

What went wrong in PSLV-C39 launch? ISRO to probe

File photo of PSLV rocket taking off from Sriharikota in Andhra Pradesh. M. Vedhan

The Space establishment has started to diagnose what went wrong in [Thursday's failed launch of PSLV-C39](#). The launch resulted in the stillbirth of its much-needed navigation satellite IRNSS-1H.

A review meeting is slated for Saturday in Thiruvananthapuram, seat of the launch vehicle centre, according to people familiar with the developments.

An informed official said the analysis should be completed before the next launches of the PSLV and the GSLV came up, starting October or November.

Indian Space Research Organisation has given up on the satellite, which along with the launcher could have cost it an estimated 300-400 crore.

A debris tracking team linked to the Vikram Sarabhai Space Centre in Thiruvananthapuram has been monitoring the unreleased satellite which is moving in a low orbit even as it sits trapped inside the heat shield.

V.Adimurthy, Adviser at ISRO, former VSSC Associate Director and former Chairman of the Inter-Agency Space Debris Coordination Committee (IADC), said, "The spacecraft is in a low orbit and there will be natural decay. Going by its falling pattern, we expect it to fall back to Earth may be between four and eight weeks."

Most of its parts of the 1425-kg will burn up as it re-enters the atmosphere. The huge quantity of propellants on it is also a worry. ISRO is part of the IADC and will also get inputs of the North American debris watch body, NORAD.

ISRO veterans who have been associated with launch vehicle activity recounted that they knew they had a problem three minutes after the rocket carrying IRNSS-1H took off.

During the 19-minute flight, the heat shield or topmost nose cone of the PSLV-C-39 rocket should have separated after three minutes and fallen off but it did not happen. At that point, the second of the four-stage rocket was at a height of around 125 km.

Instead, the heat shield continued to travel with the spacecraft still inside it. Normally the satellite would have got safely exposed and zoomed ahead at that point. This adversely added undesirable weight to the spacecraft and dragged its velocity.

The satellite is encased in a heat shield - also called payload fairings - in the top fourth stage to protect it from atmospheric disruptions. After around 100 km above ground, it does not need the heat protection.

Teams have started ascertaining what went wrong, because the rest of the launch milestones went off as planned except for the heat shield issue – which never cropped up earlier, they said.

In an apparent attempt to crack down on revenge porn, Twitter has introduced a new policy that states that no one can post or share "intimate photos

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