12.08 hrs.

Title: Regarding successful launch of second test flight of Geosynchronous Satellite Lanuch Vehicle (GSLV) D-2.

THE MINISTER OF STATE IN THE MINISTRY OF PLANNING, MINISTER OF STATE IN THE MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION AND MINISTER OF STATE IN THE DEPARTMENTS OF ATOMIC ENERGY AND SPACE (SHRI SATYA BRATA MOOKHERJEE): Mr. Speaker, Sir, yesterday the hon. Prime Minister made a brief statement. I have been asked to make a detailed statement today.

Sir, I am happy to inform this august House that the second test flight of GSLV-D2 was successfully carried out from Satish Dhawan Space Centre, SHAR, Sriharikota on May 08, 2003.

GSLV-D2 is a three-stage vehicle. It uses solid propellant first stage with four liquid strap-ons and a liquid propellant second stage. While the cryogenic third stage has been supplied by Russia, the control, guidance and electronics for the stage have been designed, developed and implemented by ISRO scientists. The 49 metre tall technologically complex GSLV-D2, weighing 400 tonnes, lifted off at 4.58 PM carrying GSAT-2 satellite. After a perfect count down and about 17 minutes of smooth flight, GSAT-2 spacecraft was successfully placed into its intended orbit. GSLV-D2 has significantly demonstrated a payload capability of 1825 kilogram, which is about 300 kilogram more than what was launched in the first test flight. This was made possible by improvements such as the use of higher pressure engines for strap-ons, introduction of improved propellant loading for the core solid stage and optimisation of structural elements. This successful GSLV-D2 flight has validated the various technologies demonstrated during the first flight as well as improvements made for the second flight.

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The first signals acquired from the GSAT-2 satellite indicated normal health of the satellite. GSAT-2 will be raised to its final geo-synchronous orbit in the coming days followed by deployment of its solar arrays and antennae. The satellite, in addition to carrying transponders for communication and mobile satellite services, has four scientific experiments.

With this successful flight of GSLV-D2, the payload capability has been established for launching operational communication satellites of 2000 kg class. Accomplishment of this technologically challenging mission is the culmination of efforts of ISRO Centres supported by Industries and academic institutions in India.

Through you, Sir, I request this august House to join me in congratulating ISRO and other participants associated with the successful launch of GSLV-D2.

Sir, if I may give the latest position, the multiple orbit raising operations are planned on GSAT-2 satellite to raise from its current Geo-synchronous Transfer Orbit (GTO). The first of these orbit-raising operations was successfully carried out at 8.45. this morning by firing the 440 Newton Liquid Apogee Motor onboard the satellite for a duration of 47 minutes 30 seconds. The health of the satellite is normal.

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