

chartered Antonov An-124 within the month.

The engines incorporate several other changes which resulted from the test-flight programme late in 1993.

**AIRCRAFT INFORMATION MANAGEMENT SYSTEMS**

Honeywell, which developed the 777 AIMS, delivered the latest software load for the system in early April. The delivery contained 90% of the load and will be followed by a further set containing 92% of all the software early in May. Honeywell says that the latest loads are adequate for the majority of the 777's requirements. The full 100% will not be reached until September, when all aircraft systems need to be airline standard for the start of accelerated extended twin-operations testing.

The complex AIMS operation, which contains 440,000 lines of software code, compared to 46,000 for a 747-400 flight-management computer, is heavily dependent on new processing chips designed specifically for AIMS. Problems were encountered with the first set of processors and Boeing is anxious to check on the performance of the new chips. □

**Bonn rejects bid for fighter cash**

The German defence ministry says that it will only pay DM160 million (\$96 million) from an estimated DM570 million in costs incurred because of the re-orientation of the Eurofighter programme.

According to Jorg Schonbohm, the defence ministry state secretary, the Federal Government will not shoulder the costs calculated by the Eurofighter consortium and presented to the Government at the end of March.

The ministry calculates the re-orientation cost from the European Fighter Aircraft project to the Eurofighter 2000 at around DM300 million, of which industry was to bear just less than half. The Government claims that other costs were incurred because of technical-development delays. □

**UK makes Rooivalk bid official**

The UK has become the first major Western nation to allow South Africa to bid officially for a large-scale weapons programme, in anticipation of the United Nations arms embargo being officially lifted after South Africa's General Election later this month.

Atlas Aviation of South Africa has been officially invited to tender (ITT) for the British Army's attack-helicopter requirement. The South African company submitted an unsolicited bid to meet Staff Target (Air) (Cardinal Points Specification) 428 for an attack helicopter in 1993. It has since teamed with Marshall Aerospace to pursue the bid.

There has been considerable pressure to provide Atlas with the full ITT. Industry

sources claim: "There is a considerable warm feeling within the Ministry of Defence [MoD] toward South Africa."

A high-level Government delegation is scheduled to visit the country in July. Other potential military deals with South Africa are also under consideration.

The shift in policy came to light in a response to a parliamentary question given by Jonathan Aitken, Minister for Defence Procurement.

"After preliminary assessment and discussions with the company, it was decided that they should have access to the invitation to tender to allow them to put their bid on the same footing as the five solicited bids," he replied.

The decision to provide

South African aerospace company Denel with a full ITT has had an impact on programme time scales, although Aitken says that steps have been taken to minimise the effect. Atlas has been given until October to come back with its bid, leading to an expected delay of one month in the MoD selection of a helicopter.

The MoD has made it clear that the Rooivalk bid is contingent on the UN arms embargo on South Africa being lifted, and peaceful transition to a multi-racial democracy.

The Rooivalk is likely to need avionics, sensors, and weapons changes to meet the MoD requirement. If the Rooivalk were to be selected, it would be assembled in the UK by Marshall. □

**DASA reveals secret flight control work**

BY ANREZEJ JEZIORSKI  
IN MUNICH

Deutsche Aerospace (DASA) has had a team working on a model of an alternative to the Eurofighter 2000's flight-control software since late 1993, but has kept it secret from everybody, including its partner on the EF2000 flight-control system (FCS), GEC-Marconi Avionics (GMAv).

DASA developed its alternative model drawing on experience gained in the DASA/Rockwell X-31 programme (*Flight International*, 30 March-5 April).

The development fuels continuing arguments about system-design responsibility (SDR) for the EF2000's FCS and potentially raises a question over the future role of GMAv, which wrote the existing FCS software, in the multinational Eurofighter programme. GMAv says that it is a "mystery" as to exactly what DASA is up to, although it is now aware of the work.

The new model was developed within six months by a team of DASA specialists work-

ing separately from the Eurofighter programme. Project sources say that development began in the third quarter of 1993, following the worst of the Eurofighter's software troubles, which had repeatedly delayed the first flight.

While DASA's Eurofighter team was de-bugging the existing software for the aircraft's FCS, the specialist team — built around a core of between four and seven engineers, some taken from the X-31 programme — was designing its alternative control system.

DASA has now briefed its partner companies in the consortium on the "X-31 method",

but officials stress: "This presentation was outside EF2000, at the expert level."

DASA denies that there are any plans to use the new software, which is still under test, in the EF2000. A senior official says, however: "We have people who have knowledge of modern methods to develop flight-control systems, so of course this group is always thinking where they could be used on other aircraft."

The official adds that it has not yet been proven whether the "laboratory model" of the alternative control software could be run using existing Eurofighter hardware. □

*Eurofighter flies into German FSC mystery*

