Spain joins 'ATR 92' study

by Gilbert Sedbon in Paris

Spain has joined France and Italy in the study and possible construction of an 80/100-seat regional airliner to enter service in 1995.

Aerospatiale, Aeritalia, and Casa have signed a memorandum of understanding on a market survey to define the new aircraft. The three manufacturers will evaluate various propulsion systems including turbofans, high-speed turboprops, and propfans.

Both Aerospatiale and Aeritalia have been planning to expand their ATR family (the 40/50-seat ATR42 and 60/70-seat ATR72) with a new aircraft in the 100-seat class, the ATR92. This may well be a compromise between two designs still on the drawing board. Aerospatiale's AS100, and Aeritalia's VMA (Vehicolo Medio Avanzato), Casa, which builds the CN-235 and C.212 regional turboprops, may join the ATR group with the proposed 80/100-seat aircraft.

Aerospatiale and Allison have signed an agreement to evaluate both propfan and high-speed turboprop propulsion systems based on the US engine company's T406.

Aerospatiale believes it is possible to produce an 80/100-seat aircraft with low fuel consumption and high reliability at an attractive cost and with greater comfort than the Fokker 100 and British Aerospace 146.

Allison's propfan propulsion system consists of a T406 with a gearbox and counter-rotating propfan module. Allison's 6,000 s.h.p.-class high-speed turboprop uses the T406 core with gearbox and new propeller. Other engines under consideration include the General Electric unducted fan.

The market for the new 80/100-seater is estimated at more than 2,000 aircraft, with Aerospatiale, Aeritalia, and Casa providing 800 to 1,000 of those by 2010 if they join on the project.

Aerospatiale and MBB study submarine-launched SAM

Aerospatiale and MBB are studying a fibre-optic-guided surface-to-air missile to protect submarines from maritime patrol aircraft and anti-submarine helicopters.

Polyphone SM will enable a deeply submerged submarine to engage aircraft up to 5 nautical miles distant. Previous submarine-launched SAMs require the boat to come up to periscope depth to fire, but Polyphone SM can be launched from depths down to 99m and at submerged speeds up to 50kts. This enables the submarine to avoid sonar.

The missile is encased in a watertight torpedo-like capsule expelled by compressed air from the submarine. When clear, a boost rocket drives the pod upwards at 15m/sec. On breaching the surface the capsule splits longitudinally, the missile's wings extend, and the cruise motor takes over.

Polyphone SM is 1.85m long, 165mm in diameter, and weighs 43kg. In the nose is a thermal-imaging camera, behind which is a 3kg warhead. The centrebody contains the boost and cruise motors, while the rear section houses the guidance electronics and fibre-optic cable transducer. Maneuuvring is by rocket exhaust vectoring.

On leaving the pod, the missile's thermal imager is activated, enabling the operator to view the aerial scene via fibre-optic cable. Once a target is selected, the missile homes automatically.

The Aerospatiale and MBB concepts differ only in the missile storage and launch methods. The West German Navy prefers to launch from the boat's torpedo tubes, the French from a vertical launch silo.

Byebye BCAL

A McDonnell Douglas DC-10 and Airbus A320 which formerly belonged to British Caledonian appear together in their new British Airways livery for the first time. BA inherited BCal's DC-10s and an order for ten Airbuses when the airlines merged earlier this year. All of the DC-10s, used on routes to Africa, the Gulf, and the USA, and the A320s, which are used in Europe, are now being repainted in BA colours.

B-52s grounded after accident

The US Air Force briefly grounded its fleet of 261 B-52 bombers last week after a B-52H burst into flames during a touch-and-go exercise.

The aircraft broke into three parts after an explosion was reported on board during the approach to K. I. Sawyer AFB, Michigan. The crew of eight had been flying a seven-hour training flight. All escaped from the aircraft, although some were injured.

The USAF quickly isolated the fuel system as the likely cause of the accident, and is allowing B-52s back into the air only after inspections of the forward aft-body, and centre-wing fuel tanks. These will take about four hours per aircraft.

There have been no recent problems with B-52s. A Strategic Air Command spokeswoman told Flight that she could not remember the last time the fleet was grounded.

D The search for a US Navy EA-6B Prowler reported missing while training off the coast of San Diego has been called off. Four crew members were aboard.

Nigeria secures DC-10 money

Nigeria Airways has secured a $60 million loan from an unnamed Japanese leasing corporation to buy the last DC-10 built.

The airline says that the 15-year loan will let it replace the DC-10 it lost in a crash in January last year.

Its international services have been disrupted by the loss of the DC-10, in addition to the impounding of two Airbuses in France for failure to pay debts and the grounding of a third for lack of spares.

The operator claims that the Nigerian Government has allocated $17 million assistance.

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