

AIRCRAFT DEVELOPMENT ANDREW DOYLE / TOKYO

Japan's hopes for CX/MPX commonality fade

Platforms for transport and maritime patrol aircraft are bound to be completely different, warns industry

Industry is sceptical over the level of commonality possible between the Japan Defence Agency's (JDA) proposed C-X and MPX aircraft programmes after the release of a request for proposals (RFP) in May.

One Japanese company planning to bid for contractorship of

the project estimates airframe commonality potential as small due to differing operational requirements.

"Some parts would be used for both aircraft, such as the outer main wing, outer horizontal stabiliser and cockpit," says one source. "But I don't think we can

use commonality much."

The C-X and MPX are to be developed by Japanese industry to replace Air Self-Defence Force Kawasaki C-1 transports and Maritime Self-Defence Force Lockheed Martin P-3C Orion maritime patrol aircraft. The JDA aims

to cut development costs by using a common platform.

The MPX is likely to be equipped with four engines while the cargo variant is expected to be a twin. The pair could also need different fuselage cross-sections.

Responses to the RFP are due by the end of next month, and Fuji, Kawasaki and Mitsubishi Heavy Industries are expected to bid for prime contractorship. Five smaller firms are bidding for subcontracts to design, develop and manufacture subassemblies.

The JDA envisages MPX development in 2001 to 2010 with a first flight in September 2006. The C-X would be in development until 2011 and fly in September 2007.

Boeing aims to offer a variant of its C-17 for the C-X, but Boeing Japan president Rick Martin does not believe that the development of a single airframe for both requirements can provide a solution.

ENGINES

Turbofan to be launched for MPX by 2004

Japan's Technical Research and Development Institute (TRDI) and Ishikawajima-Harima Heavy Industries (IHI) aim to launch the full-scale development of a turbofan engine for the country's planned MPX maritime patrol aircraft by 2004. TRDI is part of the Japan Defence Agency (JDA), which is funding the work.

The 8:1 bypass ratio powerplant, four of which would power the MPX, will be designed to produce 13,000lb-thrust (58kN), says IHI general manager defence systems sales and marketing Hidemi Haga. Around \$60 million has been allocated for development costs in the fiscal year that started in April.

A test engine, incorporating a core demonstrator that has been worked on by the TRDI and IHI since 1995, is

expected to be run by August, says Haga.

The JDA is understood to favour using commercial off-the-shelf engines for the C-X transport aircraft which is likely to be a twinjet. Other Japanese engine manufacturers, such as Kawasaki and Mitsubishi Heavy Industries, are expected to be brought into the production phase once IHI-21 development has been completed.

The MPX engine development will be Japan's most ambitious to date, though IHI previously developed the 3,680lb-thrust F3-IHI-30 with the JDA for the Kawasaki T-4 trainer. Series production began in 1987.

IHI hopes to design and produce engines itself for advanced fighter aircraft. It currently produces engines under licence for Mitsubishi F-2.

UNMANNED AIR VEHICLES ANDY NATIVI / GENOA

Italy to land first Predator in 2002

Alenia/Finmeccanica Meteor subsidiary secures deal with General Atomics to assemble country's first four UAVs

The Italian Air Force is to receive its first General Atomics RQ-1A Predator unmanned air vehicle (UAV) by the fourth quarter 2002.

Italian Ministry of Defence procurement body Segredifesa and General Atomics are finalising a contract for five of the UAVs, plus an option for three more. The deal will also include a ground control station, installed in a tactical transportable shelter, datalink, simulator and initial logistic and training support. Predator was selected over Israel's Silver Arrow UAV - which is marketed in Europe by EADS as the Eagle - following the RQ-1A's successful performance during Operation Allied Force in the Balkans.

The first UAV will be delivered with full mission systems, comprising infrared sensors and television cameras, and will be used for training. Predator is set to achieve

initial operational capability with the Italians by the second quarter of 2003 and full operational capability in 2005.

The Predator programme is jointly funded by the Italian armed services. The first five aircraft will cost \$50 million, to include product support, while the second batch of vehicles is expected to cost around \$16 million. The Italian air force will operate the Predators through a newly-created UAV squadron, to be co-located at a military airbase with a manned aircraft squadron. The Predator control centre will also be designed for installation on a ship.

Alenia/Finmeccanica's Meteor subsidiary has signed an agreement with General Atomics to assemble four of the five Predators on order, plus the three options. The Italian company will also provide maintenance, training and support

services, as well as the ground control station.

The Predator programme offers a major move for the Italian air force into the UAV arena. Discussions are underway with the Italian civil aviation and air traffic control bodies to establish certification and operational requirements which will allow the UAVs to operate outside

military aerospace boundaries.

While the Predators will initially be deployed for surveillance, monitoring, intelligence, reconnaissance and battle damage assessment missions, the air force is looking at more advanced sensor options, proposals for which have already been submitted by Northrop Grumman and General Atomics.



The Predator represents a major move by Italians into UAVs