

GeoEye-1 Satellite Launch

GeoEye (VA, USA), has announced the launch of the world's highest resolution, commercial Earth-imaging satellite, which is scheduled for 4th September 2008, from Space Launch Complex-2 at Vandenberg Air Force Base (VAFB), California. The planned launch time is 11:50:57 a.m. PDT (2:50:57 p.m. EDT).

A Flight Readiness Review was conducted on Aug. 28 and the launch vehicle, launch range, the GeoEye-1 satellite, and all other program elements are ready for launch. GeoEye-1 will be lifted into a near-polar orbit by a 12-story-tall United Launch Alliance Delta II 7420-10 configuration launch vehicle.

GeoEye-1, designed and built by General Dynamics Advanced Information Systems, is the world's highest resolution commercial imaging satellite. Designed to take colour images of the Earth from 423 miles (681 kilometers) in space and moving at a speed of about four-and-a-half miles (seven kilometers) per second, the satellite will make 15 earth orbits per day and collect imagery with its ITT-built imaging system that can distinguish objects on the Earth's surface as small as 0.41-meters (16 inches) in size in the panchromatic (black and white) mode. The 4,300-pound satellite will also be able to collect multispectral or color imagery at 1.65-meter ground resolution. While the satellite will be able to collect imagery at 0.41-meters, GeoEye's operating license from NOAA requires re-sampling the imagery to half-meter resolution for all customers not explicitly granted a waiver by the U.S. Government.

The satellite will be able to see an object the size of home plate on a baseball diamond but also map the location of an object that size to within about nine feet (three meters) of its true location on the surface of the Earth without need for ground control points. Together, GeoEye's IKONOS and GeoEye-1 satellites can collect almost one million square kilometers of imagery per day.