

MODIFICATION MAX KINGSLEY-JONES / LONDON

BR715 offered for MD-80

Market for re-engining the twinjet is being studied by Rolls-Royce and Boeing

Rolls-Royce and Boeing are jointly studying the viability of setting up a programme for re-engining the MD-80 twinjet with the BR715 powerplant.

R-R says that the study has involved Boeing offices in Long Beach and Seattle and its Airplane Services (BAS) arm. It is based around the adoption of the BR715 engine installation hardware from the 717-200.

This 100-seater shares the same McDonnell Douglas DC-9 lineage as the larger, Pratt & Whitney JT8D-200-powered MD-80 family. Although the MD-80 meets the latest Stage 3/Chapter 3 noise regulations, it is only marginally compliant. It would need modifications to meet the more stringent regulations that are expected to be introduced in the future.

According to Ken Lilley, R-R

head of marketing for small engines, the BR715 would be offered at its full 21,000lb thrust (93.5kN) rating for the MD-80, making it suitable for the lower weight variants (ie not the high gross weight MD-83). According to R-R there are 800 suitable aircraft of which 350 are the intermediate weight MD-82 model, considered the most viable candidate for the programme.

"The modification would provide a cumulative noise reduction of 10db, and up to 20% reduction in fuel consumption depending on the mission," says Lilley. The quieter BR715 would, therefore, bring the MD-80 well within the planned Chapter 4 noise limits. It would also provide the aircraft with superior climb performance, Lilley adds.

The viability study with Boeing is expected to be concluded by the end of the year, says Lilley, who

claims it is likely that the project would come within the remit of Boeing's Wichita-based BAS division. However, BAS is currently less enthused about the project, saying: "We did an internal study on re-engining the MD-80 with the BR715, but there didn't seem to be a market so we walked away."

Talks are already underway with MD-80 operators, says Lilley, who adds that if the go ahead is given, and a launch customer found, the conversion could be certificated and in service in 24-30 months.

P&W, meanwhile, is believed to be keen to retain its grasp on the huge installed fleet of MD-80s, and has begun development of a Chapter 4 hushkit for delivery by early 2006. A re-engining programme utilising the PW6000 has also been studied, but is believed to be unlikely.

SAFETY

Rus Airlines grounded after Il-76 accident

A Rus Airlines Ilyushin Il-76MD crashed, killing all 10 people on board, as it took off from Chkalovsk air force base near Moscow on 14 July. The aircraft (RA-76588) hit the ground in a small forest about 400m (1,300ft) from the runway end, having reached a maximum height of 150ft.

The Il-76 was bound for Norilsk with a cargo of consumer goods, and was carrying a crew of nine along with a State Service of Civil Aviation (GSGA) flight check pilot.

Following the accident, Rus, which has been growing rapidly, had its air operator's certificate suspended pending the initial investigation reports. These should be available soon because the flight data recorder information is now understood to have been downloaded. A European Civil Aviation Conference Safety Assessment of Foreign Aircraft audit of one of Rus' fleet at Ostend, Belgium, resulted in an allegation that the airline had extended the life of some components without doing the required work.

The investigators say that the first analysis of the cockpit voice recorder (CVR) indicates that the person at the controls may have been the GSGA check pilot. GSGA sources state that their check pilots are authorised to take any cockpit position, but Rus says that this pilot was experienced on the Ilyushin Il-62, a passenger jet with a very different profile. Unconfirmed reports indicate that there was heavy fog at the time and that the aircraft was overweight.

This is the second accident this year in which an Il-76 has been written off (see P38), though the 18 April loss was not fatal. Since 1990 there have been 20 Il-76 accidents, taking into account both military and non-military operations. One involved a mid-air collision.

SAFETY DAVID LEARMOUNT / LONDON

Test flights from Heathrow validate Concorde fuel tank modifications

A British Airways Aerospatiale/British Aerospace Concorde was about to land back at London Heathrow after completing two "validation" flights as *Flight International* went to press. Capt Mike Bannister, chief pilot of BA's Concorde fleet and commander on both flights, says the tests have shown that safety modifications will not have any overall effect on

the aircraft's range or payload.

Bannister reveals that the new Kevlar/rubber fuel tank liners reduce the aircraft's usable fuel capacity by about 350-400kg (770-880lb), and add 150kg to the aircraft weight. Offsetting this, however, new cabin interiors will save 350kg, and new Michelin radial tyres will save another 160kg. Bannister concludes the overall

operational effect is "neutral", and that calculations done prior to the validation flights were "pessimistic".

Upon return of the certificates of airworthiness (CofA), Bannister says BA plans to carry out up to four operational assessment flights to ensure that the whole Concorde customer service system is up to standard. A date for return to service, he says, is more likely to be limited by the time it takes to get three Concorde - the minimum needed for a single daily London-New York round trip schedule - refitted and tested, than by the restitution of the CofA. BA still estimates "late summer/early autumn" for commercial flights to resume.

Air France says three of its Concorde aircraft will have undergone Kevlar liner installation before autumn, and work on a fourth will begin shortly. All the French airline's Concorde crew are undergoing refresher courses.



Concorde's return to service has moved closer following BA's test flights