

India considers Magic for its MiG-21s...

BY MARTIN STREETLY

India is considering including the Matra Magic 2 short-range infra-red guided air-to-air missile (AAM) as part of its proposed upgrade for around 100 of its Mikoyan MiG-21 Fishbed fleet.

Industry sources close to the programme say that the ability to accommodate Magic 2 integration is emerging as a potential part of the requirement for the central computer for the upgrade. The Magic would provide an alternative to the Russian Vympel R-73 (AA-11 Archer) agile AAM.

A "prototype" of Mikoyan's proposed MiG-21 upgrade is understood to have been displayed at the Avia India 93 air show in Bangalore in December 1993. The prototype was claimed to be fitted with the Phazotron Kopyo multi-mode radar, which replaces the Jay Bird system.

Along with an improved radar, the Mikoyan upgrade also has new cockpit displays, central computer and a revised navigation/attack system.

A Mikoyan upgrade package could also include a threat-warning system from Dassault Electronique. The French com-

pany has developed the EWS-21 threat warner, optimised for use on Russian aircraft.

The system is a full-band instantaneous frequency-measuring system made up of an avionics-bay processor, fin-mounted radome unit, housing four antennae, and night-vision-goggle-compatible cockpit display.

The EWS-21 can control both Western and Russian chaff/flare dispensers.

Dassault Electronique is also proposing an avionics package alongside the EWS-21. This would cover a central computer, 1553 databus, Russian/

Western-compatible stores-management system, and a flight-data recorder. Mikoyan is also collaborating with Thomson-CSF on a more extensive upgrade of the MiG-21, which it is also offering to India. □

US Army plans Bell donation

The US Army plans to release retired Bell OH-58A Kiowa and UH-1H Iroquois helicopters to law-enforcement agencies from fiscal year 1995.

This follows a programme, which was begun in 1991, to place Hughes OH-6A Cayuse light helicopters that are retired from National Guard service — first with the US Border Patrol and Drug Enforcement Agency and then with local police forces.

The helicopters are offered in "as is" condition. A police force taking one of the OH-6s is responsible for refurbishing and operating the machine and the helicopter must be used in operations against drugs.

The US Army says it has placed numerous OH-6s with local law-enforcement agencies such as highway patrols and sheriffs' departments.

The last of more than 200 OH-6As, similar to the civil Hughes (now McDonnell Douglas) 500, will be retired by September and the Army will then begin releasing OH-58As and UH-1Hs to federal and local law-enforcement agencies for counter-drug use.

The OH-58A is similar to the civil Bell 206B JetRanger. The Army plans to retire several hundred OH-58s and UH-1s over a five-year period.

Sherry Hadley, executive director of the Airborne Law Enforcement Association, says that the Army programme has resulted in the formation of several police-aviation units.

Manufacturers say that the availability of retired OH-6s has had a mixed effect on new helicopter sales. Some police forces have been discouraged by the refurbishing costs. □

...as Elbit faces Fishbed problems

Romania's plan to upgrade 100 of its Mikoyan MiG-21 Fishbed fighter aircraft has run into further difficulties, with Mikoyan, Israel's Elbit and the Romanian Government now embroiled in a three-way dispute over their contractual arrangements.

The protracted negotiations centre round Elbit's role as prime contractor on the project, and the Romanian Government's demand that Mikoyan at least approve, if not implement, airframe changes involved in the upgrade.

The Israeli electronics company has offered Mikoyan a subcontractor's role in the upgrade, to perform airframe work on the upgrade.

The Romanians demanded that the Russian design bureau approve the changes to be made in the MiG-21s. This has been agreed between all the concerned partners, in a memorandum of understanding signed in 1993 in Moscow. Elbit tried to finalise the agreement with Mikoyan, but the negotiations have not resulted in a contract.

Sources close to the programme say that Mikoyan "...has had second thoughts" about becoming subcontractor for the Romanian MiG-21 upgrade. "Mikoyan is trying to get the lead in a similar pro-

gramme in India and it does not want to appear only as an airframe-capable organisation doing subcontracting work" says one of the sources.

The original contract is for the upgrade of 100 aircraft at a cost of \$300 million.

According to the contract, the Romanian Government has already transferred \$2.5 million to the Israeli company, together with a \$10 million letter of credit. In mid-1994, the Romanians will have to give Elbit an additional \$40 million letter of credit.

There are some indications

that Romania will not be able to afford to upgrade the 100 aircraft. The money which has been transferred to Elbit so far has allowed only the start of the prototype design.

Sources say that, with a considerable effort, the Romanians will be able to pay for the upgrade of a very limited number of fighters. Elbit refuses to comment on the problems in the programme.

Elbit and local rival Israel Aircraft Industries are also bidding for the Indian contract, along with other European and US companies. □

Mikoyan seeks wider role in upgrading its own MiG-21 design

