

# ISRO'S 'ANGRY BIRD' TAKES TO THE SKIES

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An anxious ISRO Chairman K. Sivan on Wednesday watched the flight path of the GSLV-F11 intently as it soared into the evening sky carrying communication satellite GSAT-7A, meant to enhance the communication infrastructure of the Indian Air Force.

Three key factors had weighed on the minds of the launch team at ISRO — the weight of the satellite, changes made to the cryogenic stage and the second stage of the vehicle to increase payload capacity, and the possibility of a cyclone looming on the coast that finally changed track gave anxious moments to the team.

## Heaviest satellite

In its Mk-II version, the GSLV with the indigenous cryogenic stage carried on board its heaviest satellite that weighed 2,250 kg, from the second launch pad of the Satish Dhawan Space Centre, SHAR, here at 4.10 p.m.

“[In] the vehicle, the second stage propellant loading has been increased from 37.5 tonnes to 40 tonnes, and cryogenic stage propellant loading has been increased from 12 tonnes to 15 tonnes along with enhanced thrust value for the cryogenic stage,” Mr. Sivan said after the satellite was placed in a ‘super synchronous transfer orbit’, a little over 19 minutes after launch to enhance its life, pegged at eight years.

Though the Mission Control team remained tight-lipped about the purported use of the satellite, sources in ISRO and the Indian Air Force said the satellite would enhance the communication capabilities of IAF. “This is primarily for the Indian Air Force’s communication purposes, such as ground to air communication,” one of the sources told *The Hindu*. The satellite, being dubbed as ‘angry bird’ by some, is likely to enhance the range of communication and also aid in aircraft to aircraft communication.

“There is always further improvements in GSLV... in the coming GSLV F10s and F12 missions we are going to make bigger payload compartment to accommodate still bigger spacecraft and that is another important challenge in front of us and we are getting ready with that change as well to make sure that GSLV continues to remain very successful and rugged vehicle like PSLV,” said S. Somanath, Director, Vikram Sarabhai Space Centre.

With ISRO ending the year on a high, having completed 17 missions, Mr. Sivan said he had a ‘great gift’ for his staff. “This year, we completed 17 missions. It is a very good number. The gift is... next year, we are going to have around 32 missions.”

## Force multiplier

“It will be a major booster and force multiplier for the Indian Air Force. When we talk of a network-centric warfare, such type of systems will help achieve full network centricity. From that perspective, it’s a major value addition to the IAF,” said Ajay Lele, Senior Fellow at the Institute for Defence Studies and Analyses (IDSA).

*(With inputs from PTI and IANS)*

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