

Why We Need Maritime Patrol and Helicopters

By VADM Walter Massenburg, USN (Ret.)

In a recent U. S. Navy promotional commercial, “The Shield,” the commercial dramatically pictures a number of Sailors, one at a time, protecting a family, and then, finally providing that protection as one unified group. The narrator proudly announces, “to get to you, they’d have to get past us.” Never has that been more applicable than today with respect to anti-submarine warfare; intelligence, surveillance and reconnaissance; and anti-surface warfare.

In the mid-eighties, at the height of the Cold War, the threats from Soviet ballistic missile and attack submarines were real. Resourcing of Anti-Submarine Warfare (ASW) platforms was at the peak as our Navy played a “cat and mouse” game to deter our enemies from threatening our homeland and operating forces. During this period resources were appropriately allocated to create a formidable force to counter the threat. Our Navy’s airborne ASW and reconnaissance forces included anti-submarine warfare helicopters, carrier-based anti-submarine aircraft, and long range maritime patrol aircraft. At the high-water mark of the Cold War (1985), the Navy had 411 ASW patrol aircraft, 148 ASW carrier aircraft, and 284 ASW helicopters to employ against this existential threat. After the fall of the Berlin Wall (1989) and the atrophy of the Soviet submarine force, there was a political cry to reallocate the fruits of this great Cold War victory as a “peace dividend”. Numbers of traditional ASW platforms, and the squadrons that flew them, were greatly reduced while their capabilities were expanded to take on other important missions.

The world changed to address new asymmetric threats, new engagements and expanded mission areas - Desert Shield, Desert Storm I and II in Iraq, Operation Joint Guardian- Kosovo Campaign, Operation Restore Hope in Somalia; Operation Enduring Freedom and Operation Iraqi Freedom, Operation Odyssey Dawn in Libya, and Operation Inherent Resolve against ISIL. Carrier antisubmarine warfare, all but disappeared with the retirement of S-3 Viking and helicopters took on the greater burden of battle-group protection. In addition, our allies reduced their ASW capabilities. Long-range patrol for Britain and the Netherlands disappeared altogether. Traditional forward operating bases for VP (Keflavik, Iceland; Lajes, Azores; Bermuda; Adak, Alaska; Cubi Point, Philippines, Diego Garcia, and others) were all abandoned.

Fast forward 30 years to today. In this unsettled world, the submarine threat has emerged from China, North Korea, Iran, and yes, even Russia, as their navies are rebuilding their sub-surface capabilities. In the near future, as the Navy continues to transition from legacy aircraft, there will be only two remaining Air ASW platforms in DoD’s inventory: the P-8A Poseidon and MH-60R Seahawk. Built primarily for ASW, combatant commanders continue to use these airborne assets in the less traditional mission roles (overland Intelligence, Surveillance and Reconnaissance (ISR), anti-surface warfare missions) to counter regional threats. With adversaries evolving, the requirement for Air ASW large area search, ballistic missile defense, and pouncer ASW has emerged as a critical component of maritime superiority.

While technological advancements and the advent of unmanned systems has changed the dynamic of airborne ASW and ISR, numbers still matter. In contrast to the height of the Cold War, with fewer than half the number of VP squadrons, the Navy can currently muster 145 P-3 and P-8 patrol aircraft, 221 MH-60R helicopters, and a handful of unmanned systems to pace the threat and meet other mission requirements. Once the Navy completes the recapitalization of its fixed and rotary wing ASW assets, the VP and HSM communities will have a total of 109 P-8As, 280 MH-60Rs, and dozens of MQ-4C Tritons and MQ-8C Fire Scouts to provide ISR coverage, against a rapidly growing and modernized submarine threat.

Even as the Navy wrestles with the proliferation and exportation of very capable diesel submarines to our adversaries and closely monitors rogue nation states like Iran and North Korea, who recently test fired a ballistic missile from one of its submarines, the rise in near-peer submarine operations is alarming. Not since the Cold War has the United States seen the levels of Russian submarine activity it is witnessing today. Significantly increasing its capital investments in undersea capabilities, Russia again routinely deploys new generation nuclear boats that are quieter and have more advanced weapons systems that can attack land and surface forces at longer ranges. Moreover, they are putting to sea with better trained and proficient crews that test our ASW skills throughout the North Atlantic, the Mediterranean, and even off the coast of the United States.

In addition to modernizing its ballistic missile and fast attack submarine force, Russia fielded the *Severodvinsk*, the first of eight planned *Yasen*-class cruise missile equipped nuclear submarines, which poses a significant threat to our carrier strike groups and surface forces.

Without a clearly understood strategic objective, the resurgence in Russian submarine deployments rightfully concerns our European allies and has resulted in calls for the U.S. Navy Maritime Patrol and Reconnaissance Force to return to its traditional operating bases and ASW tempo in the Atlantic. This is challenging given limited resources and the ongoing U.S. “pivot to the Pacific” to address concerns over China’s strategic moves in the South China Sea.

China has undertaken an unprecedented island-building campaign that extends that country’s military reach far into what has always been considered international waters and, if left unchecked, in the case of Scarborough Shoal within 140 miles of the Philippines’ capital.

ADM Harry Harris, head of U.S. Pacific Command, views this “Great Wall of Sand” as an effort by China to militarize the South China Sea and solidify its disputed sovereignty claims in the area. These actions have led to increased tensions in the region and frequent interactions between PRC fighter aircraft and US Maritime Patrol and Reconnaissance aircraft operating in international airspace off shore of these manmade islands. Some of these intercepts are characterized as dangerous and increase the chance of an incident or even a mid-air collision as occurred with an EP-3E off Hainan Island in 2001.

Coupled with a growing, farther ranging, and greatly im-

proved surface and subsurface fleet, the PRC is stretching US forces in the region and our ability to counter China's expansionistic goals. Naval Aviation, and specifically Navy Maritime Patrol and Helicopter aviation is key to monitoring and reporting on these aggressive activities, protecting our Sea Base, and ensuring freedom of navigation and commerce through international waters. Despite the Navy's maneuvers and ship transits through the disputed areas of the South China Sea, the near-daily Maritime Patrol and Reconnaissance flights are often the best example of U.S. presence and commitment.



In December 2014, a P-8A Poseidon, side number 760, takes off from the Boeing facility in Seattle, WA, for delivery to fleet operators in Jacksonville, FL. (U.S. Navy photo courtesy of Boeing Defense)

In order to cover such vast swaths of ocean, above and below the surface, requires the integrated capabilities of fixed wing, rotary wing, and unmanned aircraft systems. The P-8A Poseidon and MH-60R Seahawk are a formidable team that holds at risk the surface and subsurface adversary to allow our carrier strike groups and joint forces access and freedom of maneuver. While capable as the P-3 in any flight regime, sensor and weapons improvements like multi-static active coherent (MAC) acoustics allow the P-8A to remain at high-altitude conducting wide-area ASW search and surface reconnaissance. Working in concert with advanced air radar periscope detection (AARPD) and airborne low-frequency dipping sonar (ALFS) equipped MH-60R helicopters that operate closer to the strike group and independently steaming ships, these aircraft together provide a coordinated and accurate operational picture to multiple units and key decision makers. P-8A and MH-60R are capable of executing the entire ASW kill-chain when called upon, and the force multipliers in this integrated system of systems are the remotely piloted MQ-4C Triton and MQ-8C Fire Scout.

The MQ-4C Triton, an all-weather fixed-wing Unmanned Aircraft System (UAS), is the center of the Navy's Intelligence, Surveillance and Reconnaissance (ISR) strategy for Airborne Reconnaissance. Operating at altitudes above 50,000 feet for up to 24 hours, it will provide warfighters with an order of magnitude increase in persistent maritime multiple-intelligence (Multi-INT) capability. The Triton UAS will augment existing and planned manned Maritime Patrol and Reconnaissance aircraft (P-8A), and provide a multi-sensor surface surveillance platform that will be able to maintain a continuous presence in excess of 2,000 nautical miles from its operating base. It will be capable of providing similar intelligence products to those currently delivered by the VQ/Electronic Warfare community.

In addition to Multi-INT capabilities, the Triton will also use its Electro Optical/Infrared (EO/IR) camera, Multi-Func-

tion Active Sensor (MFAS) radar, Electronic Sensor Measure (ESM) and Automatic Identification System (AIS) to provide a real-time over-the-horizon maritime picture to the Fleet.

The MQ-8C Fire Scout, a rotary-winged UAS, will be fielded from expeditionary HSM/HSC squadrons and operate from suitably equipped ships, like the Littoral Combat Ship (LCS). With a range of at least 115 nautical miles and endurance of over eight hours, Fire Scout will conduct surface, mine countermeasures and ASW missions. The flexibility of both Triton and Fire Scout to perform such a wide range of mission sets, both over the horizon and close in to the ship, in a continuous and persistent manner will ensure superior ISR maritime dominance and free up Poseidon and Seahawk to perform their primary missions.

Our ASW aircraft of today have evolved into more capable, more lethal, more mission oriented platforms than we enjoyed in the '80s. Maritime Patrol aircraft and ASW helicopters possess modern technologies and internal architectures that are easily modernized and fully networked with new acoustic and non-acoustic sensors to exploit the energy spectrum to make the hydrosphere more transparent and the atmosphere a battlespace leveraged to advantage. The question is not whether we need Maritime Patrol and Reconnaissance Aircraft and ASW Helicopters in today's Navy, but rather, "Do we have enough?"

So we are "Back to the Future", but with greater diversity of threats. Whether the "you" in the commercial is protection of our families at home, or the protection of a carrier battle group, or the protection of our interests and concerns of allies overseas; an important part of the "us" remains our U. S. Navy

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