U.S. NAVAL RESEARCH LABORATORY

Blossom Point Tracking Facility

Point of Contact

Blossom Point Tracking Facility
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The Naval Research Laboratory's (NRL) Blossom Point Tracking Facility (BPTF) provides command, control, communications, network engineering, and management of new and on-orbit assets. BPTF provides a unique operational concept that utilizes full automation and enables lights-out satellite contacts. BPTF supports spacecraft operations in all orbit regimes. BPTF complements and supports NRL's skills in space systems by providing compatibility testing, pre-launch, launch, and post-launch support, flight operations, and mission data processing.

Space System Operations and Management

An experienced industry and government team provides the requisite expertise to oversee space systems for the life of the spacecraft. BPTF's shared infrastructure and high level of autonomy substantially reduce mission operations and management costs and provides a flexible architecture to allow for easy modification for new programs while not impacting on-orbit missions.

Hardware and Software Architecture

The facility supports an advanced suite of ground equipment in a resource pool that includes antennas, Front End Processors, Command Encoder Units, Bit-syncs, receivers, amplifiers and all of the other equipment necessary to perform satellite command and control functions in a secure environment. Equipment utilization is monitored and controlled by NRL's Neptune software which allows for maximum efficiency, reuse and scheduling of the resources.

Command, Control, and Communications

BPTF provides services during all mission phases, including development, launch, early on-orbit operations, and mission data collection and asset retirement.

Network Engineering and Management

BPTF provides a single interface point to its network of ground stations and has connections to several networks.