

**To the Engineering Duty Officer School  
In Commemoration of Your 25th Anniversary  
From All Your ED Friends at SPAWAR  
3 November 1999**



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## Milstar/EHF SATCOM

Regional crisis requires that today's on scene Commanders have fast, secure, and reliable communications to National Command Authority. The Milstar/EHF SATCOM system, along with the Navy's UFO/EHF satellite constellation, provides vital survivable wartime command, control, and communications. Milstar/EHF SATCOM is also used to provide our strike shooters at sea with time-critical Tomahawk mission data updates.

SPAWAR Engineering Duty Officers lead the entire EHF SATCOM program, from concept development to at-sea capability. EDOs conduct systems and development engineering; serve as program managers; plan and execute all aspects of integration with Milstar satellite and shipboard systems; conduct exhaustive at-sea test and evaluation; and install EHF terminals on ships, submarines, and ashore command centers throughout the entire Fleet.

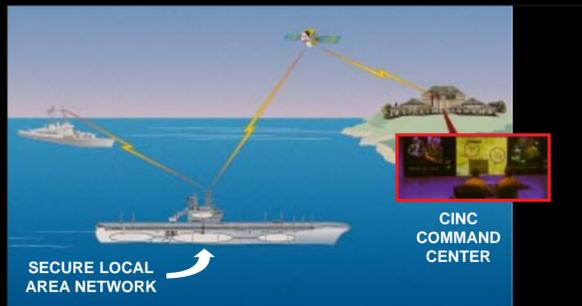


## GCCS-M

To dominate the littoral battlespace of the 21st century, the Navy, and our joint and coalition partners, must be equipped with total information superiority. The Global Command Control System-Maritime (GCCS-M) provides tactical data and intelligence information—from the Track Supervisor to the Fleet Commander—to allow our Naval forces to fight and win.

SPAWAR Engineering Duty Officers provide a unique blend of warfighting knowledge and technical expertise to the GCCS-M team. EDOs serve in all areas of GCCS-M development and Fleet implementation: software and systems engineering, integration and test, and program management. Engineering Duty Officers are taking the GCCS-M system from the lab to the warfighter—providing the Fleet with information dominance.

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## IT-21

IT-21 is the Navy's first step towards a truly network-centric communications system to provide warfighters with global connectivity and information dominance. Interconnecting a wide array of complex systems to a common backbone for interoperability and supportability, IT-21 is the Navy's premier C4ISR enabler of Joint Vision 2010.

From inception to installation, Engineering Duty Officers from every corner of the SPAWAR claimancy serve as IT-21 visionaries, architects, system integrators, program managers, and installers. These Engineering Duty Officers are credited with bringing the Navy into the Information Age. EDOs are changing the way the Navy fights, and are directly responsible for giving the warfighter—at sea, on the ground, or in a command center—the edge to win.

## Fleet Engineering

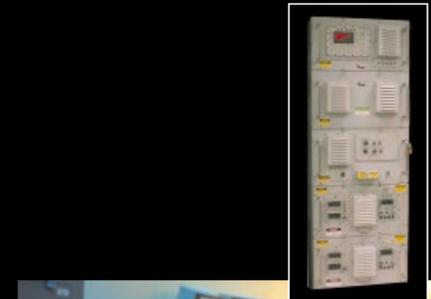
SPAWAR Fleet Engineering provides integrated C4ISR solutions to Navy and Marine Corps forces—worldwide. Fleet Engineering encompasses every aspect of planning, engineering, installation, testing, and support for a broad range of afloat and ashore C4ISR systems such as: IT-21, Satellite Communications, Direct-to-Sailor TV, Shipboard LANs, GCCS-M, and Intelligence and Navigation/GPS. Fleet Engineering and support teams provide Battle Group and Amphibious Readiness Group Commanders with the highest possible degree of warfighting capability.

SPAWAR Fleet Engineering Duty Officers lead every aspect of installation, Fleet support, and In-Service Engineering for hundreds of C4ISR systems. From the Arabian Gulf to WESTPAC to the MED, EDOs provide customer-focused and dedicated engineering and support. Engineering Duty Officers developed and implemented an integrated planning and installation process, and are executing the installation of over 1,500 C4ISR systems per year to meeting Fleet Battle Force requirements.

## JTIDS

Link-16 is the primary tactical data link for U.S. Navy, Joint, and Allied forces, providing vital networks that support the exchange of real-time tactical data. The Navy is introducing the Link-16 Joint Tactical Information Distribution System (JTIDS), providing our Naval Forces with the most capable, survivable, anti-jam data link for aviation strike and maritime air defense.

SPAWAR Engineering Duty Officers have made significant contributions to the development, deployment, and support of JTIDS. Their involvement spans all phases of acquisition for both ship and aircraft systems, including systems development and testing, surface ship and F/A-18 integration, and Fleet installations and support.



### Vision

*To be the Nation's pre-eminent provider of integrated C4ISR solutions for warrior information dominance*



SPAWAR is Global Connectivity and Information Dominance

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