

“Excellence in Global Maritime Knowledge” must be unconstrained by any particular organizational construct.

If you are a Naval intelligence professional and you haven't read The National Strategy for Maritime Security (NSMS), you could be undermining our government's efforts to combat the evolving threats in the War on Terrorism. So, before you read any further, go back and read the NSMS. After that, your required reading assignment includes two other capstone documents: (1) The National Plan to Achieve Maritime Domain Awareness and (2) The Global Maritime Intelligence Integration Plan. With those reading assignments completed, we can begin our discussion of “the need for new models and measures for optimizing fleet intelligence support” for the Maritime Headquarters with Maritime Operations Centers, Concept of Operation (MHQ w/MOC CONOP).

The challenge to measure and expand Navy/Joint intelligence capability, and balance “reachback” while meeting the increasing demand in the fleet for tactical and operational/planning level intelligence is a difficult, but certainly not insurmountable task. But, that really is not the issue. And the solution should not be constrained by the organization construct defined in the MHQ w/MOC CONOP.

The suggestion that...

“THE DEVELOPMENT OF MARITIME HEADQUARTERS WITH MARITIME OPERATIONS CENTERS (MHQ w/MOC), NEW OPNAV DIRECTION TO EXPAND DRAMATICALLY BANDWIDTH AFLOAT, AND THE CONTINUED HIGH DEMAND FOR TIMELY, PRECISE TACTICAL AND OPERATIONAL LEVEL INTELLIGENCE TO SUPPORT THE ENTIRE SPECTRUM OF WARFARE FROM MAJOR COMBAT OPERATIONS TO IRREGULAR WARFARE, ALL SUGGEST THE NEED FOR NEW MODELS AND MEASURES FOR OPTIMIZING FLEET INTELLIGENCE.”

...is simply not accurate.

The requirement for new models and measures to optimize fleet intelligence is wholly independent of any MHQ w/MOC CONOP and any other organizational efforts.

MHQ w/MOC (previously known as Globally Networked Joint Force Maritime Command Centers) is purported, by the Navy Office of Information, “to transform the Navy at the operational-level of war.” It has been characterized as “significantly expanding the Navy commander's Maritime Domain Awareness (MDA) by globally networking with other Navy organizations, services, coalitions and allies, federal, state, local agencies, and non-government organizations (NGO).”¹ Certainly, it may do this but, MHQ w/MOC is an organizational/structural construct that will evolve over time and may be renamed a few times before reaching full maturity as part of our Maritime Domain Awareness Strategy. With all the changes taking place in our military today, where Admirals and Generals of all four services are now routinely interchanged in the Joint environment, a more appropriate name for MHQ w/MOC might be “Standing Joint

¹ “RhumbLines”, Chief of Naval Information, March 7, 2007

Force Headquarters – Maritime (SJFHQ-M)” to demonstrate its connection to the greater Joint world. In any case, if the Naval intelligence community approaches this opportunity to expand Navy/Joint intelligence capability, and balance “reachback” as a challenge exclusive to MHQ w/MOC, we will have failed before we have begun.

As cliché as it sounds – failure in these demanding times is not an option for the Naval intelligence community. Failure never has been and never will be an option. Established in 1882 with Lieutenant B.M Mason as its first Director of Naval Intelligence, the Navy intelligence organization is our nation’s oldest continuously operating intelligence service. Our Naval intelligence personnel and the products they produce support many customers --- Joint warfighters, coalition forces, Navy/Marine Corps operating forces, national-level agencies, and national decision-makers. “Excellence in Global Maritime Knowledge” has never been “just a tagline” for the Naval intelligence community. It’s an integral part of their culture. MHQ w/MOC is not going to change this. And Naval Intelligence should not change for MHQ w/MOC.

Today, Naval intelligence has the opportunity to contribute significantly to the continuing cultural transformation of the overarching Intelligence Community (IC), which is “presently characterized by a professional but narrow focus on individual agency missions.”² We can ill afford to examine how Naval intelligence will support the MHQ w/MOC in isolation. Consider that, the relevance of the intelligence measurement, expansion, and balance challenge is, in fact, immaterial to the development of the MHQ w/MOC. The true challenge is to provide the intelligence which our Joint warfighters need to achieve “true” information superiority - *The capability to collect, process and disseminate an uninterrupted flow of information while exploiting or denying an adversary's ability to do the same.*³

Central to achieving information superiority is establishing Maritime Domain Awareness by integrating all-source intelligence, law enforcement information, and other open-source information. Achieving information superiority is largely dependent on information sharing and requires an unprecedented level of collaboration among our service, government and coalition partners. These twin themes of information sharing and collaboration are key elements of the Director of National Intelligence’s ‘commander’s intent’ which he shared with his Open Source Conference on 17 July 2007. Our Naval intelligence professionals represent the preeminent workforce that is capable of fully leveraging our global maritime intelligence collection and analysis capabilities for Joint success through improved information sharing and higher levels of collaboration. These professionals have never experienced any real difficulty in collection and analysis of intelligence. Dissemination is another issue entirely.

Whether our Naval intelligence enterprise will support U.S. government agencies, our military and our international partners in securing the maritime domain is not in question. To be successful in this effort, however, Naval intelligence must continue its

² Overhauling Intelligence. Mike McConnell. *FOREIGN AFFAIRS*. Volume 86 No.4. July/August 2007

³ Joint Vision 2010

relentless pursuit of community-wide implementation (through well-developed Tactics, Techniques and Procedures (TTP)) of a shared situational awareness capability (e.g., dissemination) that integrates intelligence, surveillance, reconnaissance, weather, navigation systems, and other operational information inputs from our U.S. military, government, allied, coalition and interagency partners. Dissemination of our intelligence product has been and remains a serious challenge.

Our existing maritime collection and analysis efforts are second to none and represent an intelligence enterprise that is equipped to collect, fuse, and integrate timely intelligence and information. Our challenge is to elevate our dissemination capability standards to that of our collection and analysis timeliness standards.

I suggest that we set the MHQ w/MOC construct aside and develop ‘a more intelligent approach to intelligence’ which the Director of National Intelligence, VADM Mike McConnell, put forth in *FOREIGN AFFAIRS* journal in July. He suggests that we adopt a mindset within the IC which is guided by a “responsibility to provide” (i.e., *disseminate*) intelligence to our warfighters. Intelligence isn’t worth a kilobyte of precious bandwidth if it isn’t correct and we can’t get it to the Joint warfighter on time. And, we should take this a step further and add that the “responsibility to provide” extends to providing that intelligence in a “user defined operational picture” (UDOP)⁴ rather than the conventionally accepted “common operational picture” (COP). Even for fleet operational/planning level intelligence, this all begins with an understanding of our National Security Strategy and the national level intelligence policy to share information, collaborate and integrate across the ‘broad interagency divide’. This national level policy cascades down from the DNI through the Under Secretary of Defense (Intelligence) and down to our military service intelligence chiefs. RADM Tony Cothron has responsibility for its implementation in the Navy.

Having accepted our “responsibility to provide” intelligence to our Joint warfighters, the question becomes – how do we best provide this intelligence? In his presentation to the Armed Forces Communications and Electronics Association (AFCEA) West 2007 conference, VADM Mark Edwards (CNO N6) captured one of the fundamentals roadblock to achieving true intelligence success in the FORCENet environment – lack of sufficient bandwidth. To our great shame, we are still working very hard (and maybe not smartly enough) to bring our fleet up to the home user’s level of connectivity and bandwidth. Even today, our DDGs are just beginning to enjoy the connectivity (~ .5 – 1.0 Mbps) home users experienced in the year 2000. He went on to explain that, at this pace, in 2014, home users will have 250 times more bandwidth available than our typical DDG 1000 and 100 times more than our CVNs. How can we accept this? We can not. How can we improve it? By doing what Admiral Clark advocated during his tenure as CNO – ‘embrace change and then lead it’.

⁴ The UDOP allows intelligence professional and intelligence consumers to conceptualize, visualize, create, and share intelligence to support decision-focused views of the operational environment with Joint warfighters and each other.

A key element of that change is information sharing and collaboration across the Joint, coalition and interagency domains. Information sharing at all appropriate classification levels is essential to developing useful, actionable intelligence for the Joint warfighter. Intelligence is useless if we can't get the correct information to the right decision-maker, at the right time, in the right format, at the right classification that allows the decision-maker to execute the decisive course of action. These activities are at the core of what Naval intelligence professionals deliver to our Joint war planners/fighters everyday. Intelligence professionals need to lead the way in developing and implementing new policies (e.g., Tactics, Techniques and Procedures (TTP)) that maximize information sharing across the intelligence community, extending that information sharing into the coalition and interagency arenas. But, it is the communicators and information professionals who must provide a C4I network infrastructure with sufficient bandwidth to allow seamless intelligence and information sharing across allied, coalition and interagency domains.

The Naval intelligence community has been burdened, not by lack of information or intelligence to share with the Joint warfighter to facilitate planning/warfighting, but rather by the data transport, storage and visualization capability limitations of our legacy C4ISR systems. The suggestion that “the development of the MHQ w/MOC CONOP requires new models and measures for optimizing fleet intelligence” is a faulty one. Naval intelligence professionals need only focus on improving *the capability to collect, process and disseminate an uninterrupted flow of information while exploiting or denying an adversary's ability to do the same* – regardless of the organizational construct.

The Navy is moving in the right direction to develop a robust C4I network architecture which allows intelligence professionals to provide the Joint warfighter the actionable intelligence he/she needs for overwhelming advantage in the information battle space. This new direction is independent of our MHQ w/MOC efforts. Through the development of the Consolidated Afloat Networks and Enterprise Services (CANES)⁵, the Navy is transforming the current stovepiped C4I architecture to seamless networks of modular, composable, information processing capabilities.

⁵ USN C4I Migration to a Service Oriented Architecture and Common Computing Environment Brief. March 7, 2007. CAPT Rock Madsen. SPAWAR PMW-120. Distributed Common Ground Station – Navy (DCGS-N).

While today's current C4I architecture is characterized by:

- Multiple unique networks
- Multiple classification levels
- Multiple operating systems
- Multiple protocols
- Inefficient use of server storage
- Security vulnerabilities

The CANES C4I architecture offers:

- Common network
- Cross domain interoperability at all security levels
- Ubiquitous information exchange in a Service Oriented Architecture (SOA)
- Core services
- An inoculated (secure) network

This CANES Vision approach to transport, storage and visualization of intelligence information coupled with our many significant lessons learned in Knowledge Management during operations in Iraq (to provide sufficient bandwidth and appropriate information technology infrastructure), may offer the Naval intelligence professional the first true opportunity to provide a User Defined Operational Picture (UDOP) to the Joint warfighter in a genuine, role-relevant representation-based environment. All of this occurs unconstrained by the organizational construct of MHQ w/MOC or successor CONOPs.

The UDOP allows the intelligence professional to conceptualize, visualize, create, and share intelligence to support decision-focused views of the operational environment with Joint warfighters. Intelligence-driven UDOP supports time-critical decisions in a distributed net-centric C2 environment. The Office of Naval Research is leading the Navy's effort to deliver this UDOP capability through three significant enabling capabilities⁶:

- (1) D3L – is a dynamic distributed data layer which provides the essential intelligence information necessary to drive persistent role-based visualization and situational awareness for each specific user. This layer contains the pedigree, metadata and data tags which will allow the user to see all relevant information at the appropriate classification level.
- (2) R3V – role relevant representation and visualization allows specific users to tailor representation of situational events in a context meaningful to the individual (e.g., Air Warfare Commander, Logistics Commander, Undersea Warfare Commander, Expeditionary Warfare Commander, Coalition Forces Commander, etc.).
- (3) ACA – adaptive collaboration assistant is a collection of automated techniques to gather, share and fuse contextual information. This component allows the user to interact with other users in a networked environment. It enables rapid and selective sharing of joint & coalition plans/information while ensuring the restrictions on information sharing are honored. This is the layer that contains all the necessary collaboration tools.

The net effect of ONR's successful efforts will result in a UDOP wherein Naval intelligence professionals can provide Joint warfighters with decision-relevant, accurate,

⁶ Office of Naval Research, Broad Agency Announcement (BAA) # ONR 07-021 Globally Networked Maritime Headquarters with Maritime Operations Center, April 2007.

timely reports and track data through automated processing of multi-INT and other source information. The CANES enterprise will have a virtual repository with consistent data to support processing applications (i.e., track, identification, situation awareness, threat assessment) and role-relevant representation through user defined visualization of ongoing operations. Warfighters can conduct distributed operations using shared / consistent data for Joint and Coalition regional and global collaboration in the CANES environment in any organizational construct with the proper supporting C4I infrastructure and appropriate bandwidth.

Naval intelligence support to the Joint warfighter should be seamless and transparent, regardless of the organizational construct in the Maritime Domain. Expanding Navy/Joint intelligence capability and balancing 'reach back', while meeting the increasing demand in the fleet for tactical and operational/planning level intelligence is self-resolving in the CANES Vision. Instead of focusing on conforming to evolving organizational constructs, the Naval intelligence community should instead focus on ensuring that it:

- Builds a culture of understanding among warfighters of what Intelligence professionals bring to the fight.
- Understands the DNI's mandate of the community's "responsibility to provide" intelligence to the warfighter (share information to the maximum extent possible and collaborate)
- Understands the role of the Naval intelligence professional in fulfilling:
 - The National Military Strategy,
 - The National Maritime Security Strategy,
 - The National Plan to Achieve Domain Awareness and,
 - The Global Maritime Intelligence Integration Plan.
- Develops and implements new policies (i.e., Tactics, Techniques and Procedures (TTP)) that maximize information sharing and collaboration across the intelligence community.
- Continues the relentless pursuit of community-wide implementation of shared situational awareness and collaboration capabilities.
- Recognizes the importance of coalition support.
- Recognizes the need for interagency cooperation.
- Sustains its reputation of over 125 years of excellence in meeting the Navy's intelligence requirements.

Having done these things, our intelligence organization is not constrained to supporting the MHQ w/MOC exclusively, but is instead fully capable of the satisfying the Quadrennial Defense Review's mandate to meet the intelligence requirements of ANY standing or deployable Joint Task Force Headquarters. Thus, the Naval intelligence professionals' tradition of "Excellence in Global Maritime Knowledge" remains unconstrained by any organizational construct.