The MRCA Tonic

LAST week's announcement that the British and West German governments have decided to go ahead with construction of prototypes of the Multi-Role Combat Aircraft (MRCA) was about the only bright spot in a week of almost unprecedented gloom in the aircraft industry. The Lockheed aircraft company has been experiencing severe financial strictures which could eventually and almost unbelievably take it into bankruptcy, while Rolls-Royce has been anxiously looking on from the other side of the Atlantic, conscious that its largest export order may sink with Lockheed, and aware that everything in its own garden is far from rosy.

The nub of the MRCA agreement is that the governments of Britain and West Germany have decided to cooperate bilaterally on the aircraft, but it is hoped that Italy will also join in. A decision from Italy is expected by the end of August—if her political situation permits—and if all goes well, Italy should contribute about 15 per cent of the costs. The rest will be split between West Germany and Britain, with Germany contributing slightly more. Even if Italy decides not to take part, Britain and Germany will still go ahead.

As far as the orders are concerned, Germany is expected to buy 420 aircraft, Britain will buy 350–400, while Italy will probably take about 100. If the project does reach the production stage, the MRCA will be the largest single aircraft project in Europe, but there are a few doubts about the possible number of orders. When the idea was first discussed, Germany was thinking in terms of taking 600 aircraft, but that estimate has since been revised, and there is speculation that a more realistic figure may be nearer 300. The original suggestion was also for a mixture of twin- and single-seater aircraft, but West Germany has now decided that it wants only the two-seat version (see *Nature*, **226**, 580; 1970).

Control over the project has been vested in the hands of the NATO MRCA Development and Production Organization, which was set up by the governments taking part, and the executive management will be carried out by the NATO MRCA Management Agency. The airframe will be constructed by Panavia —a company formed by the British Aircraft Company, Messerschmitt-Boelkow-Blohm and Fiat. BAC will make the nose and tail sections, including the rudder, MBB will make the centre fuselage, and Fiat the wings. If Italy drops out of the project, the wings may be constructed in Germany.

Engine development will be the responsibility of Turbo-Union, formed from Rolls-Royce Bristol Engines Division, Turbinen and Motoren of Germany, and Fiat, and the Rolls-Royce RB-199 engine has been picked for the project. But the avionics side is less clearly defined. An organization called Avionica has been formed from Elliott Automation, Elektronik-System Gesellschaft and Selenia and Fiat, but this organization only has advisory status, and the individual contracts will probably be open to tender.

As far as the rest of the world's aircraft industry is concerned, it is no coincidence that troubles seem to be heaping up on many companies at once—the whole industry is facing much the same problem. Airframe manufacturers have found themselves caught between two generations of body design, while the engine companies are busily adding a new generation of engines to their present ranges—the Rolls-Royce RB-211, for example, which is scheduled for the Lockheed L-1011 "TriStar", is a radically different design from the Spey engine, and it costs four times as much to develop. The upshot is that the aircraft companies have sunk huge amounts of capital into development of expensive new designs, and they have still to see any hard cash in return for sales.

Chief casualty of the financial malaise of the industry is the Lockheed Aircraft Company. It has found itself so short of ready cash that unless it gets an immediate injection of $430 million it may be pushed over the brink and into financial insolvency. Lockheed is feeling the pinch from recent cutbacks in NASA's spending, but at the heart of its troubles lies the cost overruns on the giant C-5A transporter which the company is developing under contract from the Department of Defense. Already some funds which have been provided by the banks, chiefly to safeguard production of the TriStar, have found their way to the C-5A, and the largest portion of a $430 million package that has been put together to keep Lockheed solvent includes $200 million from the government to meet the overruns. The rest of the money has been promised from bank loans and from the airlines which have put in orders for the TriStar.

If the package can stay together, Lockheed may be able to last out the financial storm until it sees some return on its investments in the TriStar, but there is considerable doubt about the $200 million "contingency fund" from the Senate. It forms part of the 1971 Defense Authorization Bill which is being debated this week, and Senator Richard Schweiker plans to submit an amendment to delete $200 million from the C-5A authorization. His argument, which is likely to find several friends in the Senate, is that it is not the business of the government to subsidize inefficient management and that the door should be firmly shut to firms which deliberately underbid to secure a contract and then come cap in hand to the taxpayer for money to meet the cost overruns. If Senator Schweiker succeeds, Lockheed, the largest recipient of defence contracts in the US, could well follow the Penn Central Railway Company into official bankruptcy.

The cold wind from that event would be enough to blow several other companies off course, including Rolls-Royce. Development of the RB-211, specifically for the TriStar, is the chief cause of the financial troubles that were revealed during last week's annual meeting. If the TriStar does leave the production line, Rolls-Royce should notice the effect on its finances by about 1973 or 1974. But already the huge export order to Lockheed that once excited British industry looks a little less healthy than it did when it was announced. Lockheed was then confidently expecting to sell at least 350 aircraft, but, so far, only 173 have been ordered. Rolls-Royce's potential export earnings have, of course, shrunk with Lockheed's order book, and the company certainly welcomes the opportunity to sell its engines to the MRCA project.