

Thaicom 6

Hybrid C-band and Ku-band Commercial Communications Satellite

FACT SHEET



Mission Description

Orbital ATK was selected by Thaicom PLC to build their sixth satellite, Thaicom 6. The Thaicom 6 satellite design is based on Orbital ATK's highly successful, flight-proven, GEOStar-2TM satellite platform, and was manufactured and tested at Orbital ATK's state-of-the-art manufacturing facility in Dulles, Virginia.

Thaicom 6 carries a hybrid Ku- and C-band payload operates on approximately 3.5 kilowatts of payload power. The Ku-band payload is comprised of eight active transponders (9 x 36 - MHz Transponder Equivalent) providing services to Thailand, Laos, Cambodia, and Myanmar. The C-band payload features 12 active C-band transponders providing services via a regional beam to Southeast Asia and six active C-band transponders (12 x 36 - MHz TPE) providing services to Africa.

The GEOStar[™] Advantage

Orbital ATK's highly successful Geosynchronous Earth Orbit (GEO) communications satellites are based on the company's GEOStar spacecraft platform, which is able to accommodate all types of commercial communications payloads and is compatible with all major commercial launchers. The company's GEOStar product line includes the GEOStar-2 design, which is optimized for smaller satellite missions that can support up to 5.0 kilowatts of payload power. Orbital ATK has also developed the higher-power GEOStar-3 spacecraft design, delivering the next increment of payload power for applications between 5.0 and 8.0 kilowatts, allowing Orbital ATK to offer its innovative and reliable satellite design to the medium-class of communications satellites.

FACTS AT A GLANCE

Coverage:

Thailand, Laos, Cambodia, Myanmar, Southeast Asia and Africa



Mission:

C- and Ku-band communications

Customer:

Thaicom PLC

Thaicom 6

Specifications

Spacecraft

Launch Mass: 3,325 kg (7,330 lb.)

Payload Power: 3.7 kW

Solar Arrays: Three panels per array, UTJ Gallium

Arsenide cells

Stabilization: 3-axis stabilized; zero momentum

Propulsion: Liquid bi-propellant transfer orbit system;

monopropellant (hydrazine) on-orbit system

Batteries: Li-lon batteries

Mission Life: ≥15 years

Orbit: 78.5° East Longitude

Hybrid Payload

C-band

C1 Repeater: 12 active C-band transponders
C1 Antenna: 2.3 m dual grid deployable reflector
C2 Repeater: 6 active C-band transponders
C2 Antenna: 1.4 m dual grid reflector Earth deck-

mounted Ku-band

Repeater: 8/9 active Ku-band transponders
Antenna: 2.5 x 2.7 m single offset super-elliptical

deployable reflector

Launch

Launch Vehicle: Falcon 9

Site: Cape Canaveral, Florida

Date: January 6, 2014

Mission Partners

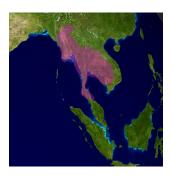
Thaicom PLC

Orbital ATK

Design, integration and test of the Thaicom 6 Satellite

Coverage Contour Maps

Ku-band Coverage Contour Map



C1 Beam Coverage Contour Map



C2 Beam Coverage Contour Map

