



UNITED STATES  
**SPACE FORCE**  
SPACE OPERATIONS COMMAND

**FACT SHEET**

**SPACE BASED SPACE SURVEILLANCE  
(SBSS)**

**MISSION:** The Space Based Space Surveillance (SBSS) operates 24-hours a day, 7-days a week collecting metric and Space Object Identification data for man-made orbiting objects without the disruption of weather, time of day and atmosphere that can limit ground-based systems. SBSS has a clear and unobstructed view of resident space objects orbiting earth from its 390-mile altitude orbit.

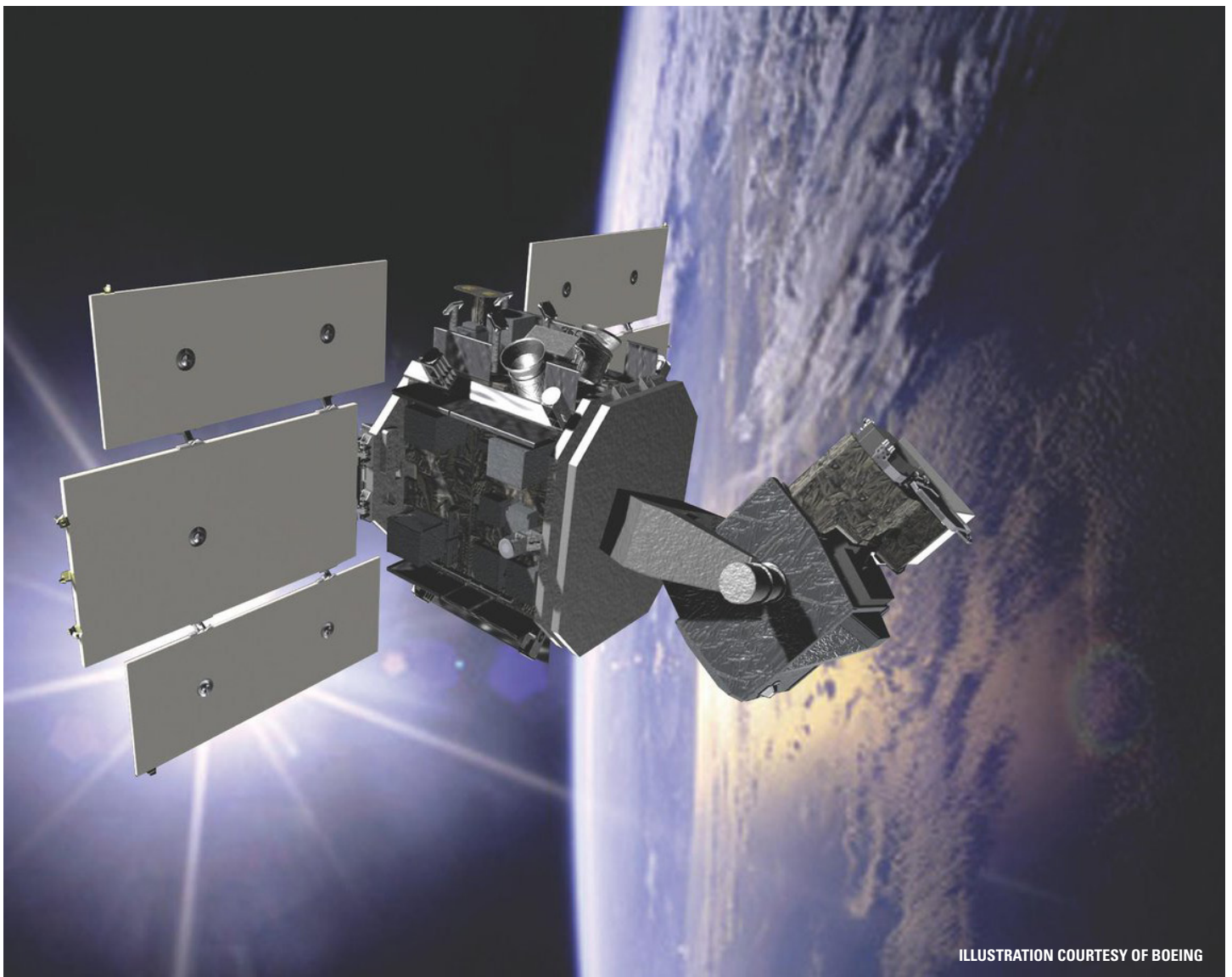


ILLUSTRATION COURTESY OF BOEING



## BACKGROUND

SBSS was launched from Vandenberg AFB, Calif., Sept. 25, 2010. The first signals from the space surveillance satellite were received a short time later at the Satellite Operations Center at Schriever AFB. The former U.S. Air Force Space Command declared SBSS Initial Operating Capability on Aug. 17, 2012.

SBSS is the follow-on to the Midcourse Space Experiment (MSX) satellite, which was the first space-based sensor to contribute to the Space Surveillance Network after initially being a technology demonstration to identify and track ballistic missiles during their midcourse flight phase.

# SPACE BASED SPACE SURVEILLANCE (SBSS)

SBSS communicates information through the world-wide Space Force Satellite Control Network and commercial Unified Space Network ground stations and then to Schriever Space Force Base, Colo., where Space Delta 9's 1st Space Operations Squadron oversees the day-to-day command and control operations of SBSS. This satellite system can monitor very small objects all the way out to the Geosynchronous belt. SBSS provides the data necessary to predict the trajectories of these objects, which gives experts an idea if an orbiting satellite may collide with another orbiting object, which allows time for evasive action to be taken in order to avoid collisions.

## FEATURES

SBSS uses a visible sensor mounted on an agile, two-axis gimbal, which allows ground operators to quickly move the camera between targets without having to expend time and fuel to reposition the entire spacecraft.

## GENERAL CHARACTERISTICS

**Primary Mission:** Space Surveillance

**Orbit Altitude:** Sun synchronous

**Dimensions:** Solar Panels - 201.36 inches x 92.50 inches

**Length Along Z-Axis:** 110.33 inches

**Weight:** 1,031 kilograms (2277 pounds)

For more information please visit  
<https://www.spoc.spaceforce.mil>

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