Headquarters of Airline	World Traffic Share, Percent 1980	1995
United States	41	35
Europe	27	27
Far East	13	15
South America	5	7
Middle East	4	5
Canada	4	4
Africa	3	4
Australia	3	3

The implications of this forecast are of interest not only to the airlines but to aircraft manufacturers and investors as well.

CHANGING NATURE OF AIRLINE COMPETITION

James E. Gorham, SRI International; Gary Fishman, Trans World Airlines

Over the next ten years the combined pressures of traffic growth, relatively high wage scales, and capital requirements for equipment will reduce the number of large trunk carriers. A smaller number of large carriers will offer primarily long-haul service. The number of such carriers probably will be less than ten, and possibly even less than seven. These carriers will have their basic strength not so much in the long-haul routes, where they will be competing, but in particular regional markets, operating a hub and spoke system in certain hubs where they have an entrenched position. Monopoly poisitions in hubs will not develop, but in many cases will be duopolistic.

There will be further growth of specialized carriers. A specialized carrier is one who has configured his service and route structure so that he can concentrate mostly on a single type of aircraft. These carriers will tend to be both low cost and low fare, and will compete at certain major hubs and in particular markets against the trunks. There will be a large number of essentially commuter airlines, although a certain amount of consolidation is also likely in this area.

The future of what are now called regional carriers is uncertain, but it appears that these will tend to disappear. They will become specialized carriers themselves, concentrating in particular markets and limiting themselves to one or very few aircraft types, or they will become large commuters, so that the present function of the regional carriers will be performed by commuters of various size.

Monopoly routes will persist only in markets that cannot very long sustain more than one carrier. There will be such situations, and other carriers may come in from time to time, but one or the other will cease operating. Monopoly routes will tend to be those with low traffic. However, duopolies will persist for periods of time and in particular markets.

On the subject of yield and capacity management, in which it was difficult to find agreement, it appears that the true objective is to maximize revenue, but yield is a convenient figure to use in an effort to measure overall economic performance. Here there are the problems of dual pricing, many prices in a given market which can persist if based on real differences in services. The specialized carriers with low costs will be able to compete effectively against entrenched large trunk carriers. A principal factor here is that the larger carriers are faced with high seniority and therefore high wage levels, particularly when undergoing a substantial curtailment in the active work force. New carriers, even if unionized, tend to have lower average wage levels. This affects prices, and therefore yields. Efforts to maximize yield involve questions of capacity management and the need to control capacity offered for discount services to avoid diversion.

On the issue of capacity management, it was argued that one needs to know what portion of the slack capacity was due to low traffic, and what portion was due to controllable or uncontrollable factors, such as need for maintenance, positioning of aircraft, time of day, etc. The value of such a study was not generally accepted. However, it is an important issue.

On the issue of load factors, there was a general tendency to feel that this is highly judgmental, and that the 63 percent figure is as good a target as any.

On the question of international competition and liberalized bilateral agreements, the conclusion was that the tide is running the opposite way, that protectionism of national carriers is growing, and that there is growing opposition in the United States as so clearly set forth in the recent letter from Pan American to the CAB Chairman. They see little value, or negative value, in liberalized bilaterals to U.S. carriers. The point was also raised that those carriers that have bought the Airbus can look for some protection in bilateral and international route negotiations with the parent countries of the Airbus. This includes a good sector of the European markets, where there will be market concessions to Airbus customers. This, plus the protection issue, led to the conclusion that there will not be further development of liberalized bilateral agreements.

Labor-management issues were much discussed. It was recognized that the problem of differences in labor rates was not purely a question of union or nonunion. The issue of work conditions, or work rules, is in many respects of more importance than labor rates as a cost element, as, for example, in the two-man versus three-man crew issue now being bitterly debated. Since labor cost is a major airline cost of production, the airlines can try to minimize that cost through more technological investment to reduce crew load and crew requirements. That should, in some situations, make a two-man crew feasible. Such labor issues in crew, flight attendants, maintenance, and possibly in other areas, are going to be barriers to further technological development in the industry. There was considerable feeling that the union will have to compromise on these issues, just as they are having to compromise in other industries such as automotive, but no clear consensus.

The final issue explored was the combined issue of financing problems and methods, and carrier bankruptcy. There was a general feeling that the prospect of bankruptcy for U.S. airlines is very real, and a natural result of deregulation. On financing, it appears that the entrenched carriers able to finance new equipment will have their positions strengthened, because many carriers not strong enough to do so will face precarious conditions and become targets for takeover. Takeover circumstances are quite different now than in pre-deregulation times, since the route franchise no longer has any value. At present the acquiring company is securing valuable equipment, in some cases pilots qualified at particular airports and therefore at a cost saving over qualifying the company's own pilots, and in other cases needed

additional management skills. These factors must be balanced against the high debt of a carrier, such as Braniff, which in Eastern's case, made this kind of takeover prohibitive. Takeovers will occur where there are clear-cut advantages such as for Pan American in its acquisition of National.

There is a real possibility that the equipment financing problem could be met by the development of investment groups who own and lease aircraft on a different basis than has been done historically. This will not be so much a method of financing aircraft from the standpoint of the airline, as an investment opportunity. A carrier might be able to approach the problem of developing markets from the standpoint of where a developmental opportunity exists, the best way to develop it, the kind of equipment needed to develop it, and where to lease that equipment, rather than how to utilize existing equipment.

AIRLINE PASSENGER DEMAND

William R. Nesbit, Umited Air Lines

Airline passenger demand is determined by three sets of forces: (1) fares and costs, (2) consumer income, and (3) technological and structural changes in the economy. In the long run, airline fares tend to follow the cost of producing airline service. Fuel and labor are the dominant cost factors. Fuel prices will rise somewhat faster than inflation in general but improvements in airline efficiency and aircraft/engine technology should hold fuel costs in line with inflation. Airline labor costs, which have risen at an above-average rate historically, will probably rise less rapidly due to deregulation. Airline capital costs have escalated in recent years and are expected to continue to do so. On balance, total airline unit costs are expected to rise about in line with the inflation rate.

Real yields are thus likely to be flat over the next ten to twenty years. Unit costs for fuel and labor should be flat or downward in real terms but capital costs will increase. Efficiency factors such as utilization, seat density and load factor will improve somewhat but not nearly as much as in the past eight years. From a forecasting standpoint, an assumption of constant real yield is a blessing since it wipes out the effect of price elasticity -- a subject on which nobody seems to agree.

Although average real yield will probably remain relatively flat, deregulation will result in a wider variety of price/service options for air travelers which, on balance, should be a stimulant to demand.

If fares are neither a drag nor a stimulus to growth, then changes in the economy and population will be the vital considerations. Most forecasters, except the FAA, agree that income elasticity is strongly positive, so that the consensus economic projection of 3 percent annual growth in real disposable personal income (DPI) implies at least 4-1/2 percent to 6 percent market growth. However, the growth of true discretionary income and how it is distributed among various demographic age-income cells is viewed as a better growth indicator than the gain in aggregate DPI.

There is no consensus among forecasters with respect to a "realistic" assumption regarding future passenger load factor levels. The FAA forecast of 63 percent seems to fall within the bounds of expectations.

Among other potential growth factors, teleconferencing was viewed as a negligible influence for the next decade and private business aircraft were not a threat to airline demand. Diversion from surface modes is primarily a historical phenomenon -- from railroads in the 1950's and from autos in the 1970's. People seem to be getting more accustomed to small cars and willing to use them for intercity trips - and would be even more likely to use autos if the 55 m.p.h. speed limit were repealed. Airport or airway congestion was expected to become worse since no new airports are expected; however, this will not be a constraint on airline growth because there are many ways to overcome the congestion problem. General aviation may face a more serious airport constraint as small airports close, air carrier airports become very expensive and reliever airports are expanded at an uneven pace.

The need for better market research data on air travel based on general population surveys, such as the ATA/Gallup survey, was discussed at length. Airlines strongly oppose in-flight surveys other than their own proprietary surveys. The airframe and engine manufacturers seem to be willing to underwrite a major research effort through the Aerospace Industries Association at a cost far in excess of the $13,000 for the ATA/Gallup survey. Airlines, manufacturers, government and academics agreed on the need for much better information in the public domain and seem to be willing to share the cost.

AIRLINE CARGO DEMAND

Donald C. Creswell, SRI International

The objectives of the cargo session were: (1) to identify threats to and opportunities for the air freight industry (The "industry" does not include specialized small package overnight services.); (2) to develop a consensus about growth rates, 1980-1990; (3) to identify important issues; and (4) to identify important areas for research.

Threats and Opportunities

The prime outside or major threats are possibilities of disruptive pricing and/or lack of availability of fuel. There are direct threats of increased operating costs, and indirect threats of depressed demand from economic recession.

Trucking deregulation in the U.S. is a threat because no one is quite sure how the new structure will work out. There is a threat of increased competition within a 500-mile radius of major airports.

Other outside threats are new "institutional barriers" affecting international traffic. These are changing trade agreements, shifts in bilateral agreements aimed at protecting flag carriers, shifting currency exchange rates, and various restrictions on free trade.

Outside, or macro-opportunities include modal expansion as an attractive strategic option resulting from truck and rail deregulation. This opens the way for imaginative operators to move into complementary transport modes. An example is the new services offered by the Flying Tiger Line.

Third World economic expansion may offer opportunities for airlines and related air freight businesses that are capable of taking advantage of such changes.

Several participants thought the high inflation rates would increase the apparent value of products relative to the cost of air freight. More commodities would, therefore, cross the "threshold of eligibility" for movement by air freight.