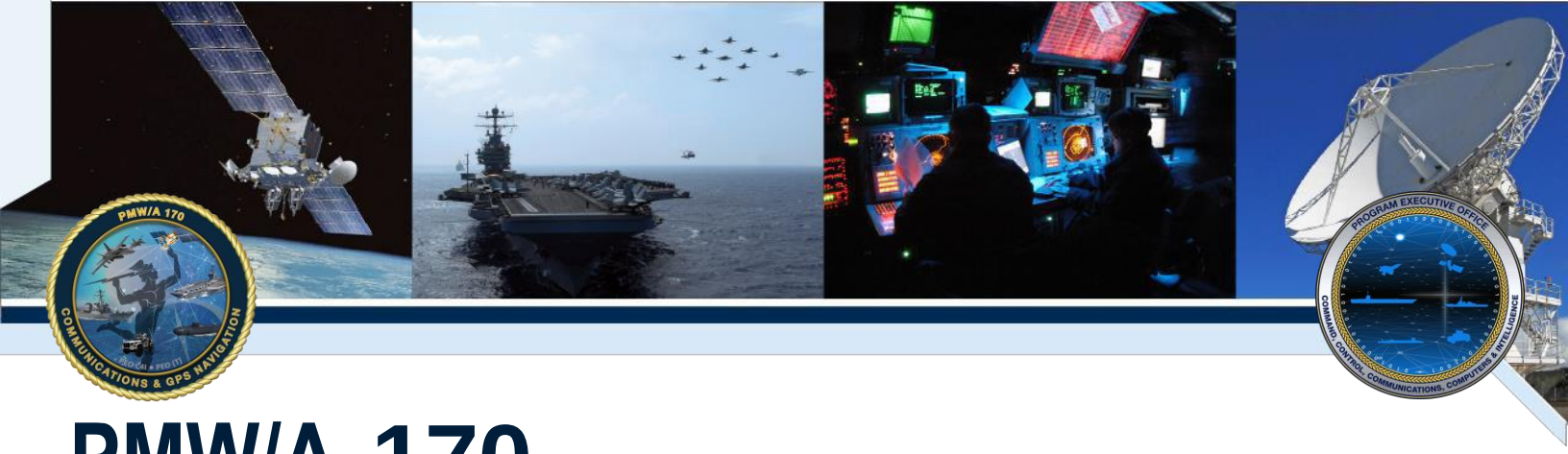


PMW/A 170

COMMUNICATIONS & GPS NAVIGATION PROGRAM OFFICE

WHO WE ARE

As the Navy's Communications and GPS Navigation Program Office, PMW/A 170's mission is to be the premier provider of advanced, resilient, and adaptive communication and assured position, navigation, and timing capabilities, delivering operational dominance across all domains.

FOCUS AREAS

SATCOM

NMT: SLEMOD approach is ongoing due to increased Fleet demand; Implementing SATCOM resiliency foundation and posture to pace the threat

STtNG: Ongoing coordination with Numbered Fleet Commanders and Type Commanders to rapidly test and field systems providing connectivity to LEO, MEO, and GEO to provide band and vendor diversity

TACCOMS

DMR: Major efforts underway to align Cryptographic Modernization Updates (IW, TRANSEC, MUOS, SATURN, SINCGARS); and Supporting SATCOM resiliency via a SMRC

NTCDL: Achieved Milestone C in Oct 2024 authorizing NTCDL to enter P&D Phase; IOC for production units planned 2025

PNT Family of Systems

GPNTS: Actively addressing Fleet obsolescence issues and providing path to M-Code; leveraging MOSA for rapid integration of new PNT sensors while enhancing SW algorithms to pace the threat

GPS Modernization: Leveraging USAF developed modernized GPS Receivers to improve performance on air platforms in contested environments

TOP PROGRAMS

Navy Multiband Terminal (NMT) (ACAT IC)

NMT is the Navy's sole protected SATCOM terminal providing critical secure, protected, survivable, and interoperable military satellite communications enabling protected and wideband satellite communications. Enables RC3 initiatives, supports the President's Ballistic Missile Defense priorities, and the Navy Strategic Plan. Provides simultaneous access to existing (AEHF, WGS, MILSTAR, DSCS, EPS) and future constellations (EPS-R, ESS, PTS) with enhanced capabilities, increased throughput and bandwidth, and new waveforms. NMT includes variants that support four international partners: United Kingdom, Canada, Australia, and the Netherlands.

Network Tactical Common Data Link (NTCDL) (ACAT II)

NTCDL is the Navy's next generation tactical common data link system that provides multi-link, end-to-end, networked Navy CDL mission capability. Supports CDL waveform, to include currently fielded USN aircraft (legacy Standard Navy CDL Rev. F), and future Bandwidth Efficient CDL waveforms being integrated in planned USN air platforms (MQ-25, MH-60R/S, P-8A, MQ-4C). NTCDL provides LOS links using Ku-band Phased Array Antennas.

Commercial Broadband Satellite Program (CBSP) (ACAT III)

CBSP is the Navy's commercial SATCOM program of record for both Geostationary and NGSO communications. It provides the sole source of wideband SATCOM to Mine Countermeasure ships and is a diverse communication solution on ULV and FLV surface ships. The associated architectures significantly increase data throughput, Navy SATCOM resiliency posture, SATCOM reliability, and space resiliency by providing band diversity, assured access, and redundancy for MILSATCOM. CBSP recently added STtNG as an engineering change under CBSP to incorporate NGSO communications into the portfolio. STtNG is a militarized terminal and common interface system providing access to NGSO PLEO/MEO/HEO constellations for a simultaneous multiband failover capability to MIL/COMSATCOM.

Digital Modular Radio (DMR) (ACAT III)

DMR is providing UHF and VHF LOS, HF, BLOS, and UHF SATCOM C4I capabilities to the Fleet. The program is built around open systems architectures that allows common software waveform applications and cryptographic algorithms to be implemented across the entire inventory. Designed to support communication readiness and mission success by providing military commanders with the ability to command, control, and communicate with their forces via voice and data during all aspects of military operations.

Battle Force Tactical Network (BFTN) (ACAT III)

BFTN enables LOS and BLOS IP data connectivity for ships and submarines via HF and UHF RF spectrum at data rates of up to 19.2Kbps (HF) and 64Kbps (UHF). UHF/HF network supported with Subnet Relay (SNR) and High Frequency Internet Protocol (HFIP) subsystems, respectively. Provides non-SATCOM IP-based transport capabilities to Navy Fleet and select Allies.

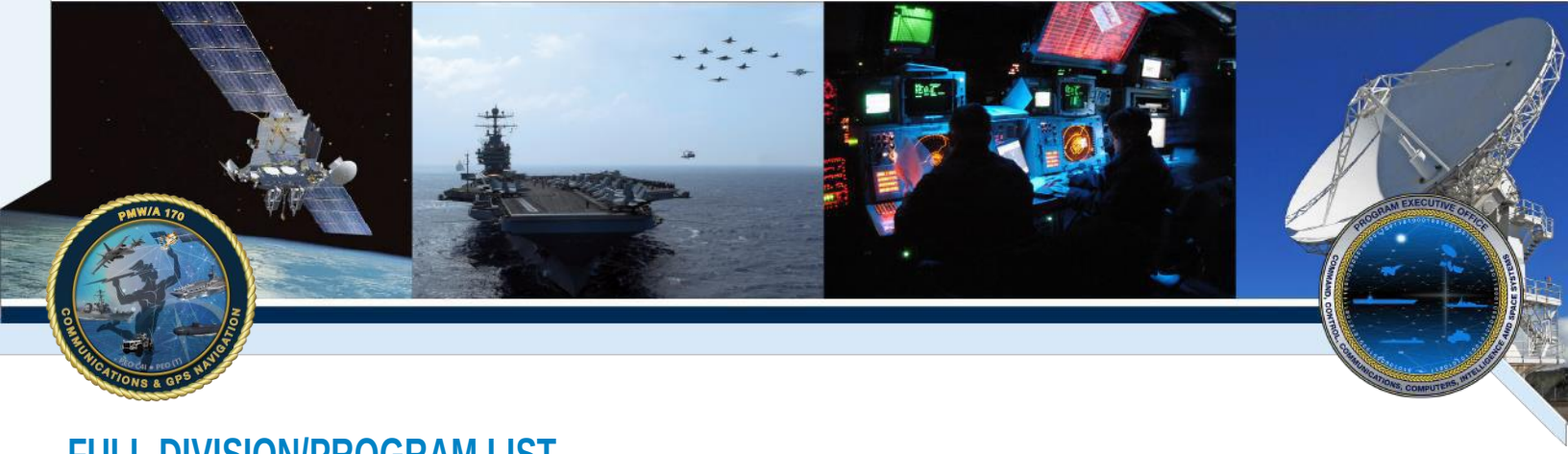
GPS-Based Positioning, Navigation and Timing Service (GPNTS) (ACAT II)

GPNTS is the Navy's current and modernized surface PNT data fusion and distribution system. It provides mission critical real-time, assured PNT data services for weapons, combat, navigation, and other C4I systems. GPNTS is the Navy's lead platform for GPS M-Code integration.

GPS Modernization (GPS Mod) (Project)

GPS Mod addresses the Navy's future integration of Air Force developed M-Code capable GPS receivers. Provides Naval aviation platforms improved access to GPS signals in contested environments.

Contact Information: Program Manager, CAPT Kris De Soto, 619-524-7930



FULL DIVISION/PROGRAM LIST

SATCOM	Satellite Communications
ATIP	Advanced Time Division Multiple Access Interface Processor
CBSP	Commercial Broadband Satellite Program
NESP	Navy EHF SATCOM Program
NMT	Navy Multiband Terminal
NSLC-A	Navy Senior Leadership Communications – Aircraft
STtNG	Satellite Terminal (transportable) Non-Geostationary
TV-DTS	Television Direct-to-Sailors
WAMS	Wideband Anti-Jam Modem System

Mission TACSIT	Mission Tactical Situation
CDLS/CDLS-TR	Communications Data Link System/CDLS Technical Refresh
CSEL	Combat Survivor Evader Locator
ESRP (Afloat/Ashore)	Environmental Satellite Receiver Processor (Afloat/Ashore)
GBS	Global Broadcast Service
NTCDL	Network Tactical Common Data Link
PRP	Portable Radios Program
SMT	Spectrum Multiband Transition

TACCOMS	Tactical Communications
Amphib Comms	Amphibious Communications (includes EPLRS-DR, HFSAR, LFI, MFT, SINCGARS, and Triband)
ATCS	Amphibious Tactical Communications System
BFTN	Battle Force Tactical Network
DMR	Digital Modular Radio
HFRG/HF Legacy	HF Radio Group and HF Legacy
iRCS	Integrated Radio Communications Suite
SMRC	Scalable Modular Radio Cluster
TVS	Tactical Variant Switch
UHF Mini-Dama	Ultra High Frequency Legacy and Miniaturized Assigned Multiple Access

PNT	Positioning, Navigation, and Timing
Air Navigation	Air Navigation
Air NAVWAR	Air Navigation Warfare
AN/WRN-6(V)	Satellite Signals Navigation Set
DAGR	Defense Advanced GPS Receiver
GPNTS	GPS-Based PNT Service
GPS Mod	GPS Modernization
NAVSSI	Navigation Sensor System Interface
Sea NAVWAR	Sea Navigation Warfare

ADDITIONAL ACRONYMS

BLOS	Beyond Line-of-Site
C4I	Command, Control, Communication, Computers, and Intelligence
CDL	Common Data Link
COMSATCOM	Commercial Satellite Communications
FLV	Force Level Variant
GEO	Geostationary
HEO	High Earth Orbit
HFIP	High Frequency Internet Protocol
IOC	Initial Operating Capability
IP	Internet Protocol
IW	Information Warfare
LEO	Low Earth Orbit
LOS	Line-of-Sight
M-Code	Military Code
MEO	Medium Earth Orbit
MILSATCOM	Military Satellite Communications
MOSA	Modular Open Systems Architecture
MUOS	Mobile User Objective System
NGSO	Non-Geostationary
P&D	Production and Deployment
PLEO	Proliferated Low Earth Orbit
RC3	Resilient Command, Control, and Communications
RF	Radio Frequency
SATURN	Second generation Anti-Jam Tactical UHF Radio for NATO
SINCGARS	Single Channel Ground and Airborne Radio System
SLEMOD	Service Life Extension & Modernization
SNR	Subnet Relay
SW	Software
UHF	Ultra High Frequency
ULV	Unit Level Variant
VHF	Very High Frequency