

# INSAT-3C Mission

24 January, 2002

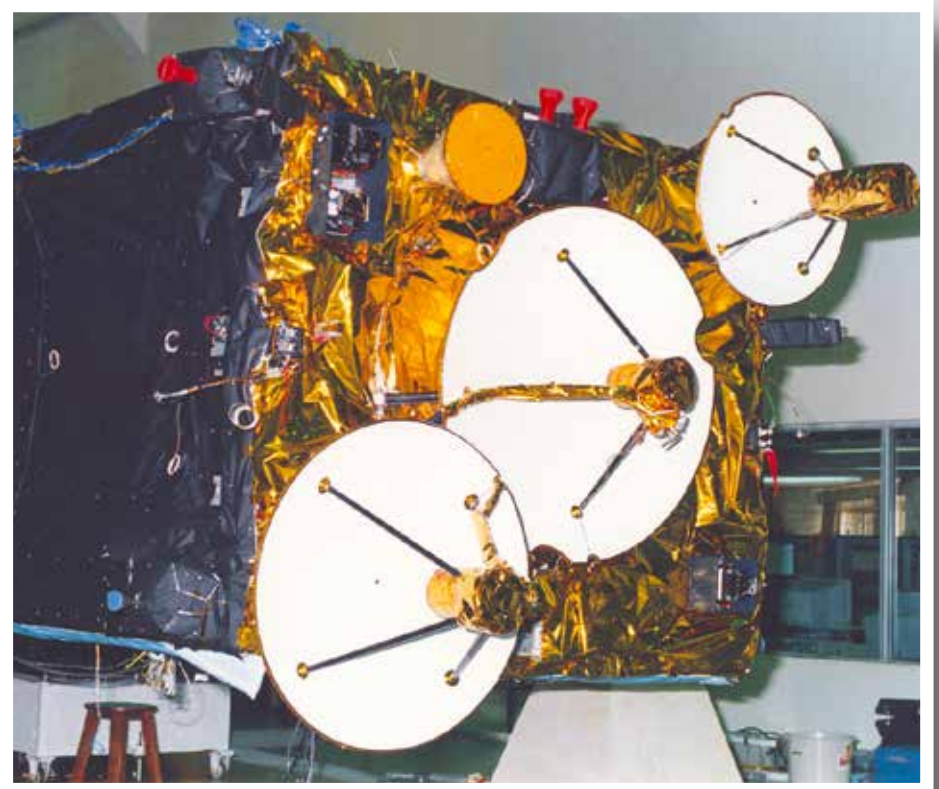
## THE MISSION

The Indian National Satellite (INSAT-3C) on-board the Ariane 5-V147 lifted-off from Kourou, French Guiana on January 24, 2002. INSAT-3C is the second satellite of the INSAT-3 series launched successfully.

## INSAT-3C

### THE SATELLITE

INSAT-3C carried Fixed Satellite Services (FSS) transponders, Broadcast Satellite Services (BSS) transponders and Mobile Satellite Services (MSS) transponders. The satellite was positioned at 74° East longitude. INSAT-3C being a large satellite needed challenging subsystems to be developed to meet the mission objectives. Some of the major challenges were realization of the indigenous 2 m shaped reflector right from the mould to the final CFRP hardware, complete realization and qualification of the indigenous 22 N as well as 10 N thrusters, realization of FPGA based automatic temperature controller, realization of ASIC based miniaturized Earth sensors with three level redundancy and indigenous development of CFRP solar panel substrates for meeting the power requirement of 2800 W.



## SPECIFICATIONS

<b>Weight</b>	2650 kg
<b>Power</b>	2765 W
<b>Stabilization</b>	3-axis body stabilized using Momentum / Reaction Wheels, Magnetic Torquers, Sensors and Thrusters
<b>Type of Satellite</b>	Communication
<b>Payloads</b>	<ul style="list-style-type: none"> <li>• 24 C-band Transponders</li> <li>• 6 Extended C-band Transponders</li> <li>• 2 S-band Transponders</li> </ul>
<b>Mission Life</b>	12 Years



Ariane 5-V147

