



## GSAT-7A Launched

Indian Space and Research Organization (ISRO) has recently launched communication satellite GSAT-7A onboard the Geosynchronous Satellite Launch Vehicle F-11 (GSLV F-11).

- GSLV F-11 is the seventh flight of GSLV Mk-II and is equipped with **indigenously developed cryogenic upper stage engine**.
- The satellite is nicknamed as '**angry bird**' as it will enhance Indian Air Force (IAF) capabilities.
- It is heaviest satellite launch in GSLV's Mk-II version launch vehicle.
- In September 2013, Isro launched **GSAT-7 (Rukmini)**, a communication satellite **exclusively for Navy** to monitor Indian Ocean Region up to 2,000 nautical miles and provide real-time inputs to Indian warships, submarines, and maritime aircraft.

### Significance

- The satellite will give a boost to the strategic communication and networking capabilities of the IAF.
- GSAT-7A will enable superior real-time aircraft-to-aircraft communication and between aircraft and base station.
- GSAT-7A is expected to boost the IAF's network-centric warfare capabilities by interlinking all ground-based radars, airborne early warning and control aircraft for surveillance, maintain air superiority, gather intelligence by detecting aircraft, vessels and other vehicles in long range.

### GSAT-7A

- Weight: **2250 Kg**
- Orbit: **Super Synchronous Orbit** (Orbit beyond Geosynchronous Orbit)
- Mission Life: **8 years**
- GSAT-7A is the **35th communication satellite built by ISRO**.
- GSAT-7A is an advanced communication satellite with a **Gregorian Antenna**.
- The satellite will operate in the **Ku band** (This frequency range is often used for satellite communications).