



UNITED STATES
SPACE FORCE
SPACE OPERATIONS COMMAND

FACTSHEET

**MILSTAR SATELLITE COMMUNICATIONS
SYSTEM (MILSTAR)**

MISSION: Milstar is a joint service satellite communications system that provides survivable, global, secure, protected, and jam-resistant communications for high-priority military ground, sea and air assets. Milstar enables the Department of Defense to control tactical and strategic forces through all levels of conflict, and supports the attainment of space superiority for the joint force.



COURTESY ILLUSTRATION



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BACKGROUND

The objective of the Milstar program was to create a global, secure, nuclear-survivable, space-based communication system (considered a top national priority during the Reagan Administration in the 1980s). Milstar was designed to perform all communication processing and network routing onboard, thus eliminating the need for vulnerable land-based relay stations and reducing the chances of communications being intercepted on the ground.

LAUNCHES

February 7, 1994

November 7, 1995

February 27, 2001

January 16, 2002

April 8, 2003

FEATURES

The Milstar system consists of multiple satellites in geosynchronous earth orbit. Milstar provides continuous 24-hour worldwide coverage between north and south poles. The Milstar system is composed of three segments: space (the satellites), ground (mission control and associated communications links), and terminals (the users segment). The segments will provide communications in a specified set of data rates from 75 bps to approximately 1.5 Mbps using the Low Data Rate (LDR) and Medium Data Rate (MDR) waveforms. The space segment consists of the on-orbit satellite systems utilizing crosslink communications to allow for inter-satellite communication. The mission control segment controls satellites on orbit, monitors vehicle health, and provides communication system planning and monitoring. This segment is highly survivable, with both fixed and mobile control stations. System uplinks and crosslinks will operate in the extremely high frequency range. The terminal segment includes fixed and ground mobile terminals, ship and submarine terminals, and airborne terminals used by all of the Services. Space Systems Command (SSC) is responsible for acquisition of the space and ground segments as well as the Space Force terminal segments.

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

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