

DISCUSSION PANEL REPORTS

Prior to the workshop, FAA circulated a questionnaire to all involved participants. The questionnaire listed the preliminary and assumed values and growth rates for each sector of civil aviation to be incorporated in the forthcoming FAA aviation section forecast scheduled for release in March 1998. The TRB workshop panels were asked to review these figures during their deliberations and, where possible, to offer alternatives and comments for each recommended change. The views of most panels are presented in Attachment A. Not every panel responded directly to the questionnaire, however their assessment and rationale are presented in each panel's discussion report.

JOINT SESSION: PASSENGER DEMAND AND FLEETS/MANUFACTURERS

Session Co-Chairs:

Mark Diamond
SH&E (International Airlines)

Tulinda Larsen
SH&E (Regional Air Carriers)

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Introduction

The Domestic, Regional and International passenger demand panels joined the Fleets/Manufacturers panel on the first day of the workshop in order to discuss issues of common importance.

The combined panels examined six topics related to air service demand and supply:

- Overall air transport demand and supply trends.
- Trends in key airline cost and productivity drivers.
- Opportunities for airline cost reduction and productivity improvement.
- Opportunities for improved revenue generation.
- Impact of regional jets.

- Determinants of passenger demand forecasts

Overall Air Transport Demand and Supply Trends

The combined group concurred broadly with FAA preliminary forecasts for the 1997-2002 period:

- Enplanements will increase at about 4 percent per year in the U.S. domestic market and about 6 percent per year in the U.S. international market, with Pacific and Latin American traffic growing the most rapidly.

- U.S. domestic and international real yields will continue to drop at about one percent per year or less, more moderate decreases than in prior years.

- Load factor will remain relatively constant, in the high sixties range domestically and low seventies internationally, with the highest loads in the Pacific and lowest in Latin America. Regional carrier load factors will remain below 60 percent.

- U.S. carrier average aircraft seating capacity (excluding regional jets) will grow at the rate of 1-2 seats per year in domestic and international markets.

- The U.S. air carrier and regional fleet will grow at 3-4 percent per year, with widebodies growing faster than narrowbodies.

The projected constant load factors imply that U.S. carrier capacity will increase at the same rate as demand. Although there has been a major increase in aircraft orders in the last two years, many of these aircraft will be used for fleet replacement rather than growth in the short and medium terms, as aging Stage II airplanes are retired by the turn of the century.

Other panel members voiced caution that the influx of new aircraft could lead to overcapacity, particularly if there is an economic downturn over the next several years. However, participants did not expect a repeat of the capacity glut of the early 1990s, when fleets were growing at up to 12 percent per year.

U.S. major carriers currently are in a healthy state overall, having dismantled inefficient hub operations, raised load factors to record levels, and used the resulting improved cash flow to retire debt and replace their fleets. Currently, large U.S. hub carriers have costs per unit sold (cost per RPM) only slightly higher than the highly efficient carrier Southwest.

Longer Term Trends

The group noted that leisure travel has been growing

faster than business travel in the mature U.S. market since the late 1980s as real yields have dropped. The increase in discretionary travel has, in turn, resulted in greater seasonal differences in traffic flows.

Trends in Key Airline Cost and Productivity Drivers

Labor

U.S. carrier labor costs are not expected to increase significantly in the short term, as airlines have negotiated relatively favorable long-term contracts. However, over the longer term, labor costs likely will increase as a proportion of operating costs, with unions having become more powerful in the wake of the 1997 UPS strike. The current pilot shortage will also place upward pressure on flight crew costs. Even small increases in crew costs could have a significant impact on airlines, as pilots account for roughly 30 percent of the total labor costs of U.S. carriers.

Regional jets (RJs) will continue to be a divisive issue between management and labor in both the United States and Europe, with pilots concerned that current and future jet flying opportunities will be spun off to major carriers' lower cost regional partners as they take delivery of RJs.

Rising labor costs may provide further incentive for carriers to code-share or franchise—unions willing—if costs can be reduced by transferring flying to a code-share partner.

Fuel

In the long term, fuel prices are projected to remain flat. The fuel price increases of 1996 were considered to be a blip, not part of a rising trend.

Regulations and Taxation

Additional costs for safety and environmental regulations are expected in both the United States and Europe, but not at a higher rate than in prior years. There will be increased airport charges and uncapped Passenger Facility Charges (PFC's) levied against U.S. airlines to offset reduced FAA Airport Improvement Program (AIP) funds.

It was noted that new European airport and navigation charges are disproportionately burdening operators of smaller aircraft in Europe, with fixed runway charges being levied in London without regard to aircraft size or weight. New fixed per-passenger tariffs in Europe also are heavily affecting low cost operators, with the taxes representing up to 25 percent of a discount fare between London and Brussels.

Opportunities for Cost Reduction and Productivity Improvement

Since the early 1990s, airlines in the United States and abroad have radically restructured their operations to reduce costs. However, with real yields continuing to drop and margins still low compared to other industries, productivity improvements remain critical. The panel concluded that future cost reductions are likely to be relatively small, but enough such reductions could be obtained over the next five years to match the projected five percent decrease in real yield on U.S. domestic and international routes.

Cost reduction opportunities were thought to be higher for non-U.S. airlines, since U.S. carriers have already realized extensive cost savings over the last half-decade. Panel members noted, however, that a larger proportion of non-U.S. carriers' operating costs are fixed, such as landing and overflight charges, and therefore beyond the capability of the airlines to cut.

Distribution now represents the greatest area of opportunity for airline cost reduction. These costs, including ticketing, computer reservation system (CRS) and travel agency fees, typically represent 12-14 percent of carriers' overall operating costs.

Airlines are starting to take steps to reduce distribution costs by capping travel agency commissions, offering direct ticket purchasing over the Internet, and providing automatic electronic ticketing ("E-tickets") or ticketless travel.

Such direct ticket sales not only avoid CRS and travel agency fees, they also reduce telecommunications and revenue accounting expenditures, and permit airlines to realize cash from ticket sales earlier.

Fleet commonality offers efficiency advantages by decreasing crew and maintenance training requirements, reducing spares purchases and inventory, and offering substantial aircraft purchase discounts. Manufacturers and airlines have recognized the advantages of fleet commonality at least since the early 1980s; however, many U.S. and foreign airline fleets still consist, unnecessarily, of many different aircraft types.

Larger aircraft will provide additional productivity improvements from lower seat-mile costs. The Passenger Demand and Fleets/Manufacturers panels concurred with FAA preliminary forecasts that average jet aircraft seating capacity (excluding RJs) will increase over the next five years on U.S. domestic and international routes.

However, the group cautioned that the current massive orders of RJs in the U.S. may bring overall U.S. aircraft size down and decrease productivity—particularly if RJ's are used to replace larger jet aircraft, rather than substituting for turboprops or developing new routes.

Free Flight and *Global Positioning Systems (GPS)*, just starting to be introduced, will reduce aircraft operating

costs by offering more direct long-haul routings and decreasing spacing requirements.

Outsourcing functions such as maintenance, catering and revenue accounting may provide additional cost savings for carriers. Several large European carriers have successfully outsourced their revenue accounting functions to specialized third party providers in Asia. Maintenance outsourcing continues to be a growing activity worldwide, but will remain problematic for major U.S. carriers holding strong labor contracts.

Alliances have the potential to reduce purchasing costs by bringing greater volume and purchasing power to supply contracts. Additional savings could result from sharing resources such as sales forces, reservations personnel, maintenance facilities, terminal space and so forth. The International Airlines panel later noted, however, that global marketing alliances generally have not yet realized significant cost efficiencies. The panel concluded that equity stakes between carriers or purpose-designed joint ventures may be prerequisites for meaningful cost reductions.

Opportunities for Improved Revenue Generation

Alternative Distribution Channels

Technological improvements in distribution may also have a positive effect on revenue generation in the coming years, although the primary impetus behind alternative distribution channels such as the Internet and electronic ticketing has been to reduce costs.

Airlines are starting to set up sites on the Internet to sell discount tickets (American Airlines' "NetSAvers" and USAirways' "E-SAVERS," for example). These "cyber-fares" offer deep discounts to sell off perishable seat inventory at the last minute.

Other airlines, including American, Lufthansa, Cathay Pacific and Canadian have offered fare auctions on the Internet, selling seats to the highest bidder. The philosophy behind such auctions again is to sell off seat inventory that would otherwise go unsold. Fare auctions offer an additional advantage to airlines by providing market intelligence on consumer willingness to pay that can be useful for future pricing decisions.

Currently, Internet ticketing is limited mostly to weekend travel. Airlines so far have resisted extending Internet ticketing to weekday flights to avoid diluting business traveler fares.

"Cyber-fares" have the potential to stimulate travel demand by making low fares and seat availability information more accessible and transparent to the end consumer. However, the increased demand would come at the expense of yield. Since U.S. carriers already are operating at very high load factors, it is questionable how much stimulated demand could be accommodated in the short- to medium-term.

Internet ticketing is likely to increase as a share of total distribution activity, with some long-range estimates projecting that up to half of all air travel sold will be via the Internet. The role of travel agencies will not disappear; and they are still expected to be widely used for corporate travel and will continue to sell inclusive travel packages to leisure travelers in Europe. Furthermore, travel agencies themselves are beginning to branch out into Internet ticket sales.

Impact of RJs

The joint panels noted the increasing importance that regional jets are likely to have in the U.S. and overseas air transport markets in the future. As of September 1997, over 700 regional jets were in service, on order or on option in the United States.

Fifty-seat RJs have trip costs one-half to two-thirds lower than 737s, and can turn a profit with loads of only 25-27 passengers. They are expected to strengthen hubs and open up new point-to-point route opportunities.

With a vast number of RJs entering the U.S. fleet over the next few years, the regional airline share of U.S. domestic passenger traffic will continue to increase.

Determinants of Passenger Demand Forecasts

The panels discussed some of the main economic determinants of traffic growth, and noted that GDP, although a primary driver is by itself insufficiently explanatory. Other important determinants that should be considered include population, age distribution, income distribution, immigration trends, exchange rates, quality of air service, and competing transport modes.

DOMESTIC AVIATION

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