

12.16 hrs.

STATEMENT RE : FAILURE OF
AUGMENTED SATELLITE
LAUNCH VEHICLE-D2 (ASLV
D2) AND LAUNCHING OF
INSAT 1-C

[English]

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE DEPARTMENTS OF OCEAN DEVELOPMENT, ATOMIC ENERGY, ELECTRONICS AND SPACE (SHRI K.R. NARAYANAN) : The second developmental flight of ASLV with SROSS-2 satellite on-board was launched from Sriharikota at 14.48 hours IST on the 13th July, 1988. The performance of both the strap-on motors, which were ignited simultaneously, and of the vehicle upto the first 48 seconds was normal. The first stage motor which did not ignite in D-1 flight did get ignited this time as programmed at 48.5 seconds. However, at about 49.5 seconds after lift off, the yaw and roll rate of the vehicle started building up rapidly and could not be controlled by the Rocket Control System resulting in the severance of the top end of the vehicle at 50.4 seconds. The first stage motor with the burnt out strap-on motors, however, performed normally till its burn out at about 97.8 seconds. The prematurely detached SROSS-2 Satellite also performed normally till its splash down at 257 seconds after lift off.

In spite of incorporating all the recommendations of the ASLV-D2 Failure Analysis Committee and all the care taken, another failure has occurred. It may be remembered, however, that all flight conditions cannot be fully simulated on the ground.

Immediate action has been taken to constitute a Failure Analysis Committee of ISRO to look into the voluminous data now available. A National Expert Review Panel has also been set up to go into all aspects of the flight.

We have more cheerful news from Hassan in Karnataka. The INSAT-1C spacecraft was launched by the Ariane-3 Launch Vehicle from Kourou in French Guyana into a geostationary transfer orbit

of 36000 × 200 Km at 0442 hours IST on the 22nd July, 1988. Within 10 minutes after the separation of the satellite from the Ariane, INSAT Master Control Facility at Hassan took full control of the Satellite. Two of the five solar panels and the C-Band Antenna were deployed at around 0615 hours on 22nd as planned. Two major firings of the apogee motor for 23 minutes each were carried out, one on 23rd and the second on 24th July to raise the perigee from 200 Km. to about 3300 Km. With the successful firing of the apogee motor for 90.5 seconds on 25th morning, the INSAT-1C has now reached near geosynchronous circular orbit, and will reach its final destination of 93.5 degrees East longitude in a few days. The critical manoeuvres of full solar array deployment and placing INSAT-1C in a body stabilised mode were also successfully accomplished on 26th July, 1988. Deployment of C/S band antenna and solar sail release are scheduled in the next two days. After that, exhaustive on-orbit tests will be carried out to characterise each of the payloads before the spacecraft is declared operational. The INSAT-1C will provide back-up to INSAT-1B now in operation and will also substantially augment the existing telecommunication and TV programme distribution capacities.

As Hon'ble members are aware, the ultimate aim of our Space Research Programme is to achieve self-reliance in the peaceful use of outer space. On behalf of the House, I wish to congratulate the scientists of ISRO for the success of the INSAT-1C Mission and to tell them that they should not lose heart because of the ASLV-D2 failure. We have full faith in them and shall stand by them in their efforts to achieve our goal in space research.

12.18 hrs.

[English]

MATTERS UNDER RULE 377

- (1) Need to declare Kavi Samrat Upendra Bhanj Training College, Bhanjanagar, Orissa as a comprehensive College for teachers education.

SHRI SOMNATH RATH (Aska) : Sir, out of three universities in Orissa, two colle-