



The Future Battlespace and the Power of Immediate Decision Making



Networks that are interoperable with Joint Forces will be fundamental to battlespace dominance in the future. FORCENet, the Navy's architectural framework for that Joint interoperability, is geared towards providing naval aviation and surface platforms immediate access to images, signals, and data. The goal is to speed the flow of information, shorten the kill chain, and deliver a more effective use of weapons and firepower, allowing forces to conduct operations at a much faster pace, increasing effects-based warfare.

Adm. Michael G. Mullen stated in his 2006 Naval Sea Systems Command keynote address: We must design the fleet to support the network, and we must design the network to empower the fleet, and, to empower the fleet, the network must empower the sailor. The new littoral combat ship is a good example of how the Navy can design ships from the keel up around networks and sensors.

Adm. Mullen wants the same approach taken for all current and future ships, aircraft and submarines.

Whether developing an intranet infrastructure in Iraq or transforming communication systems in the Department of Defense (articles featured in this issue), key issues remain as how to provide a secure network with easy and immediate access to information that is accurate, valid, reliable, and relevant for the future battlespace decision maker.

FORCENet enables the operational battlespace. In it, the enabling capability for a fully networked naval force is connecting to the similarly networked joint force that will be linked together by the Internet Protocol (IP)-enabled Global Information Grid. Our systems will be conceived, developed, and implemented as truly joint integrated capabilities capable of generating improved coalition effectiveness that will link warfighters ashore and at sea into a series of highly integrated distributed services networks capable of providing critical operational and tactical information to specified users. This will enhance naval capabilities to quickly make and execute decisions in the battlespace, synchronize the activities of widely distributed forces to mass effects on the enemy, and reduce threats to sailors and marines by providing broader situational awareness and operational flexibility. In this issue of *CROSSTALK*, there is a wide range of articles authored by those at the forefront of delivering the *Net-Centricity* of the future. From ground vehicles to data architecture, from the global grid to a focus on the strategic aspect of providing information access, the authors bring to life a forward-looking capability that is essential, fascinating, and complex.

Net-centric operations will distribute data and information to the warfighter across fault tolerant, adaptable, self-organizing, self-monitoring and self-healing, continuously available networks. A wide range of transmission paths, interoperable with those used by joint, coalition, civil, and law enforcement agencies, will be utilized. Warfighters embarking in net-ready aircraft, tanks, and ships will be able to communicate freely and autonomously down to the data-level while the underlying communications and network infrastructure will be invisible to the users. The infrastructure will also be readily deployable to any operating environment.

We cannot predict with certainty what specific threats we will face, but we do know we have to be flexible and globally intelligent, we have to operate jointly and at the same time seamlessly, and we must put the necessary information into the hands of those who need it precisely when it is needed. Entire systems at all levels of our government are being redesigned to meet this unpredictable future.

I imagine that as you read this issue of *CROSSTALK* you will look into our future with a new appreciation of net-centric efforts in place, that you will understand that our future threats go beyond the terrorist, and you may see your work in a new light.

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