data.

Continental Airlines and Northwest Airlines announced in January 1998 that they were entering into a “strategic global alliance” that would connect the two airlines’ route systems. Under this alliance, the airlines plan to code-share flights and include each of their respective code-share partners, such as America West, Alaska Airlines, and KLM Royal Dutch Airlines. In addition, the airlines will establish reciprocity between their frequent flier programs, which means that travelers who belong to both

programs will be able to combine miles from both to claim an award on either airline. The airlines will also undertake other cooperative activities, including coordinating flight schedules and marketing. Certain aspects of the alliance agreement are contingent on the successful conclusion of negotiations with Northwest's pilots' union. Northwest plans to buy an equity share in Continental and place it in a voting trust.¹

In April 1998, United Airlines and Delta Air Lines announced a tentative agreement to enter into a global alliance. The United-Delta alliance would be the largest alliance in terms of its market share of passengers, but it would have no exchange of equity. Under the terms of the agreement, the two airlines plan to engage in code-sharing arrangements, reciprocal frequent flier programs, and other areas of marketing cooperation. The alliance will be implemented on the airlines' domestic routes and expanded internationally only after obtaining the concurrence of the airlines' alliance partners and approval by governments, where applicable. Code-sharing on flights to Europe is not currently part of the plan for this alliance because of complex governmental and alliance issues, particularly linking two current competitors—Lufthansa and SwissAir—under the same alliance. According to airline officials, the code-sharing planned for the U.S. domestic markets will probably not occur before early 1999 and is contingent on the approval of pilots at both airlines.

Also in April 1998, American Airlines and US Airways announced that they had agreed on a marketing relationship that would give the customers of each airline access to the other airline's frequent flier program. In addition, the two airlines agreed to allow reciprocal access to all domestic and international club facilities and are working to make final arrangements to cooperate in other areas. The airlines expect to implement the linkages between the two frequent flier programs by late summer 1998. The alliance will also include code-sharing by the airlines' regional partners, American Eagle and US Airways Express, and may seek broader code-sharing, pending pilots' approval, at a later date. The chief executive officers of both airlines have also announced that if the other two alliances are implemented, they would seek a code-sharing arrangement as a competitive response.

¹According to Northwest and Continental officials, the voting trust means that Northwest's shares will be voted in proportion to the votes of non-Northwest shareholders and, therefore, except in exceptional circumstances, will not affect the outcome of a vote. Northwest's equity purchase equates to slightly more than 50 percent of the voting rights. After 6 years, the voting trust ends, and Northwest could exercise the full power of its ownership, which would mean that Northwest would effectively control Continental.

DOJ and DOT have somewhat different statutory authorities to review the proposed alliances. In 1989, DOT's long-standing authority to review domestic mergers and alliances transferred to DOJ. DOJ's Antitrust Division uses its authority under the Clayton, Sherman, and Hart-Scott-Rodino acts to examine domestic alliances in which a change in ownership or code-sharing occurs. If DOJ believes an alliance is anticompetitive in whole or part, it may seek to block the agreement in federal court. Alternatively, DOJ may negotiate a consent decree that would restructure the transaction to eliminate the competitive harm. DOJ has been reviewing the Northwest-Continental alliance proposal, which was announced in January 1998. In May 1998, DOJ indicated that it also is looking at the other two alliance proposals.

DOT has stated that, later this year, it also intends to study the proposed alliances under its broader authority to maintain airline competition and protect against industry concentration and excessive market domination, as well as its specific authority to prohibit unfair methods of competition in the airline industry. It will coordinate with DOJ on the alliance reviews. DOT does not have prior approval authority over an alliance. On the basis of a recommendation from an administrative law judge, DOT could issue a cease-and-desist order.

Alliances May Offer Some Benefits to Consumers

Alliances could benefit consumers by increasing the number of destinations and the frequency of flights available through each partner. The airlines believe that these increases will in turn attract new passengers, allowing them to offer more frequent flights, and, if demand is substantial, more new destinations.

In an alliance that includes code-sharing, such as those proposed by United and Delta and Northwest and Continental, airline route networks are effectively joined, expanding possible routings by linking two different hub-and-spoke systems. The service provided through code-sharing replicates the "seamless" travel that would be provided by a single airline, known as "on-line service." This type of service is generally preferred by airline passengers because it allows the convenience of single ticketing and check-in. Airlines have had interline agreements, which offer many of the same services, for some time. Interline agreements provide for the mutual acceptance by the participating airlines of passenger tickets, baggage checks, and cargo waybills, as well as establish uniform procedures in these areas. However, with on-line service, connecting

flights between the two code-sharing airlines are shown in the computer reservation system as occurring on one airline.

Officials for the airlines see advantages to on-line service for their customers. For example, with on-line service under the alliance proposed by United and Delta, airline passengers would be able to travel from Sioux Falls, South Dakota, to Bangor, Maine, on one airline's code, even though neither airline currently serves the entire route between these two cities. In this example, a passenger could purchase a ticket from Delta and fly on a United plane from Sioux Falls to Chicago, then to Boston, and then, on a Delta flight, to Bangor. The passenger would earn Delta frequent flier miles for the entire trip. According to Northwest and Continental executives, their alliance would result in more than 2,000 new destinations that each airline could begin marketing as its own. The American-US Airways alliance plans to initially offer only limited code-sharing on regional airline flights, and not on each partner's flights.

In addition to new destinations, combining airlines' hub-and-spoke route networks would also result in a substantial increase in the number of flight options that each airline could offer travelers to existing destinations. Airlines contend that these expanded service options may also attract new passengers, which would then allow the airlines to offer even more frequent flights and, if demand is substantial, more new destinations.

Airline officials also note that additional routing options can create some better on-line connections by substituting one airline's connection for its partner's when the partner has closer connection times for the customer. This could reduce travel time for some travelers. However, this benefit may be limited. For example, through the proposed alliance, Northwest and Continental officials predict shorter travel times for about 250,000 passengers, or 0.3 percent of the 81.3 million passengers potentially affected in 1997.

Critics of code-sharing point out that the practice is inherently deceptive because consumers may believe they are flying on one airline only to discover that they are on another airline's flight and because code-sharing does not necessarily expand consumer choice. These critics charge that airlines take advantage of consumers' preferences for on-line connections by making an interline code-share connection appear in computer reservation systems to be an on-line connection. Code-share flights also have the advantage of being listed more than once on computer reservation systems. For example, in our examination of flight listings for

17 international city-pairs, we found that 19 percent of the time code-share flights were listed at least three times (once under each airline and another as an interline connection) on the first screen of the display, giving the partners a competitive advantage over other airlines operating on those routes.² Even the former chairman of American Airlines and the current chairman of US Airways are reported as calling code-sharing deceptive for consumers, but have said that they will also propose a code-sharing alliance as a competitive response if the other alliances are approved.

In addition to the anticipated benefits of code-sharing, all three of the proposed alliances would offer their passengers reciprocal frequent flier benefits—that is, earning and using frequent flier points on either alliance partner—and the reciprocal use of club facilities. Airline officials believe that these reciprocal benefits would increase the value of frequent flier programs by allowing consumers to pool their points and choose from more destinations and frequencies. One critic counters, however, that unless the airlines substantially increase the number of seats available for use by frequent fliers, the additional demand created by combining the programs will reduce the availability of seats and therefore the value of the frequent flier programs.

Alliances May Reduce Competition, Which Would Harm Consumers

While the proposed domestic alliances may benefit consumers, they also have the potential to decrease competition in dozens of nonstop markets and hundreds more one-and multiple-stop markets because, even though the alliances are not mergers, they may reduce the incentive for alliance partners to compete with each other. Many longer routes that include one or more stops are currently the most competitive because they offer the greatest number of airlines from which consumers can choose. These same routes are likely to see the largest reduction in choices among totally unaffiliated airlines and, correspondingly, the greatest potential loss in competition. Our prior work on mergers in the 1980s showed that when such competition declines, airfares tend to increase. Unlike international alliances, which largely extend domestic airlines' route networks into areas that they could not enter by themselves, the networks of the domestic airlines generally overlap to a much greater extent, and therefore the proposed alliances pose a greater threat to competition. Because travel to and from small and medium-sized cities usually involves a stop at one or more hubs, travelers to and from these cities potentially face reduced competition and higher fares. Existing operating barriers, such as

²International Aviation: Airline Alliances Produce Benefits, but Effect on Competition Is Uncertain (GAO/RCED-95-99, Apr. 6, 1995). Also see Computer Reservation Systems: Action Needed to Better Monitor the CRS Industry and Eliminate CRS Biases (GAO/RCED-92-130, Mar. 20, 1992).

constraints on the number of available takeoff and landing slots, are likely to make any increases in concentration problematic because such barriers reduce the likelihood that other airlines will be able to enter the market and provide a competitive response.

Competition Could Decline in Many Markets

The proposed alliances could harm consumers because they may reduce the incentive for alliance partners to compete with each other. If this were to happen, airfares would likely increase and service would likely decrease. We analyzed 1997 data on the 5,000 busiest domestic airport-pair origin and destination markets—markets for air travel between two airports—to determine how these markets could be affected by the proposed alliances. If the airlines do not continue to compete on prices, we found that the number of independent airlines could decline in 1,836 of these 5,000 markets,³ possibly affecting the fares paid by nearly 101 million passengers out of a total of 396 million passengers. For example, the number of effective competitors between Detroit Metro Wayne County Airport and Newark International Airport would decline from two to one if Northwest and Continental do not compete with each other. In 1997, this reduction in competition would have affected the roughly 429,000 passengers who traveled on that route.

While the airlines have said that their alliances have relatively few nonstop routes that overlap, these routes often serve many passengers. For example, even though the proposed alliance between United and Delta has only 34 nonstop routes that overlap, the two airlines carry about 9.7 million passengers per year on these routes. Moreover, we believe that it is important to focus on the alliances' potential harm to competition in the hundreds of additional one-stop and two-stop markets that have overlapping routes. These routes account for most of the 1,836 markets that could be negatively affected by the proposed alliances. In our prior work on the TWA-Ozark merger, we found that after the merger, the total number of cities with direct service declined and competition decreased in many markets. The number of routes served by two or more airlines fell by 44 percent, and fares increased between 7 and 12 percent in constant dollars within 1 year.⁴ To the extent that the proposed alliances tend to behave as a single entity, similar results could occur.

³Over 359 million passengers traveled on these 5,000 origin and destination markets in 1997. These passengers account for over 90 percent of the total 396 million domestic passengers who flew that year.

⁴Airline Competition: Fare and Service Changes at St. Louis Since the TWA-Ozark Merger (GAO/RCED-88-217BR, Sept. 21, 1988).

In contrast to this potential for harm to consumers, competition could increase in 338 of the 5,000 largest markets, affecting about 30 million passengers per year, according to our analysis of 1997 data. In these markets, two alliance partners that individually have a market share of less than 5 percent would combine to form a potentially more effective competitor against other airlines on these routes. However, the number of markets where this could occur is substantially less, and they serve substantially fewer passengers, than the markets where consumers could be harmed by the proposed alliances. Table 2 summarizes the market and passenger information for the proposed alliances.

Table 2: Domestic Markets and Passengers Potentially Benefiting From and Harmed by Each Proposed Alliance

Proposed alliance	Total markets in which competition could increase^a	Total passengers potentially benefiting	Total markets in which competition could decrease^a	Total passengers potentially harmed
Northwest-Continental	199	15,180,910	359	15,544,467
United-Delta	89	8,898,921	1,038	60,155,470
American-US Airways	50	6,378,279	439	25,208,592
Total	338	30,458,110	1,836	100,908,529

^aFor the purposes of this analysis, competition would increase if another competitor entered the market through forming an alliance, and would decrease if a competitor left the market after forming an alliance with another airline. We are defining a "competitor" as an airline that carries at least 5 percent of the enplaned passengers in a particular airport-pair market. In this analysis, we also assume no reaction by airlines to each other's behavior and no change in the airlines' route structures.

Source: GAO's analysis of data provided by Data Base Products, Inc., on the top 5,000 origin and destination markets in 1997.

In our prior work, we stated that some international alliances may bring benefits to passengers because international and domestic airlines are able to extend their networks. However, domestic alliances are more likely than international alliances to cause concerns about competition because they often have many more overlapping routes. In a typical international alliance, a domestic airline with a domestic route network will form an alliance with a foreign airline that has a route network in its home territory. These alliances frequently contain only a few routes where the networks overlap on either a nonstop or a one-stop basis. As a result, these alliances can benefit consumers by extending the route structure for both airlines without posing a threat to competition on overlapping routes.

For example, prior to the alliance between Northwest Airlines and KLM, those airlines had only two nonstop routes that overlapped, and because neither airline had a route network in the home territory of the other, there was no significant overlap of one-stop routes. In contrast, domestic airlines' route networks tend to overlap much more. As a result, domestic alliances are potentially more harmful to consumers because competition could decline on many more routes.

Service to and from small and medium-sized cities may also be harmed because the number of competing airlines would likely decline in many cases. Most routes to and from these cities involve changing planes at one or more hubs. The number of effective competitors may decline in these markets when such passengers have more than one choice of hub airports. For example, currently, four airlines travel between Appleton, Wisconsin, and Reagan Washington National Airport. Two of those airlines are Delta and United. If these airlines were to compete less because of their alliance, passengers traveling between these two cities could be harmed.

Existing Barriers at Key Airports Increase the Likelihood That More Concentration Will Harm Consumers

Barriers that restrict entry at key airports may increase the potential for harm from the proposed alliances because they remove the threat that high fares or poor service will attract competition from established or new entrant airlines. As we have reported in the past, barriers such as slot controls—limits on the number of takeoffs and landings—at four airports in Chicago, New York, and Washington, D.C., and long-term exclusive-use gate leases at six additional airports have led to higher fares on routes to and from these airports. Such barriers make entry at those airports difficult because the incumbent airlines frequently control access to the airport's gates. Nonincumbent airlines generally would have to sublease gates from the incumbent airline, often at less preferable times and at a higher cost than the incumbent pays.⁵

At two of the four slot-controlled airports—New York's LaGuardia and Washington's Reagan National—the levels of concentration by the existing dominant airline would increase substantially following the alliance. The increase at Chicago's O'Hare and New York's Kennedy, on the other hand, would be much more modest. Similarly, with the six airports that are gate-constrained, because the dominant airlines already control such large percentages of the available gates, the increases in concentration that

⁵For example, see *Airline Deregulation: Barriers to Entry Continue to Limit Competition in Several Key Domestic Markets* (GAO/RCED-97-4, Oct. 18, 1996).

would occur following the alliances are also relatively small, averaging less than 2 percent. (See table 3.)

Table 3: Alliance Partners' Combined Market Share at Slot-Controlled and Gate-Constrained Airports

Market share expressed as percent of total 1997 enplanements at each airport

Constraint	Airport	Pre-alliance market share of dominant airline, percent/airline	Post-alliance market share		
			United-Delta	American-US Airways	Northwest-Continental
Slot	Chicago O'Hare	48.3/United	51.7	40.1	4.2
	Reagan Washington National	35.4/US Airways	24.0	49.0	14.4
	New York Kennedy	30.0/American	28.9	30.1	1.1 ^a
	New York LaGuardia	27.0/US Airways	34.3	44.5	10.1
Gate	Charlotte	83.8/US Airways	3.3	85.3	1.4
	Cincinnati	76.8/Delta	77.9	0.9	1.4
	Detroit	77.8/Northwest	4.8	4.8	79.4
	Minneapolis	80.5/Northwest	5.9	3.9	81.5
	Newark	60.8/Continental	15.0	12.1	64.6
	Pittsburgh	82.2/US Airways	3.6	83.1	2.5

^aContinental did not serve New York's Kennedy airport in 1997.

Source: GAO's analysis of DOT's data.

To the extent that there is an increased concentration of slots and gates, entry may become more difficult, which would further limit competition on routes to and from these airports and likely lead to higher airfares. Our previous work has shown that airlines that dominate traffic at an airport generally charge higher fares than they do at airports that they do not dominate.⁶

⁶See *Airline Competition: Higher Fares and Less Competition Continue at Concentrated Airports* (GAO/RCED-93-171, July 15, 1993).

We have also reported that several airlines' sales and marketing practices may make competitive entry more difficult for other airlines.⁷ Practices such as airlines' frequent flier plans and special travel agent bonuses for booking traffic on an incumbent airline encourage travelers to choose one airline over another on the basis of factors other than the best fares. Such practices may be most important if an airline is already dominant in a given market or markets. Together, operating and marketing barriers increase the likelihood that increases in concentration will harm consumers by discouraging entry by other established or new entrant airlines, thus allowing airlines to raise their fares or reduce services.

Decisionmakers Need to Consider a Number of Complex Issues in Evaluating the Alliances

Many dimensions of each of the proposed alliances deserve close scrutiny so that decisionmakers can assess whether the potential benefits of each particular alliance outweigh its potential harmful effects. Though not an exhaustive list, we believe analysis of several key issues will help determine the extent to which each of the proposed alliances may be beneficial or detrimental, overall, to consumers. These key issues are how substantial the benefits to consumers may be, whether incentives to compete are retained, what the potential impact of the proposed alliances on certain classes of consumers and certain communities are, how international travel may be affected, and what the overall implications of the proposed alliances for competition may be.

First, DOJ and DOT need to scrutinize each alliance's claims about the benefits each brings to the public, including the underlying assumptions that each alliance is using to estimate consumer benefits. Some of the estimated increases for the growth in traffic may depend on questionable assumptions about how much new traffic can be generated by marginal additions in the frequency of flights and the number of destinations or about how many additional travelers will choose to fly to destinations through a code-sharing arrangement that is currently available through an interline connection. In addition, DOT and DOJ need to assess the competitive response by other airlines or other alliances to determine how much new traffic may be generated rather than how much passengers shift from one airline or alliance to another.

Second, it is important for decisionmakers to examine the issue of whether each alliance's partners will continue to compete with one another on price. The amount of competition may vary by alliance.

⁷See, for example, *Aviation Competition: International Aviation Alliances and the Influence of Airline Marketing Practices* (GAO/T-RCED-98-131, Mar. 19, 1998).

Officials with United, Delta, Northwest, and Continental told us that, because the airlines will remain separate companies, they expect to set prices independently and thus compete for each passenger.⁸ The three alliances have not specifically explained their financial arrangements or how they will ensure that price competition will be preserved. If the six airlines do compete vigorously on pricing, then this competition may alleviate many of the concerns about whether consumers would be harmed by dominant airlines in particular markets using their monopoly power to raise fares. On the other hand, if the alliances reduce incentives to compete on prices,⁹ then DOJ and DOT will need to carefully examine the overlap in the alliance partners' route structures and assess whether an alliance would create a significant number of routes with less, or no, competition. Determining the incentives will, at a minimum, likely require a review of the exact terms of the alliances' agreements, which may be contained in proprietary documents that DOJ and DOT have access to.

We also believe that a number of other issues will be important for DOT and DOJ to analyze in their reviews of these proposed alliances. These include the following:

- The potential impact of the proposed alliances on certain classes of consumers and certain communities. Some business travelers have recently complained about fare increases, and consumers from some small and medium-sized communities have not experienced the lower fares and/or improved services that deregulation has delivered to other parts of the country. It will be important for policymakers to determine whether these alliances could exacerbate or ameliorate these fare and/or service problems.
- The impact each alliance could have on consumers who travel internationally. Both of the code-sharing alliances have indicated that eventually they would like to include their international partners, thereby allowing them to offer improved service to international destinations through such benefits as new service, increased flight frequency, and

⁸We did not discuss the issue with American Airlines and US Airways because, at the time of our work, they had not announced plans to code-share except with their regional affiliates.

⁹For example, equity positions and revenue sharing provide incentives to cooperate rather than compete, and specific mechanisms may have to be put into place before policymakers might consider alliance partners as competitors. Other arrangements, such as fees paid for selling seats on an alliance partner's flights, if substantial, may also provide sufficient financial incentive not to compete. An examination of previous domestic code-sharing arrangements between Northwest and Continental, which have limited code-sharing with Alaska and America West, respectively, may be illustrative of the extent of competition between major U.S. airlines on code-share routes.

better connections.¹⁰ International code-sharing alliances are a way of opening foreign markets to U.S. airlines that otherwise would not be able to serve these markets because of restrictions in the bilateral agreements that govern service between countries. Northwest, United, and Delta have international strategic alliances that not only feature code-sharing and other types of integration but that also have immunity from U.S. antitrust laws. This immunity has been granted in the framework of Open Skies agreements, whereby all bilateral restrictions are eliminated. We have found that partners in these strategic code-sharing agreements have had increased traffic and revenues, and that passengers benefit through decreased layover times. However, we also have found that insufficient data exist to determine whether consumers are paying higher or lower fares as a result of the alliances and what effect the alliances will have on competition and fares in the long term.¹¹ Given the increasing size and scope of the alliances' international reach, the questions we raised in our earlier report about the alliances' effect on fares and competition could become even more urgent.

- The potential sources of new competition if any combination, or all, of the alliances move forward. As we mentioned earlier, the three alliances would represent about 70 percent of the domestic aviation industry. Other industries, such as automobiles, have been similarly dominated by a few firms. That industry was widely regarded as not being competitive until new sources of competition emerged from outside the domestic industry. As we noted in our previous work, new airlines may be at a disadvantage in competing with the large alliances because of the incumbents' large route networks and other barriers resulting from their marketing practices and slot and gate constraints at major U.S. airports. Should any combination, or all three, of the alliances go forward, there may be considerable uncertainty about the ability of new airlines to compete in many markets. The same may hold true for existing U.S. airlines that lack alliance partners, whether they are older, established airlines, such as Trans World Airlines, or new entrant airlines, like Frontier.

Mr. Chairman, this concludes my prepared statement. Our work was conducted in accordance with generally accepted government auditing standards. To provide data for this testimony, we contracted with Data

¹⁰For the time being, however, in discussing whether their proposed code-sharing will extend to each airline partner's existing international code-sharing partners, officials from both the Northwest-Continental and United-Delta alliances specifically excluded their European destinations and code-sharing partners at least partly in deference to the uncertainty of the European Commission's draft remedies for existing international alliances.

¹¹International Aviation: Airline Alliances Produce Benefits, but Effect on Competition Is Uncertain (GAO/RCED-95-99, Apr. 6, 1995).

Base Products, Inc. Data Base Products, Inc., used information submitted by all U.S. airlines to DOT for 1997 and produced various tables to our specifications. Data Base Products, Inc., makes certain adjustments to these data to correct for deficiencies, such as those noted by the DOT's Office of the Inspector General. We did not review the company's specific programming but did discuss with company officials the adjustments that they make. We also interviewed officials with DOT, DOJ, and each of the six major airlines contemplating domestic alliances.

We would be pleased to respond to any questions that you or any Member of the Subcommittee may have.

Related GAO Products

Domestic Aviation: Service Problems and Limited Competition Continue in Some Markets ([GAO/T-RCED-98-176](#), Apr. 23, 1998).

Aviation Competition: International Aviation Alliances and the Influence of Airline Marketing Practices ([GAO/T-RCED-98-131](#), Mar. 19, 1998).

Airline Competition: Barriers to Entry Continue in Some Domestic Markets ([GAO/T-RCED-98-112](#), Mar. 5, 1998).

Domestic Aviation: Barriers Continue to Limit Competition ([GAO/T-RCED-98-32](#), Oct. 28, 1997).

Airline Deregulation: Addressing the Air Service Problems of Some Communities ([GAO/T-RCED-97-187](#), June 25, 1997).

International Aviation: Competition Issues in the U.S.-U.K. Market ([GAO/T-RCED-97-103](#), June 4, 1997).

Domestic Aviation: Barriers to Entry Continue to Limit Benefits of Airline Deregulation ([GAO/T-RCED-97-120](#), May 13, 1997).

Airline Deregulation: Barriers to Entry Continue to Limit Competition in Several Key Domestic Markets ([GAO/RCED-97-4](#), Oct. 18, 1996).

Domestic Aviation: Changes in Airfares, Service, and Safety Since Airline Deregulation ([GAO/T-RCED-96-126](#), Apr. 25, 1996).

Airline Deregulation: Changes in Airfares, Service, and Safety at Small, Medium-Sized, and Large Communities ([GAO/RCED-96-79](#), Apr. 19, 1996).

International Aviation: Airline Alliances Produce Benefits, but Effect on Competition Is Uncertain ([GAO/RCED-95-99](#), Apr. 6, 1995).

Airline Competition: Higher Fares and Less Competition Continue at Concentrated Airports ([GAO/RCED-93-171](#), July 15, 1993).

Computer Reservation Systems: Action Needed to Better Monitor the CRS Industry and Eliminate CRS Biases ([GAO/RCED-92-130](#), Mar. 20, 1992).

Airline Competition: Effects of Airline Market Concentration and Barriers to Entry on Airfares ([GAO/RCED-91-101](#), Apr. 26, 1991).

Related GAO Products

Airline Competition: Industry Operating and Marketing Practices Limit Market Entry ([GAO/RCED-90-147](#), Aug. 29, 1990).

Airline Competition: Higher Fares and Reduced Competition at Concentrated Airports ([GAO/RCED-90-102](#), July 11, 1990).

Airline Deregulation: Barriers to Competition in the Airline Industry ([GAO/T-RCED-89-65](#), Sept. 20, 1989).

Airline Competition: Fare and Service Changes at St. Louis Since the TWA-Ozark Merger ([GAO/RCED-88-217BR](#), Sept. 21, 1988).

Competition in the Airline Computerized Reservation Systems ([GAO/T-RCED-88-62](#), Sept. 14, 1988).

Airline Competition: Impact of Computerized Reservation Systems ([GAO/RCED-86-74](#), May 9, 1986).

Airline Takeoff and Landing Slots: Department of Transportation's Slot Allocation Rule ([GAO/RCED-86-92](#), Jan. 31, 1986).

Deregulation: Increased Competition Is Making Airlines More Efficient and Responsive to Consumers ([GAO/RCED-86-26](#), Nov. 6, 1985).

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. VISA and MasterCard credit cards are accepted, also. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:

**U.S. General Accounting Office
P.O. Box 37050
Washington, DC 20013**

or visit:

**Room 1100
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC**

**Orders may also be placed by calling (202) 512-6000
or by using fax number (202) 512-6061, or TDD (202) 512-2537.**

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

For information on how to access GAO reports on the INTERNET, send an e-mail message with "info" in the body to:

info@www.gao.gov

or visit GAO's World Wide Web Home Page at:

<http://www.gao.gov>

**United States
General Accounting Office
Washington, D.C. 20548-0001**

**Bulk Rate
Postage & Fees Paid
GAO
Permit No. G100**

**Official Business
Penalty for Private Use \$300**

Address Correction Requested
