



Apache weapons-integration work would add new string to Shorts' bow

Martin Marietta and Shorts reveal talks

BY KEVIN O'TOOLE

Short Brothers and Martin Marietta have revealed that they are holding discussions over a possible international tie-up, based around the weapons-systems integration work being carried out for McDonnell Douglas Helicopter's (MDH) AH-64 Apache bid for the British Army attack-helicopter contract.

An alliance could see efforts to offer Short's laser-guided Starstreak close-air-defence missile system for the US Army's Apaches.

The UK requires that the high-velocity Starstreak be included as an option on all bids for the attack helicopter, and Shorts says that it contacted the six bidders before the November 1993 deadline.

Just before the deadline, the Belfast-based company also announced that it had joined the Westland/MDH team offering the Longbow Apache.

Shorts has been offered a package of aero-structures work on the bid, but is also pursuing weapons-integration work with Martin Marietta, which, together with its partner, Westinghouse, produces the Longbow.

The Longbow system is based on a millimetre-wave mast-mounted radar and seeker head for the RF-Hellfire anti-armour missile.

The British Army has yet to decide on its anti-armour weapon for the attack-helicopter requirement. The Euro-missile Trigat LR (long-range) represents the main opposition to the Hellfire.

Shorts and Martin Marietta admit that their discussions cover more than the issue of integrating the Starstreak into the Longbow for the bid. Martin Marietta says that the talks "...go beyond Hellfire" and cover the potential for joint "efforts in the US and other parts of the world".

Neither side is prepared to give details, but Martin Marietta could help Shorts to bring the Starstreak to a wider market. Such an effort could possibly count towards any offset, if the team's UK attack-helicopter bid is successful.

Shorts confirms that it is "talking quite separately with Martin Marietta on a number of other areas", but the Northern Ireland company will not add whether this is on weapons, aerostructures or both.

The US Army has come under pressure to find a more capable air-engagement weapon for its Apaches as an alternative to the existing Hughes Stinger. The Starstreak is being evaluated by the US Missile Command as a complementary missile to the Stinger on the Avenger air-defence system and other platforms. □

ATARS sensors given F-18D lifeline

Sensors developed for the cancelled Martin Marietta advanced tactical air-reconnaissance system (ATARS) are to be used in a version of the McDonnell Douglas (MDC) F-18D for the US Marine Corps.

The F-18 was intended to be the lead application for the tri-service ATARS, which was cancelled in June 1993 after both going over budget and falling behind schedule.

The cancellation came as MDC was preparing to flight-test the sensors in an F-18. The tests went ahead, says F-18 programme general manager Mike Sears, and the sensors "...worked pretty well".

The result is a single-service requirement to equip 31 Marine Corps F-18Ds as reconnaissance aircraft, he says.

The aircraft will be fitted with the electro-optical over-

flight sensors developed for the ATARS, a long-range optical sensor and a modified version of the F-18's Hughes APG-73 radar, capable of producing high-resolution strip maps.

Sears says that the ATARS ran into problems with integration and the video-recording system. "The sensors were developed," he notes.

Development of the radar strip-map capability has not yet been started, but would use the new processor going into all F-18s which are delivered after June 1994. This has been developed to improve the aircraft's electronic counter-countermeasures capability.

Reconnaissance is one of the missions being looked at for US Navy F-18s, Sears says, as the service studies the feasibility of reducing the number of aircraft types on its carriers. □

Israeli Piano tuned for production

A passive electro-optical missile-warning system which can be used on a variety of platforms, including helicopters, has been developed by TAAS in Israel.

TAAS, formerly Israel Military Industries, has released limited details about the system, called Piano. According to the company, the system's passive electro-optical sensor detects certain "emissions" from the missile motor. When these emissions are detected, the

Piano displays an instant visual and audio alert.

According to TAAS, the system provides 360° coverage and is capable of detecting anti-aircraft and anti-tank missiles. The warning system can also be linked to various countermeasures systems.

A series of field tests has already been completed on the prototype of the warning system and, according to TAAS, "...we can start production within months". □

NEWS IN BRIEF

AV-8B DECISION

The Royal Thai Navy is expected to decide by mid-1994 whether to buy ex-Spanish navy British Aerospace AV-8A Matadors or new McDonnell Douglas AV-8B Harrier II Plus to equip an aircraft carrier on order from Bazan, the Spanish shipyard which built Spain's carrier, the *Principe d'Asturias*.

E-8A HANDOVER

Grumman has handed over the two E-8A Joint Surveillance Target Attack Radar System development aircraft

to the US Air Force. Once the 18 planned E-8C production aircraft have been delivered, the E-8As will be returned to Grumman for upgrading to E-8C standard. The E-8As will be used for tests and will form a contingency force.

DELIVERY MISSION

Westinghouse has begun delivering to Boeing Helicopters data- and signal-processing components for the Boeing Sikorsky RAH-66 Comanche helicopter's mission-computer cluster.