inclusive-tour charter traffic to and from the UK should be around the 1m mark this summer. Although the ATLB would probably admit that this is more than is good for scheduled operators, there is nothing they can do to stop foreign carriers obtaining permits from the Ministry of Aviation. And in any case, the Board's generous policy towards British carriers has undoubtedly benefited British civil aviation in the sense that it has slowed down the headlong growth of the foreign operators. Instead of the annual doubling to which they have become accustomed, these airlines will now have to fall in line with the independents' annual increase of one-third to one-half. Having now cornered a larger share of the market for British carriers, the Board can now be expected to turn its attention to the possibility of exerting some form of positive control over the total volume of inclusive-tour charters, taking both British and foreign carriers together.

DC-9 PRODUCTION PLANS

IN the world of civil aircraft manufacturing the DC-9 cost-sharing agreement which Douglas are now in the final stages of concluding with seven major component subcontractors and scores of smaller suppliers is without doubt unique. In spite of Douglas's established place in the industry, and the company's market predictions which—backed by reliable airline opinion—indicate an enormous requirement for short-range jet airliners over the next ten years, Douglas have still decided that it is better to share their profit (or loss) even though they regard their chances in favour of breaking even as six to one.

Mr Jackson R. McGowen, vice-president and general manager of the Douglas Aircraft Division, has said that "if we sell 150 at least we won't lose any money, and sales of 200 would be profitable." Mr McGowen has put the market for aircraft of the DC-9 type at over 1,000 during the next seven years. This estimate of size presumably refers to the same market that the larger Trident and 727 and the similar-sized BAC One-Eleven and Caravelle are aimed. Mr McGowen says that Douglas hope to get 40 per cent of this market. As BAC, Boeing, de Havilland and Sud have already taken orders for 22 per cent of the total estimated market, Douglas appear to be optimistic. Douglas's main competition for the very big US domestic market will be the Boeing 727, and although the DC-9 is smaller than the 727 it has similar range and its operating cost (estimated by Douglas on the ATA formula as $1 per aircraft mile with a 32 per cent breakeven load factor) is likely to be at least as good with the added advantage of smaller size for higher frequencies, and better load factors on less dense traffic routes. Competition from the One-Eleven is likely to be restricted only to those airlines such as American, where early delivery is vital, and to local service airlines, where the lower first price will be an important consideration. Mr McGowen is also reported to have said: "There is room for one or two manufacturers in the market, but three could provoke a disastrous situation." With the One-Eleven, Caravelle, and possibly the F-28 and Jet Herald, Douglas are not going to have it all their own way in overseas markets.

Apart from the recently announced $65m contract with de Havilland of Canada, who will produce wings and tailplane assemblies, seven US aircraft ancillary manufacturers are about to sign up an agreement on deferred payment for developing and producing major components of the DC-9. These associated companies will be responsible for about 45 per cent of the total DC-9 development and production effort. Components to be produced by sub-contractors under the plan are engine pod assemblies, electrical generating system, landing gear, wheels and brakes, the automatic flight control system, pressurization and air-conditioning system and ice-protection system. Each participating company will use its own capital to pay for the engineering, tooling, testing and production. Douglas will purchase completed portions under a firm, fixed-price contract covering a specific number of units. Payment will be completed upon delivery of the aircraft to airline customers.

Summing up the agreement, Mr John C. Brizendine, Douglas (aircraft) assistant general manager, DC-9, says: "The companies associated with us have accepted the same terms and conditions of business under which a commercial manufacturer operates in developing, producing and marketing a transport aircraft. Commercial aircraft are sold at a fixed price and a major portion of the payment is made only on delivery. Participants in the DC-9 major sub-contracting programme have agreed to the same terms. They will recover their investment in the same manner as Douglas—that is, spread over a quantity of aircraft delivered. In return Douglas guarantees the sub-contractor a fixed amount of business."

First flight of the DC-9 is scheduled for March 1965, and airworthiness certification by February 1966. Five aircraft will be used in the test programme and Douglas have said that four or five aircraft will be delivered prior to certification for some airlines to begin crew training. On this basis the Douglas consortium must be aiming to complete at least ten aircraft within a year of the first flight.

US SWING TO M2?

ACCORDING to the publication *Aviation Daily* the Federal Aviation Agency has apparently had second thoughts about the economic feasibility of a M3 supersonic airliner, and is "on the brink of recommending" construction of a M2 airliner. The FAA's official attitude, in the words attributed to a spokesman, is that "the FAA has both M2 and M3 under consideration."

As previously reported in these pages, the FAA's supersonic advisory group is working to a schedule set by the White House calling for delivery of its report to the Vice-President, Mr Lyndon Johnson, by June 1. It is presumed that this report will express considered US technical opinion on the relative merits of M2 and M3, though the choice is one of time rather than US technical ability. Most technical US opinion appears to favour going straight for M3.

It is now thought likely that the FAA's report will not be completed by the June 1 deadline and that it may, according to *Aviation Daily*, be more likely July 1 and perhaps even later.

An article in *Flight International* for April 18, pages 559-560, described the four basic "SCAT" NASA design configurations now being studied by Boeing and Lockheed teams.

BEA announce the following appointments: left to right, Mr W. H. Bond, at present timetable superintendent, becomes sales development manager from September 1; Mr Harry Collis, at present sales manager (USA), is to return to London to take up the post of sales manager (Continent) from October 1; Mr Peter Leuw, at present sales development manager, is appointed sales manager (USA) from October 1; and Mr John Norton, at present passenger sales manager (Continent), becomes advertising manager from July 1 in succession to Mr John Burkart, who is leaving to take up an appointment with a London publishing house