

# Komplex gets off to a bad start

TIM FURNISS/LONDON

RUSSIA'S FIRST commercial flight of a converted military missile ended in disaster on 28 March, when three satellites were lost after launch from Plesetsk. The failure is a major blow to the Russian Komplex company's attempt to grab a share of the low-Earth-orbit launch market.

A five-stage solid-propellant Start launcher, based on SS-25

missile technology, carrying Israel's 45kg, \$3.5 million Gurwin 1 research satellite and other payloads from Russia and Mexico, exploded over the Sea of Okhotsk, 10min after launch when the fifth stage failed.

A four-stage Start 1 had a successful orbital-demonstration flight in March 1992, but the 28 March launch was the first flight of the five-stage version.

The Gurwin 1, developed with

the help of a \$1 million contribution from US philanthropist Joseph Gurwin, was designed to provide communications for Israeli companies and to demonstrate spacecraft technologies.

Israel, which paid \$250,000 for the launch, had previously launched two 160kg satellites, the Offeqs 1 and 2 on the locally built Shavit booster. The launch of a second-generation Offeq on the Shavit is reported to be imminent. □

## ESA continues to support Alpha

THE EUROPEAN Space Agency (ESA) has re-affirmed in a letter to NASA and other programme partners its commitment to the proposed Alpha international space station.

A formal decision on European involvement in the Alpha, however, is not expected to be made until the 18-20 October European Ministers' Council meeting in Toulouse, France. The agency hopes that the reduced \$2.3 billion 1996-2000 space-station budget, about \$500 million short of the original estimate, will then be agreed.

Some ESA partners are critical of the project, given the tight financial climate and incessant delays since ESA joined in 1984.

ESA's contribution to the Alpha will be the smaller and re-named Columbus Orbital Facility, which is unlikely to be hooked up to the space station until 2002.

The Ariane 5 and an Automated Transfer Vehicle (ATV) will be offered for logistic services. The ATV will also be offered for orbital-maneuvring purposes, in return for ESA's operating expenses on the Alpha. The proposed Ariane 5-launched crew-transfer vehicle has been dropped to save costs.

■ Thomas Reiter of Germany has been selected by ESA to fly the 135-day Euromir mission aboard the Russian space station, the Mir 1, starting on 22 August. Sweden's Christa Fuglesang appeared to have been favourite but Germany contributes more than Sweden does to the ESA budget. □



Delta 2s will launch Globalstar satellites

## Ariane operations resume with successful launch

ARIANESPACE RESUMED commercial-launch operations on 28 March with the successful launch of the Brasilsat B2 and Hot Bird 1 satellites into geostationary-transfer orbit. The V71/Ariane 44LP launch from Kourou, Guiana, came 117 days after the failure of V70 (*Flight International*, 29 March-4 April).

The Ariane 4 fleet was grounded after the PanAmSat (PAS) 3 was lost on the 1 December flight of the V70, following an earlier failure in 1994, resulting in the loss of two satellites. Modifications have been made to the launcher's third stage.

The V72 is scheduled to launch the European Space Agency's remote-sensing satellite, the ERS 2 on 20 April. Arianespace now has

38 outstanding satellites to launch, after confirmation that it has won the contract to launch the replacement PAS 3R spacecraft.

McDonnell Douglas (MDC), meanwhile, has received a significant commercial boost with the selection of its Delta 2 to launch the first four Space Systems/Loral Globalstar worldwide cellular-telephone and digital-communications satellites during a single launch in 1997. The contract is worth \$50 million, with the option of 13 further launches. These will complete the 48 satellite constellation by 1998, with eight in-orbit spares.

MDC has already won a contract from the competing Motorola company for eight launches of five Iridium satellites each, starting in 1996. □

## NEWS IN BRIEF

### ■ MIR MISSION DELAY

The first Space Shuttle mission to dock with the Russian Mir 1 space station, the STS71/*Atlantis*, scheduled for launch on 10 June, is threatened with delay because of problems in checking the Russian Spektr module, which has to be launched to the Mir on 11 May. The Spektr will provide experiment space for the joint mission and vital power.

### ■ DC-X TO FLY AGAIN

The McDonnell Douglas DC-X single-stage-to-orbit technology demonstrator will fly again no earlier than 8 May, says the company. After the four new flight tests — funded by the US Air Force and NASA — to push the vehicle into the "high-risk portion", the DC-X will be handed over to NASA for upgrade to the DC-XA configuration. The first flight will ascend for 50s to 4,350ft (1,325m), at an angle of attack of 15°, taking it 1,000ft from the flight stand at White Sands. The DC-X will be flown laterally over the pad and touch down on it at T+135s.

### ■ JAPAN'S SPACE BOOST

Japan's space-programme budget for 1996 has been increased by 5%, to \$2.5 billion (*Flight International*, 8-14 February). The lion's share, \$1.9 billion, is allocated to the National Space Development Agency, while the Institute of Astronautical and Space Sciences receives \$240 million. The remainder is allocated to other agencies involved in space technology.

### ■ TRW CONTRACT

TRW has signed a \$75 million contract with Korea Aerospace to develop jointly the Korean multi-purpose satellite, KOMSAT, which will carry scientific and communications payloads. The 400kg satellite will be launched in 1999.