What Is Past Is Prologue

The Future of Naval Intelligence Is Going (Back) Beneath the Waves

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Located at the northeast corner of the National Archives Building in Washington, D.C., is the 1935 sculpture *Future* with the inscription "WHAT IS PAST IS PROLOGUE" engraved below. This quote, originally from Shakespeare's *The Tempest,* reminds us that there are moments when the future is very much like the past. As we look ahead to the next decade and beyond, naval intelligence is in such a moment. As a community, we must not only evolve to meet the significant intelligence requirements associated with the new cyber domain but must also provide increased analytical capability and expertise to address the threats in a traditional maritime area of focus for the Navy — the undersea environment. Although the threats in the new cyber domain are significant, and the Navy's intelligence community[i] must be on the forefront of addressing them, we must re-focus our community on the growing undersea threat by creating a cadre of naval intelligence professionals who possess the unique skillsets necessary to understand and characterize that threat.

The Strategic Mandate

In the U.S. Navy's *Design for Maritime Superiority* issued in January 2016, Chief of Naval Operations (CNO) Admiral John Richardson lays out a vision to keep the U.S. Navy the greatest sea-going force in the world. In assessing the strategic environment, the CNO identified the traffic "on the oceans, seas, waterways, including the sea floor – the classic maritime system" and the "increasingly influential force" of the global information system, which includes undersea cables, as "key forces."[ii] Of particular concern is that "for the first time in 25 years, the United States is facing a return to great power competition."[iii]

While there are many areas where this great power competition is playing itself out on the global stage, the CNO highlighted specific concerns in regards to the Russian and Chinese navies. In addressing these challenges to our maritime superiority the CNO stated, “[T]he Russian Navy is operating with a frequency and in areas not seen for almost two decades and the Chinese PLA(N) is extending its reach around the world.”[iv] Nowhere are the threats more grave to our survival as a nation than those emanating from the undersea domain. Naval intelligence, in concert with the submarine community, must focus on growing the Navy’s intelligence capabilities to grasp, assess, and mitigate these threats.

Operational Realities and Shifts in Focus Areas for Navy Intel

I have had the privilege of serving as a naval intelligence officer for 18 years, covering the three decades of the 1990s, the 2000s, and now the 2010s. During those timeframes, I have observed distinct shifts in focus areas.

The 1990’s: This decade saw the proliferation of precision- guided munitions (PGM’s) and the obvious effect this development in warfare had on intelligence support requirements in terms of targeting and strike operations. For young intelligence officers desiring to be closely integrated with Navy operations, there was no better assignment than that within a Carrier Air Wing – providing threat and targeting intelligence in real-world operations such as those strike missions in Iraq, including: DESERT STORM, SOUTHERN WATCH, DESERT STRIKE, and DESERT FOX; as well as DELIBERATE FORCE (Bosnia) and Allied Force ALLIED FORCE (Kosovo).

At the Navy-Marine Corps Intelligence Training Center (NMITC) in Dam Neck, VA, respected Cold Warriors shared about the intelligence successes against the Soviet undersea threat in the ’70s and ’80s. However, in the 1990s, these stories were just very interesting history to young ensigns like me. The Cold War was ending, Russian subs weren’t deploying, and the “place to be” for an intelligence officer was providing support to strike operations as part of power projection ashore. Naively, many of us assumed intelligence support to the undersea domain was part of history, not also a critical part of our future.

The 2000s: Shortly after the beginning of the new millennium, the catastrophic events of 9/11 ushered in another shift in focus for naval intelligence. As a junior officer assigned to Fighter Squadron 213 onboard the *USS Carl Vinson* (CVN-70) in the Indian Ocean, I watched with disbelief as the World Trade Center towers fell. At that moment, our Carrier Strike Group (CSG) Director of Intelligence, CDR Eileen MacKrell, gathered the enlisted Intelligence Specialists and my fellow intelligence officers and calmly stated that our deployment would be different from what we ever could have imagined and that our lives would never be the same. She was prescient on both counts.

During Operations ENDURING FREEDOM and IRAQI FREEDOM, active and reserve naval intelligence officers served combat deployments on land—hundreds of miles from the shoreline. In many respects, we had become augmentation for our Army Intelligence colleagues. The nature of these counterinsurgency (COIN) operations conducted during this period catalyzed yet another shift in focus for naval intelligence to that of supporting special warfare, expeditionary warfare, and human intelligence. Although the general discipline of operational intelligence (OPINTEL) was applied to intelligence fusion cells and joint intelligence-operations centers throughout numerous theaters, this shift in operational realities took some focus away from the Navy's *raison d'être* of intelligence expertise—the maritime environment.

The 2010s: Acknowledging the centrality of information to naval operations, the Navy established the Information Dominance Corps (IDC) in late 2009 (now known as the Naval Information Warfare Community, or IWC).[v] This move coincided with another rapidly growing focus: cyber operations. It became increasingly clear that robust defensive and offensive cyber capabilities were critical to maintaining the United States' competitive edge in general and our maritime superiority in particular. "Cyber" became the next big thing during this era, and developing a cadre of cyber warriors and analysts (rightly) became critical to the Navy's mission. However, in the midst of this focus on cyber operations, dramatic developments have occurred in the undersea domain, which must be addressed with the same focus and intensity.

The Threat Today: Back to the Future

During the last few years, Russian and Chinese submarine operations have increased markedly. In the late 1990s, when I was first designated a Navy intelligence officer, Russian submarines were rusting at their

piers, and Chinese subs were simply not a significant concern. How things have changed! We are now witnessing a new era of Russian submarine activity not seen in decades. It is a *Back to the Future* moment for the Navy. Russian submarines are not only operating at a tempo not seen since the Cold War, but are also more capable. This combination presents a serious challenge that, as an IWC, we must address comprehensively.

As Vice Admiral James Foggo and Dr. Alarik Fritz pointed out in their timely *Proceedings* article on the growing Russian submarine threat, *The Fourth Battle of the Atlantic:*

> they are much more stealthy, carry more devastating weaponry, and go on more frequent and longer deployments than before. The submarines of the Russian Federation are one of the most difficult threats the United States has faced. This threat is significant, and it is only growing in complexity and capacity.[vi]

The significant holiday that naval intelligence has enjoyed *vis-a-vis* the foreign submarine threat is over. As Admiral Foggo and Dr. Fritz unequivocally stated: "[F]or the first time in 30 years, Russia is a significant and aggressive maritime power."[vii]

This growing threat in the undersea domain is particularly ominous given the increased capabilities that Russian submarines now possess. The newest class of Russian subs, the Severodvinsk multipurpose attack submarine, has introduced a challenge in anti-submarine warfare (ASW) operations not experienced by the U.S. Navy since the height of the Cold War. The combination of stealth and nuclear capability of this fourth-generation missile boat (the first of which entered active service in June 2014) poses a significant threat to the United States. Among its impressive weapons payload is the highly capable supersonic Kalibr SS-N-30A submarine-launched cruise missile (SLCM), capable of ranges up to 2,500 kilometers and armed with nuclear or conventional warheads.[viii] This potent weapon (with an advanced guidance system and high terminal speed) coupled with this stealthy platform presents the U.S. Navy with its most serious challenge in our role as the "Shield of the Republic."[ix]

The U.S. Navy now faces not only a revived ASW threat from Russia but also a growing challenge from China. For the first time, two non-allies possess the capability to hold the United States at risk with nuclear strike capabilities from submerged platforms. The Chinese Type 094 Jin class ballistic missile submarine

began nuclear deterrent patrols in December 2015.[x] Armed with 12 JL-2 submarine-launched ballistic missiles (SLBMs), the Jin class will give China another platform for enhanced strategic strike capabilities, according to the U.S. Office of the Secretary of Defense.[xi]

In addition to the threat posed by Chinese ballistic missile submarines, the People's Liberation Army Navy has increased the operational tempo and distances of submarine deployments. Effective theater anti-submarine warfare (TASW) capabilities and expertise will be a growing requirement in the 2020's not just for the North Atlantic and Western Pacific – but for the Indian Ocean, Mediterranean, and Eastern Pacific as well.

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Prioritizing Information Warfare Support to the Undersea Domain for the Next Decade (and Beyond)

As intelligence professionals, we earn our keep when we develop deep knowledge of the threat and the operating environment, while effectively communicating tactical, operational, and strategic intelligence assessments to commanders and decision makers. During the last 20 years, great strides have been made in creating a more joint force. Without question, when it comes to combat operations we function in a joint context. Navy intelligence professionals in particular, throughout their careers, get above-average exposure to joint commands and operations. However, in the critical arena of ASW operations it is, to put it bluntly, a Navy-only mission. The U.S. Navy has the *sole* responsibility for protecting our homeland, and those of our allies, from the threat posed from and within the undersea domain. That threat is growing, and IWC must respond appropriately given this service-specific responsibility.

As a community, we must prioritize intelligence support to undersea operations as part of our overall human capital strategy. The art and science of intelligence support to ASW and effective use of unmanned undersea vehicles (UUVs) require a cadre of intelligence professionals specifically trained and designated in this skillset. The knowledge base required to serve in these roles goes beyond the basic training that new intelligence officers receive or from the OPINTEL "C" School available to many intelligence specialists. It must also include a unique training regime that synthesizes information on threat platforms, tactics, and doctrine, as well as a deep understanding of the unique undersea environmental factors of thermoclines, bathymetry, acoustic propagation paths, etc.[xii] A recently adopted Information Warfare Support to Theater

ASW Professional Qualification Standard (PQS) will serve as a much-needed foundation for qualifying intelligence professionals in this growing, critical need.[xiii] However, this new PQS should be only a starting point for an overall strategic effort to grow the capacity of naval intelligence to support undersea superiority.

As a part of a strategy to build a cadre of naval intelligence professionals with expertise in the undersea threat, the Navy needs a system for tracking, and recalling if necessary, personnel with these skillsets. One need only look at intelligence officer Additional Qualification Designation (AQD) codes[xiv] to see a disconnect between this growing threat and human capital priorities. The *Navy Officer Manpower and Personnel Qualifications Manual* and the *Navy Enlisted Occupational Standards Manual* demonstrates a lack of focus on intelligence support in the undersea domain. There are just over two-dozen AQD codes for intelligence officers, ranging from Intel Support to Targeting to Special Warfare. In fact, there are four AQDs codes for Intel Support to HUMINT alone. However, it has only been since May 2016 (as part of the establishment of the new PQS previously mentioned) that the Navy had its first-ever AQD related to intelligence support to the undersea domain.[xv] But this new development must only be the beginning of a larger comprehensive effort for the IWC in addressing this need.

In light of the growing threat, rapidly advancing undersea technologies, and the overall importance of the undersea domain to the Navy's maritime superiority strategy, the IWC may need to develop a *series* of undersea-related AQDs and a Navy Enlisted Classification (NEC) as a component of an overall strategy for developing the Navy's human capital to address the full spectrum of undersea operations. This course of action will also provide the Navy with a first-ever ability to efficiently identify, track, recall, and assign active and reserve intelligence personnel who possess the unique expertise in the undersea domain – whether it be at the tactical, strike group, task force, fleet, or theater level, or even in the growing importance and employment of Unmanned Undersea Vehicles (UUV's).

Given the fiscal realities on Navy training budgets, the IWC should pursue pathways for these ADQs and NECs that are consistent with the CNO's call to "achieve high velocity learning at every level."[xvi] Training and certification initiatives consistent with this level of effort from the Navy's strategy will be critical in developing the cadre needed to address the undersea threat. Traditionally, the only way for a Sailor to earn an intelligence-related NEC was via the schoolhouse. This approach entails significant cost. An alternative

pathway the IWC should consider, and is already allowed by Navy regulations and utilized by other communities, is the Tracking NEC.[xvii] This approach gives the Navy a proven system of tracking key qualifications via on-the-job training and/or a PQS qualification. Given the reality that most theater ASW task forces are heavily dependent on reserve information warfare Sailors to augment their operations, this tracking capability will prove pivotal in an operation where such support will be required.

However, this need for greater prioritization in information warfare support to the undersea domain must not rest solely on the IWC. Just as the Navy's aviation community has made significant investments in intelligence personnel over many decades (with numerous officer and enlisted intel-related billets integrated within air wings and squadrons), so too must the Navy's submarine community. Commander Submarine Forces and Commander Information Forces – two corresponding type commands (TYCOMs) –working together to address the growing undersea threat, can create a powerful force for innovating and accomplishing our common mission to protect our nation and way of life. The good news is that even a little investment in intelligence billets (both active and reserve) will go a long way in making a significant impact in intelligence support capacity to ASW and the wider undersea enterprise.

Opportunities to Grasp

With the growing utilization of UUVs and the call from the U.S. Secretary of Defense for a third offset strategy to maintain our competitive edge against potential adversaries, the intelligence-related opportunities posed by UUVs to the Department of Defense's overall long-term strategy is substantial. This reality only reinforces the need for the IWC to focus as much on the undersea domain in terms of human capital strategy going forward as it has on cyber in the last decade. This particular subset of intelligence expertise is critical in accomplishing the *Design for Maritime Superiority*. With the majority of global information traveling on undersea cables, our economy depends on a secure undersea environment. The IWC must make the necessary investments to be in the position to address and neutralize these threats now and into the future.

Additionally, a significant opportunity exists for the two respective warfare development centers (Undersea Warfare Development Center and Information Warfare Development Center) to work together in building a trained and ready Total Force cadre able to provide effective battlespace awareness of the undersea

operating environment. This collaboration is critical to maintaining our superiority beneath the waves.

If the 2020s (and beyond) are marked by a persistent and growing threat from the undersea domain, the IWC, supported by investments in billets by the submarine community, must build a cadre of professionals who can provide the best intelligence support to mitigate or neutralize these threats to our nation. The past is indeed prologue, and the importance of the undersea threat has come full circle in the last three decades. Just as we met the challenge in the 1970s and 1980s, we must do so again as we look ahead toward the future of naval intelligence.

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[i] The terms "Navy Information Warfare Community" and "Navy Intelligence Community" are used interchangeably throughout this essay.

[ii] *A Design for Maintaining Maritime Superiority* (Washington, DC: Department of the Navy, 2016), http://www.navy.mil/cno/docs/cno_stg.pdf .

[iii] Ibid.

[iv] Ibid.

[v] Navy Information Dominance Corps Human Capital Strategy 2012-2017, http://www.public.navy.mil/fcc-c10f/Strategies/Navy_Information_Dominance_Corps_Human_Capital_Strategy.pdf.

[vi] VADM James Foggo III, USN and Dr. Alarik Fritz, "The Fourth Battle of the Atlantic," *U.S. Naval Institute Proceedings* 142 (2016), https://www.usni.org/node/87164.

[vii] Ibid.

[viii] David Majumdar, "U.S. Navy Impressed with New Russian Attack Boat," *USNI News*, October 28, 2014. https://news.usni.org/2014/10/28/u-s-navy-impressed-new-russian-attack-boat.

[ix] From the title of Michael Isenberg's epic book: "Shield of the Republic: The United States Navy In An Era of Cold War and Violent Peace 1945-1962" *St. Martin's Press*, November 1993. ISBN 978-0-312-09911-4

[x] Richard D. Fisher, Jr., "China Advances Sea and Land-Based Deterrent Capabilities," in *Jane's Defence Weekly* (Surrey, UK: Jane's Information Group, 2015).

[xi] U.S. Office of the Secretary of Defense, "Military Power and the People's Republic of China" (2009):24. http://www.defense.gov/Portals/1/Documents/pubs/China_Military_Power_Report_2009.pdf

[xii] The primary intelligence discipline for the undersea – acoustic intelligence, or ACINT – is a Navy-centric, programmatically neglected stepchild of MASINT, with no major "three-letter" national intelligence agency to champion it – unlike SIGINT, HUMINT, and GEOINT.

[xiii] "ASW Intel Support Getting on the Same Page," *NAVIDFOR Public Affairs*, March 13, 2015, http://www.navy.mil/submit/display.asp?story_id=84399.

[xiv] According to the NOOCS Manual, an AQD code: (1) Identifies additional qualifications, skills, and knowledge required to perform the duties and/or functions of a billet beyond those implicit in the billet designator, grade, NOBC, or subspecialty; (2) Where specifically noted, identifies billets that provide unique qualifications for the billet incumbent; and (3) Facilitates retrieval of management information required to support more precise officer personnel planning. http://www.public.navy.mil/bupers-npc/reference/noc/NOOCSVOL1/Pages/default.aspx.

[xvi] *A Design for Maintaining Maritime Superiority* (Washington, DC: Department of the Navy, 2016), http://www.navy.mil/cno/docs/cno_stg.pdf .

[xvii] NECOS Manual, Volume III, Chapter 1 (April 2016) http://www.public.navy.mil/bupers-npc/reference/nec/NECOSVolII/Documents/Chap-1_APR16.pdf

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