रूसरो <mark>ांउल्व</mark>

30 August, 2013

GSAT-7 Mission

THE MISSION

India's Communication Satellite GSAT-7 on-board the Ariane-5 VA-215 lifted-off form the Kourou, French Guiana at 02:00 AM (IST) on August 30, 2013. After a flight of 34 minutes, the GSAT-7 satellite will be injected into a Geosynchronous Transfer Orbit (GTO) of 249 km perigee, 35,929 km apogee and an inclination of 3.5° with respect to the Equator. Immediately after the injection, ISRO's Master Control Facility (MCF) at Hassan took control and command of GSAT-7.

During August 31-September 4, three orbit-raising operations by firing of GSAT-7's Liquid Apogee Motor (LAM) was performed to place the Satellite into Geostationary Orbit of 36,000 km height above the Equator. By September 14, 2013, GSAT-7 was positioned in its orbital slot of 74° East longitude

The satellite is an advanced communication satellite built by ISRO. GSAT-7 Communication payload is designed to provide communication capabilities to users over a wide oceanic region including the Indian land-mass.



G S A T - 7 The satellite

This satellite provides wide range of service spectrum from low bit rate voice to high bit rate data communication. The payload configuration is compatible with I-2.5K bus of ISRO to provide communication services from Geostationary Orbit in UHF, S-band, C-band and Ku-bands. The GSAT-7 payload design includes Multiband Communication.

SPECIFICATIONS

| Weight | 2650 kg | |
|-------------------|---|--|
| Power | 3000 W | |
| Stabilisation | Three axis stabilisation | |
| Type of Satellite | Communication | |
| Payloads | 2 C-band Transponder 2 Ku-band Transponder MSS UHF payload | |
| Mission Life | 7 Years | |