Team JCA doubles up for army, air force bids

Team JCA is emphasising its contenders' operational record and fuel efficiency.

Team JCA – the Raytheon and EADS Casa North America grouping offering the CN-235 and C-295 for the US Joint Cargo Aircraft (JCA) programme – believes that two into one will go when it comes to bidding for the project.

It has submitted two bids for the US Army and Air Force requirement for an intra-theatre transport, one based on the CN-235 and one on the larger C-295.

"The CN-235 provides our best cost offering while the C-295 provides our best value offering," says Tom Kennedy, vice-president, Integrated Airborne Systems at Raytheon.

"The requirement is for the JCA to carry three pallets. The CN-235 carries three-and-a-half pallets – the C-295 carries five." The latter's longer fuselage, he adds, is particularly useful for dealing with lengthy loads, such as helicopter rotor blades.

The aircraft at Farnborough is outfitted with some of the kit for the JCA Early User Survey (EUS), due to start this autumn, including the communications fit and some of the defensive aids.

EUS will allow army and air force evaluators to validate the claims made for Team JCA and its competitors, the GMAS C-27J Spartan and the Lockheed Martin C-130J Hercules.

Kennedy believes that his team's contenders will benefit both from the fact that they have seen active service (the Polish air force's C-295s are flying in Afghanistan, for example) and fuel economy.

Missile booster test success

Lockheed Martin and Alliant Techsystems have successfully test-fired a first-stage booster motor under the submarine-launched intermediate range ballistic missile (SLIRBM) booster system demonstration for the US Navy.

The modified ATK Orion 32-7 booster was fired for 50s at maximum thrust at an ATK test facility in Utah.

Boeing sweats on Indian P-8 pitch

Boeing (Outside OE15) is awaiting the outcome of its P-8A Multi-mission Maritime Aircraft offer to India, which issued a Request for Proposals for eight long-range maritime patrol aircraft in April.

The Indian export model would be designated P-8I

The P-8A, the replacement for the US Navy's P-3C Orion fleet, is based on the Boeing 737, using the fuselage from the 737-800 and the wings from the -900.

Does Hercules have the strength to carry on?

Jon Lake

The UK Ministry of Defence (MoD) is being forced to seek an interim replacement for its ageing Special Forces C-130 Hercules fleet before the Airbus A400M military transport enters service.

There is a real fear that the ageing aircraft, which are amassing flying hours and fatigue much faster than expected, will not last until 2011. Two operational losses in Iraq and Afghanistan have further exacerbated the situation.

The fleet consists of four short-bodied Hercules C1s augmented by six long-bodied C3As, collectively known as the 'Antiques Roadshow'.

The aircraft, flown by 47 Squadron's Special Forces (SF) Flight, have been extensively modified for the SF role and are receiving a £20 million ($37 million) Enhanced Vision System upgrade.

They were to have been replaced by the 10 'short' C-130Js (C5s) delivered as part of the RAF's C-130J purchase, but centre of gravity problems and difficulties with integrating kit – especially the RAF's comprehensive DASS – on these aircraft proved intractable.

An MoD study into replacing this capability is expected to take about one year, Ian Stopps, chief executive, Lockheed Martin UK, said at Farnborough. Lockheed will likely offer a conversion of the existing Hercules C5s and a purchase of additional aircraft to meet the requirement.

Solution

In many ways, a solution based on the older 'Heritage Hercules' would be preferable, since the C-130J's two-man flightdeck is felt by many to be less useful for Special Forces operations, and since it is easier and cheaper to modify a mature aircraft.

Earlier this week, Boeing briefed the appropriate director of equipment capability on its C-130 Avionics Modernisation Programme (AMP), pushing an upgrade of the existing aircraft as the best solution to the RAF's SF requirement.

Boeing used Farnborough to reveal its 'secret weapon' – a Total Life Extension programme that promises to deliver a 30,000h extension to Hercules life.

Boeing has used its experience of working on the C-17 wing box to design an innovative centre wing box refurbishment that does not require removal of the wing or wing box, and is therefore cheaper and quicker than solutions based on Lockheed's technical order.

Wind River software for A400M refuelling pod

Safety-critical software supplier Wind River (Hall 2, B11) announced here that its VxWorks real-time operating system (RTOS) had been chosen for use in the digital control unit of the Cobham 900E-series air-to-air refuelling pods destined for the Airbus A330MRTT and A400M tanker-transports.

The software runs the pod refuelling control unit (RCU), which operates the electric hose-reel motor and brakes and the ram-air turbine that powers the fuel pump. It also monitors hose-reel speed, fuel pressure, turbine speed and a dozen sensors inside the pod, provides built-in testing (BIT) diagnostics, and supplies advisory, caution and warning information to the operator station in the aircraft.

"Our RTOS is a building block for growing number of safety-critical systems," says Wind River senior programme manager Alex Wilson. "Aerospace manufacturers are looking increasingly to readily available off-the-shelf solutions. "

Leasing option emerges for UK lift

Potential candidates to meet the UK's increasingly urgent medium lift helicopter requirement have been on show at Farnborough this week.

AgustaWestland unveiled more details about the AW149 and Eurocopter displayed the EC725 on the static park.

The UK Ministry of Defence (MoD) has yet to decide how to spend an estimated £1 billion ($1.8 billion) available over the next 10 years for the medium lift requirement from an overall spend of £3.1 billion on helicopter procurement.

More than £2 billion has already been eaten up by the recently confirmed order of 70 AgustaWestland Future Lynx helicopters and investment in the Merlin Capability Sustainment Programme (CSP).

Eurocopter's EC725.

The MoD is contemplating three options to upgrade the UK's medium lift/support capability – a straight purchase of new helicopters, which would need to be phased because of cost restrictions, a leasing agreement as an interim measure, or near-term upgrades to the existing Westland Puma HC1 and Westland Sea King HC4 fleets.

The recent experience of British forces in Afghanistan, where commanders have had an extremely limited number of helicopters to support operations in Helmand province, has underlined the findings of a 2004 National Audit Office report which found that the UK had a significant shortfall in helicopter capability.