SUMMARY OF MINI-SESSIONS

THE MACRO BUSINESS ENVIRONMENT
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The Macro Business Environment Group discussed only major factors in general business directly affecting the air transportation industry. Those of greatest concern are: gross national product, inflation rate, fuel availability and price, employment, international tensions, and capability of the industry to attract capital.

Each member of the group presented his forecasts for the area discussed, together with his assumptions. This procedure provided a range of forecasts. Then the group developed a consensus. The group consensus forecast assumptions follow.

The Macro Business Environment Forecasts

I. Real Gross National Product Growth: Percent Per Year

	1981	1981-1985	1985-2000
High		4.5	3.5
Baseline	2.0	3.3	2.8
Low		2.5	2.2

- A. Total disposable income is forecast to increase at the same rate as GNP.
- B. Business cycles are difficult to forecast.
 The general economy is expected to
 increase its growth rate until about
 1985. There will then be a slowing,
 but not so great as to be considered a
 full-scale recession.

II. GNP Deflator Growth Rate Percent Per Year

	1981	1981-1985	1985-2000	
High		11.0	9.0	
Baseline	10.0	8.5	7.0	
Low		7.0	5.5	

III. Employment

Within three to five years there will be more jobs available and unemployment rates will moderate slowly. Two factors account for this: continued growth of the general economy, and decreasing growth of the work force. There will still be unemployment of job seekers with low level work skills, and other persons who choose not to work at the jobs available.

IV. Productivity and Wages

Productivity for the total economy will increase at two percent per year. Industrial productivity, a greater benefactor of new technology, will increase at three percent per year. Wages will increase at the same rate as productivity: two percent for the total economy and three percent for the industrial sector.

Since U.S. wage costs will increase at the same rate as productivity gains, the United States will gain no advantage in labor costs in international trade, unless other nations' wage costs grow faster than their own productivity.

V. Fuel Availability and Price

The group felt that there would be no long-term crude oil supply shortage through the year 2000. There are proven supplies for forecast needs through that time. However, availability is in many cases a political decision, not a market decision. While political decisions are difficult to forecast, several assumptions can be made:

- A. Increasing numbers of present users will turn to alternate sources of energy, as higher costs of oil make the alternates cost effective.
- B. Oil users will become more efficient through new technology and improved operating procedures.
- C. Because of these two trends, and continued growth of air transportation, aviation will consume an increasing percentage of total oil usage.
- D. The price of jet fuel will increase three to four percent more per year than overall inflation rates. The price of aviation gasoline is expected to increase five to six percent faster per year than general inflation rates. Higher growth in the cost of aviation gasoline is expected since most major oil refining companies will probably stop producing aviation gasoline because of the small amounts required. This will cause an increase in distribution costs.

VI. Political Risk

There will be an increase in international political risk in the short term, followed by a leveling off at a higher level than at present. There will be no major war in the near term involving superpower intervention.

VII. Capital Acquisition by the Aviation Industry

Today the airline industry is perceived to be a below average investment opportunity. It will continue to be viewed this way. All but the most profitable airlines will have decreasing success in raising capital through normal methods. New methods will have to be devised even though they prove to be more costly. Because of the higher cost of capital, or in some cases the lack of ability to attract capital at any acceptable cost, fewer profitable airlines are expected to survive.

VIII. International Aviation

- A. There will be a modest increase in deregulation in the international area, but not approaching the degree of deregulation in the United States.
- B. Foreign passengers will continue to be the greater portion of travelers between the United States and other countries.
- C. Although not its direct responsibility, the Macro Business Environment Group forecast the share of total world traffic carried by international airlines. The group was asked to reveal this forecast during general discussions at the end of the meeting.

Headquarters	. 1	World Traffic	Share,	Percent
of Airline		1980	1995	
United States		41	35	5
Europe		27	27	7
Far East	-	13	15	5
South America		5		7
Middle East		4	ţ	5
Canada		4	4	1
Africa		3	4	1
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

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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 prederegulation 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