UNITED STATES SPACE FORCE
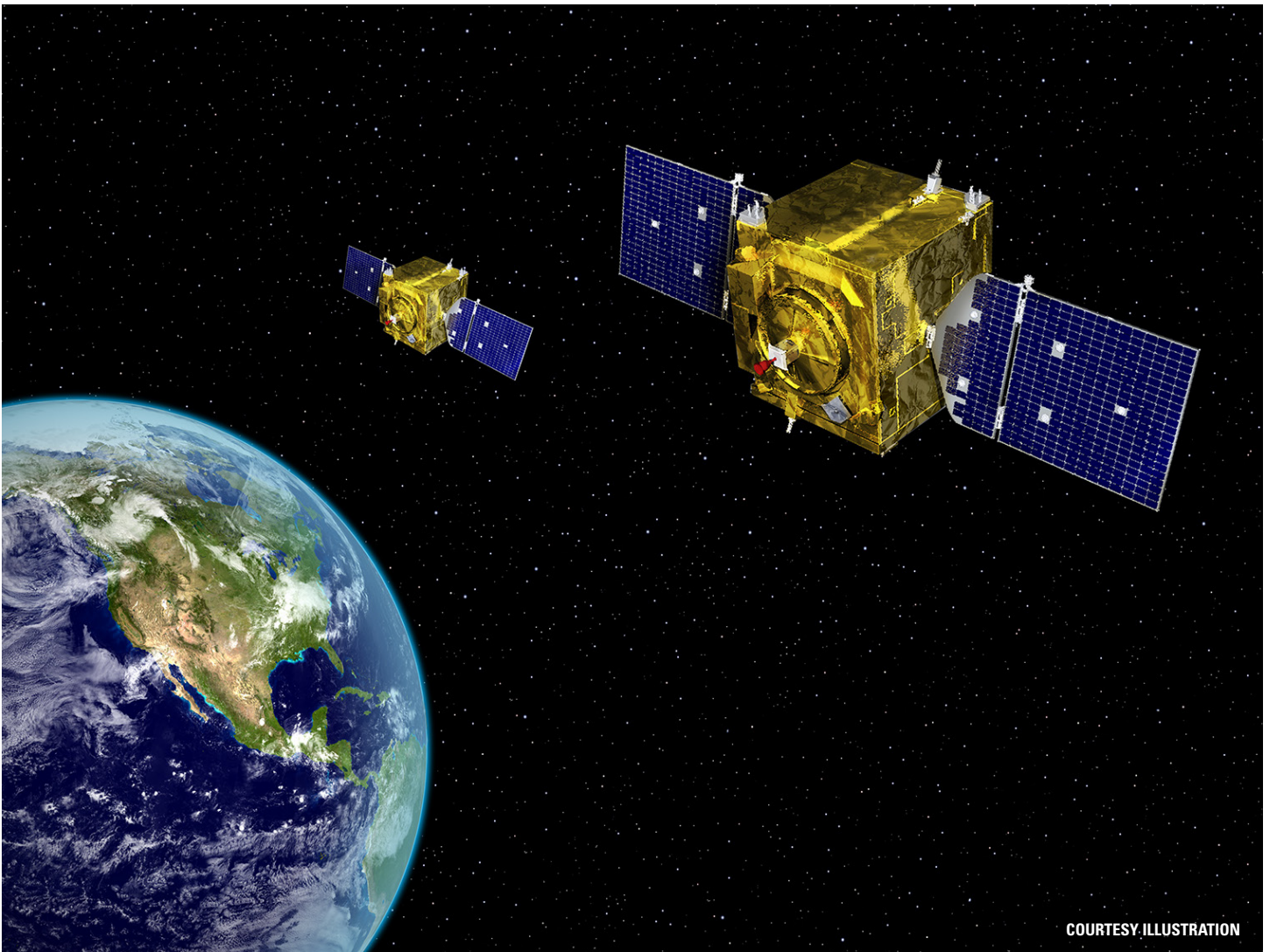## SPACE OPERATIONS COMMAND

FACTSHEET

GEOSYNCHRONOUS SPACE SITUATIONAL AWARENESS PROGRAM (GSSAP)

MISSION:

Geosynchronous Space Situational Awareness Program (GSSAP) satellites are a space-based capability operating in the near-geosynchronous orbit regime supporting U.S. Space Command space surveillance operations as a dedicated Space Surveillance Network (SSN) sensor.

COURTESY ILLUSTRATION

GEOSYNCHRONOUS SPACE SITUATIONAL AWARENESS PROGRAM (GSSAP)

LAUNCH

GSSAP satellites launched from Cape Canaveral Space Force Station, Fla., on July 28, 2014. GSSAP declared Initial Operational Capability (IOC) on Sept. 29, 2015. Additional replenishment satellites launched on Aug. 19, 2016, and accepted into operation Sept. 12, 2017.

GENERAL CHARACTERISTICS

Mission: Space Surveillance

Approximately 22,300 miles (35,970 km)

BACKGROUND

GSSAP satellites collect space situational awareness data allowing for more accurate tracking and characterization of man-made orbiting objects. From a near-geosynchronous orbit, it has a clear, unobstructed and distinct vantage point for viewing Resident Space Objects (RSOs). GSSAP satellites operate near the geosynchronous belt and have the capability to perform Rendezvous and Proximity Operations (RPO). RPO allows for the space vehicle to maneuver near a resident space object of interest, enabling characterization for anomaly resolution and enhanced surveillance, while maintaining flight safety. Data from GSSAP uniquely contributes to timely and accurate orbital predictions, enhancing our knowledge of the geosynchronous orbit environment, and further enabling space flight safety to include satellite collision avoidance.

GSSAP satellites communicate information through the world-wide Space Force Satellite Control Network (SFSCN) ground stations, then to Schriever Space Force Base, Colo., where Space Delta 9 conducts day-to-day operations.