

Loral wins contract to build Chinasat 8

SPACE SYSTEMS/LORAL has been selected to finalise a contract with China Telecommunications Broadcast Satellite to build the Chinasat 8.

The satellite, to be launched late in 1998, will be based on a standard FS-1300, three-axis stabilised spacecraft bus — the 38th of this series to be built — and will be equipped with 16 Ku-band and 36 C-band transponders, to provide video, data and voice telecommunications services in China.

The spacecraft will have total electrical power of 11kW. It is the eighteenth Loral spacecraft in production at its Palo Alto factory in California. Also awaiting launch is the Chinasat 7, a Hughes HS-376 spin-stabilised spacecraft. □

NEWS IN BRIEF

■ THIRD ORION

Hughes Space and Communications has been awarded a contract from Orion Asia Pacific to build the ten C-band, 33 Ku-band transponder Orion 3 communications satellite, an HS-601HP model, which will be launched aboard a McDonnell Douglas Delta 3 booster into a 139° position in geostationary orbit in 1998 (*Flight International*, 1-7 January).

■ ARIANE POISED

The first Ariane 4 launch of 1997 is scheduled for 30 January, with the flight of Argentina's Nahuel 1A and the USA's GE 1 communications satellites into geostationary transfer orbit aboard a 44LP model/V93.

■ EARTH IMAGER

NASA plans to launch the LightSAR radar-imaging Earth-observation satellite to use advanced technologies to reduce the cost and enhance the quality of radar-based information for scientific research, remote-sensing and emergency-management applications.

Solar storm is suspected in Telstar 401 satellite loss

TIM FURNISS/LONDON

NASA SCIENTISTS AT the Goddard Space Flight Center, Maryland, believe that a Solar storm on 6 January created enough geomagnetic activity to knock out the AT&T's Telstar 401 communications satellite in geostationary orbit (GEO) on 11 January. The satellite is a total loss (*Flight International*, 22-28 January).

The Telstar 401 suffered a catastrophic failure during routine station-keeping manoeuvres using the craft's hydrazine arcjet thrusters.

The satellite had been in service since 1993 and was scheduled to have remained operative until 2006. The Telstar 402 was lost in 1994 just after separation, when the firing of a pyrovalve to open a propellant line ignited some hydrazine fuel, destroying the satellite.

Another satellite, the National Oceanic and Atmospheric Administration's GOES 8 meteorological satellite in GEO, suffered a malfunction on 8 January which affected its attitude-control system and the spacecraft went into automatic shutdown mode. Control of the

satellite was restored after 37h.

Malfunctions, mainly to attitude-control systems on several satellites, caused by electrostatic discharges resulting from Solar activity are more common than satellite manufacturers care to admit (*Flight International*, 2-8 October, 1996).

On 20 January, 1994, three satellites, the Aniks E1 and 2 and the Intelsat K, suffered electrostatic discharges which caused malfunctions in their gyro-guidance systems, seven days after a geomagnetic storm left the Sun. □

Iridium launches will be further delayed after Delta explosion

THE MUCH-DELAYED maiden flight of the first of Motorola's Iridium mobile communications-satellites aboard a McDonnell Douglas (MDC) Delta 2 booster faces a further hold-up pending the investigation into the loss of a Delta 2, 13s after launch from Cape Canaveral, Florida, on 17 January.

MDC had planned seven Iridium launches of 33 satellites this year, plus six for other customers, including the first launch of the Globalstar system, which will compete with the Iridium. The original launch date for the Iridium of late December 1996 was delayed because of technical and weather problems.

A Navstar Block 2A global-positioning-system (GPS) satellite was lost in the explosion of the booster just after launch, apparently after a fault developed which triggered the automatic abort system. It was the first Delta failure since May 1986 and the first total failure of the Delta 2 model.

There will be no disruption to GPS services as the lost craft was a replacement for an older satellite, which is still in orbit and one of 26 spacecraft which are in an operational constellation. □

Russia worries about Space Station role

YURI KOPTEV, director-general of the Russian Space Agency, has admitted that his country could be ousted from the International Space Station (ISS). The Russian energy module, the first element of the ISS, has been completed and will be launched on 27 November, but other hardware is behind schedule because of lack of funds.

Koptev says that 1,500 billion roubles (\$267 million) is required in 1997 to enable Russia to continue work on the Alpha. NASA has already hinted that Russia could be relegated to a subcontractor level. Russia's service module, already eight months behind schedule, is being replaced by a US module.

■ NASA astronaut John Blaha has suffered severe return-to-Earth gravity problems after his 128 days on board the Russian *Mir 1* space station, compared to the experience of Norman Thagard and Shannon Lucid, the previous US occupants of the station.

Blaha, who landed aboard the Space Shuttle *Atlantis*/STS81 on 22 January, says that he felt he weighed "a thousand pounds" and was "absolutely stunned" at his condition. He could not raise his leg more than a few millimetres and was lifted out of the Shuttle. □



Delta 2: earlier launches successful