



# VP ASSOCIATION NEWSLETTER

AN ASSOCIATION OF VETERANS WHO SERVED WITH THE NAVAL AIR RESERVE PATROL SQUADRONS BASED AT NAS SQUANTUM MA, NAS SOUTH WEYMOUTH MA, AND NAS BRUNSWICK ME.

NOTE, CURRENT AND FORMER MEMBERS OF ANY U.S. NAVY PATROL SQUADRON ARE WELCOME TO JOIN US!

**ISSUE 83**

**[HTTP://WWW.VPASSOCIATION.ORG](http://www.vpassociation.org)**

**MAR 2021**

Welcome to another edition of the VP Association newsletter. Until further notice please direct all VP Association-related inquiries or correspondence to Marc Frattasio, PO Box 30, Pembroke MA 02339, 781-294-4491, [marc\\_frattasio@yahoo.com](mailto:marc_frattasio@yahoo.com).

## **RECCO:**



**ABOVE:** VP-92 P-3Cs at Roosevelt Roads Puerto Rico sometime in the late 1990s. Got something similar to share? Contact Marc Frattasio at [marc\\_frattasio@yahoo.com](mailto:marc_frattasio@yahoo.com).

**FINAL FLIGHTS:** Jerry Shed, an electronics technician in VP-92, recently lost a long battle with cancer. We also lost Harvey Lee Bureau, who was an AW in VP-92, to complications associated with Alzheimer's disease.

We have two members who are very ill and would appreciate cards and letters from their old Navy friends. Tom O'Connor was in VS-913, VP-917, and VP-915. His address is 14 Gray Road, Falmouth ME 04105. Bill Hanigan, who was in VP-911 and VP-92, is also sick. His address is 23 Parkview Terrace, Duxbury MA 02332.

## **THE ADMIN FUND:**

The VP Association has no dues but contributions are welcome to help defray the cost of web site hosting, postage, and other expenses. We'd like to thank Sean Coffey for his recent and extremely generous contribution to the "admin fund". Thanks!

## **SPEAKING OF THE COST OF PRINTING AND MAILING NEWSLETTERS...**

If you have an e-mail address and get your newsletter in the mail please contact George Driscoll at [gnddriscoll@gmail.com](mailto:gnddriscoll@gmail.com) ASAP so we can send it to you via e-mail. Remember, we do not charge dues and operate on a shoestring thanks to volunteer labor, memorabilia sales, and donations. If you have an e-mail address and get a paper newsletter it would be better for us to send it via e-mail.

## **LOST CONTACT:**

Be sure to inform George Driscoll at [gnddriscoll@gmail.com](mailto:gnddriscoll@gmail.com) about home or e-mail address changes.

## **A NOTE AND PHOTO FROM PAUL LAPINSKI:**



I don't know if you received the news that Harvey Lee Bureau passed away on September 28, 2020. He had been suffering the effects of Alzheimer's Disease for several years.

Upon reviewing your book "THE MINUTEMEN OF VP-92" I gather that you knew Harvey quite well. I met him and most of the folks from Maine when I affiliated with VP-915 in January 1963. We formed a bond because of the fact the we all stayed in the barracks on drill weekends due to our long commutes. I flew with Harvey Bureau and Lee Cabana during the SP-2H days. After Harvey and other members of the Maine group left VP-92 in the late 1970s, my wife Barbara and I would return to Brunswick ME many times to enjoy the company of the Bureau's, the Cabana's and the Beebe's. A lot of sea stories became embellished over the years. The last time we visited was June 2019. Lee was still able to carry on a limited conversation. It was a great relationship with lasting memories.

In the photo presented above Varian Beebe, retired AM-1, VP-92. is on the left. Harvey Lee Bureau AW-2 in VP-92 and later retired BU-1 is on the right.

*Newsletter editor's note: Harvey Lee Bureau designed VP-92's original squadron insignia, which featured a guillotine surmounting the Atlantic Ocean with a submarine periscope below.*

## A NOTE AND PHOTO FROM DEB CRUTCHFIELD:

About a year ago, I nominated my husband Travis to receive a Quilt of Valor (presented to veterans). This was all kept secret from Travis and it was presented to him in our Sunday School class today (December 6<sup>th</sup>). However, I was also surprised to receive one myself. Both of us were in tears. What a special honor to receive these beautiful quilts. It was so special to receive these while we were at church. We will treasure them always. We are both so very honored to have been able to serve our country.

*Newsletter editor's note, Travis Crutchfield and Debbie Crutchfield were both CPOs in VP-92. Travis was an AWC and Deb was a YNC.*



## BALL CAPS:



Mike Kidder found somebody who sells ball caps that can be embroidered with a P-3 Orion and aircrew positions like "Sensor Operator" or "Flight Engineer", maintenance departments such as "Airframes" or "Power Plants", or anything you can think of. For more information or to order contact Diane Uerkvitz at [duerkvitz@fayausa.com](mailto:duerkvitz@fayausa.com).

A friendly reminder that our own Larry Daly from VP-92 is also in the custom embroidery business. He can make ball caps, polo shirts, and pretty much anything with the VP-92 squadron insignia, P-2s, P-3s, etc., and customize them with your name, rank or rate, wings, or you-name-it. Contact Larry for details at [easternemb@msn.com](mailto:easternemb@msn.com)

## LOCAL NAVAL AVIATION MUSEUM EFFORTS:

As you may know, there are organizations working to establish naval aviation museums on old NAS South Weymouth and old NAS Brunswick. Both bases are presently being redeveloped and its important their they naval history and heritage are not forgotten. NAS South Weymouth is nearly gone, with most of the airfield and military structures torn down or torn up. Although the airfield still

exists and is in daily use for civilian purposes, many of the military structures at NAS Brunswick have been torn down and more will no doubt go in at some point in the near future. If you were assigned to these bases, please consider becoming a member of one or both organizations. They need help, both financially and in terms of active members willing to donate time. The NAS South Weymouth museum group is the Boston area chapter of the Association of Naval Aviation, which is called the ANA Patriot Squadron. The NAS Brunswick group is called the Brunswick Naval Museum. Go to [www.anapatriotsquadron.org](http://www.anapatriotsquadron.org) and [www.bnasmuseum.org](http://www.bnasmuseum.org) for more details about these organizations.

### **BRUNSWICK NAVAL MUSEUM MEMORIAL BRICK PROJECT:**

The Brunswick Naval Museum on old NAS Brunswick, ME is selling memorial bricks as a fund-raiser. The bricks, which cost \$150 each, can be used to memorialize your service on that base. The bricks will be placed in a "Wall of Honor" that will be erected on the old base. To order a brick, or for more information about the bricks or the museum, go to [www.bnamuseum.org](http://www.bnamuseum.org).

### **NAS BRUNSWICK REUNION:**

If the "Wuhan Flu" has abated by that time, the Brunswick Naval Museum intends to hold an NAS Brunswick reunion on the old base over the weekend of September 17<sup>th</sup>, 19<sup>th</sup>, and 20<sup>th</sup>. If this goes through, they intend to reserve tables at reunion events for veterans who were in the VP squadrons assigned to NAS Brunswick so that these squadrons can hold their own reunions in conjunction with the larger base reunion. For example, if enough people from VP-92 or the VP-MAU indicate that they will attend, the organizers of the NAS Brunswick reunion will ensure that there are tables placarded "VP-92" and "VP-MAU" so that everybody who was in those commands can sit together. The reunion will have a variety of events scheduled for each day. Friday's events will feature an afternoon/evening cocktail reception with a-la-carte dining provided by food trucks, Saturday's events will feature a Maine seafood banquet catered by Cook's, and Sunday's events will feature a golf competition. There will be a guest speaker at the banquet on Saturday, the museum will be open all weekend, and there is a good chance that the Navy will send a P-3 and P-8, which will be opened for visitors. The VP Association may not have a reunion this year and we encourage everybody who can make it to come to the NAS Brunswick event. More details will be reported in future newsletters as the date of this event approaches.

### **NEW SONAR SEES UNDERWATER FROM THE AIR (Forbes 2/4):**

Researchers at Stanford University have developed a new type of sonar to overcome the previously insurmountable problem of seeing underwater from the air. Sound does not travel easily between air and water: there is a 65-decibel loss, which means roughly a million-fold decrease in intensity, making it makes it virtually impossible to pick up sound reflections from the air. The new technology can map the seabed and potentially detect mines, subs and other underwater targets from aircraft.

Currently, the only ways of using sonar from aircraft are sonar buoys (sonobuoys) dropped into the water, or dipping sonar lowered to the sea surface from a hovering helicopter. The helicopter cannot move while using dipping sonar, so it has to check one spot, raise the sonar, fly somewhere else, lower the sonar again, and so on. By contrast, the new Photoacoustic Airborne Sonar System or PASS, developed at Stanford with funding from the U.S. Navy, will work from a moving aircraft. "Our vision of the proposed technology is to capture images continuously as the airborne vehicle flies over the water," Stanford researcher Aidan Fitzpatrick told Forbes. "Similar to how synthetic aperture radar systems or in-water synthetic aperture sonar systems work today."

PASS combines two advanced technologies to achieve this feat: laser-generated sound, and novel sound sensors. A short laser pulse heats the water surface, causing it to expand rapidly and producing a sound wave. The sound radiates out and reflects back from the seabed or submerged objects, like a conventional sonar source. This eliminates the loss of intensity going from air to water.

PASS needs extremely sensitive sound detection – it still has to cope with the loss of sound in the return from water to air. Most current sound sensors are piezoelectric, based on ceramics which generate an electrical potential when sound hits them. PASS uses different sensors known as capacitive micromachined ultrasonic transducers (CMUTs). These are tiny micro-machined capacitors consisting of two thin parallel plates close to each other. Any disturbance of the plates, such as vibration of a sound wave, changes the electrical properties of the capacitor which can be easily detected.

Fitzpatrick says their CMUTs are vastly more efficient for this role than piezoelectric transducers. “Since CMUTs are mechanical devices that convert sound waves to electrical signals through vibration of a very thin plate as the sound waves impinge on the plate, they have a very high coupling coefficient – meaning that they are capable of converting a large majority of the incident sound energy to electrical energy,” says Fitzpatrick.

CMUTs are, as it happens, a Stanford invention, developed by professor Butrus Khuri-Yakub in the mid-1990s. They have matured rapidly and are increasingly used by companies like Hitachi and Phillips for medical ultrasound. One advantage of the technology is low cost; mass production means that large and highly sensitive arrays of CMUTs are possible, the equivalent of the AESA arrays in modern aircraft radar.

The team did look at alternative approaches of sound sensing from the air, including laser vibrometry using a laser to detect sound vibrations at the water surface. This turned out to be less effective, and in particular suffered from the difficulty of picking out the signal from the background noise. Because the CMUTs are tuned to resonate at the exact frequency of the laser pulse sound pulse, they receive the signal clearly and efficiently blank out extraneous noise.

The prototype PASS is optimized for high-resolution seabed mapping, creating a detailed three-dimensional map. Currently such surveys need to be carried out by ships or unmanned submarines, a slow and laborious process. Surveying from the air could cover much larger areas more rapidly. The first demonstration of PASS was carried out on a modest scale, with a target in a fishtank-sized container being scanned by a sonar just a few centimeters about the water surface. But the developers see no particular issues with scaling it up at least to the size of a drone flying some tens of meters above the water and viewing objects at depths of hundreds of meters. The PASS sonar could be a low-cost device weighing just a few kilos, making it possible to equip a fleet of sea-skimming drones.

Fitzpatrick notes that if the only requirement for the current system was for detection (rather than imaging), which is what dipping sonar provides, they could use lower acoustic frequencies and operate from much higher altitudes. The researchers are now working on tests in larger settings, with the aim of being able to demonstrate PASS in an open-water environment. The research is sponsored by the U.S. Office of Naval Research but corporate partnership will be needed to turn the laboratory prototype into a finished product. Given the potential of PASS to transform anti-submarine warfare, that might happen fairly quickly.

*Forbes article by David Hambling*

#### **BURKE: KEFLAVIK IMPORTANT TO NORTH ATLANTIC OPERATIONS (Seapower 2/2):**

The U.S. Navy’s top admiral in Europe highlighted the importance of using the airfield in Keflavik, Iceland, in the current era of great power competition, as a base for maritime patrol and anti-submarine warfare (ASW) aircraft. “We need to operate there,” said Adm. Robert Burke, commander, U.S. Naval Forces Europe/Africa, speaking Feb. 2 at a webinar sponsored by the U.S.

Naval Institute and the Center for Strategic and International Studies, funded by Huntington Ingalls Industries. “There were 12 P-8s on the ground when I was there at the end of October. They were very busy. I can tell you it wasn’t an exercise and it’s not hard to imagine why.”

Burke referred to 2019 when “there were open-source reports of 10 Russian submarines operating in the Arctic and the North Atlantic. From there, they head into the Atlantic and they go there to exercise their ability to hold Europe and the continental United States at risk with land-attack cruise missiles.” The admiral pointed out that “[s]ome of those missiles, in the near future, will be capable of hypersonic speeds. That’s a real threat and that’s something we have to be ready to address.”

The international airport in Keflavik was the site of a U.S. naval air station during the Cold War, with an ASW operations center. A squadron of P-3 Orion maritime patrol aircraft was deployed there on a rotational basis. A detachment of U.S. Air Force F-15 Eagle fighters also was present to intercept Soviet bombers that ventured over the Atlantic. Iceland has no armed forces other than a coast guard, but Keflavik represents an important contribution to the U.S. and NATO’s capabilities with Keflavik’s airfield. With mobile operations command centers, the Navy rapidly can deploy one to Keflavik to stand up an ASW command, control, and analysis capability for maritime patrol aircraft.

Two other North Atlantic nations are acquiring P-8As. The U.K. Royal Air Force already is operating its new P-8s, having reconstituted a maritime patrol capability after the 2011 retirement of its Nimrod aircraft. The first P-8A for the Royal Norwegian Air Force is now under construction to replace its P-3s. Other NATO nations including Germany, Spain, Portugal and Greece operate P-3s, and France and Italy operate Atlantique aircraft. Burke praised the P-8 for its “incredible legs, incredible capabilities.” While the Russian submarine force is much smaller than its peak during the Soviet era, it has continued to push development of modern submarines, now in their sixth generation.

*Seapower article by Richard Burgess*

### **IRAN'S BEST SUBS HAVE BEEN OUT OF THE WATER FOR A MONTH (USNI News 1/31):**

While the Iranian naval forces have been clashing with U.S. forces in the Middles East in the last several weeks, its most capable submarines have been out of action. Information shared by The Intel Lab show all three of Tehran’s Kilo-class submarines have been out of the water for at least a month.

The 3,000-ton Kilos are the Iranian Navy’s largest and most potent submarines. They are based at Bandar Abbas near the Strait of Hormuz at the entrance to the Persian Gulf. The Russian-built boats are armed with up to 18 torpedoes and can remain submerged for several days at a time. They are, logically, central to the Iranian Navy’s ability to defend the country.

Having all three out of the water at once is unusual and may indicate a serviceability issue. Navies try to rotate maintenance periods to keep as many submarines in the water as possible. For a navy with three subs, like Iran’s Kilos, this should mean that at least one is in the water at any point in time.

The addition of Iran’s 600-ton indigenous Fateh-class submarines could be viewed by Tehran as enough capability to allow all three of the Kilos to be out of the water at once. First-in-class Fateh has been tied up to the submarine pier in Bandar Abbas throughout. But Fateh is much smaller and less capable than the Kilos.

Iran also has a sizable fleet of midget submarines. These are the locally designed Nahang-class boats and around 14 (estimates vary) of the North Korean derived Ghadir-class. They can be armed with heavyweight torpedoes and the small Jask-2 anti-ship missile. But they are not comparable in either role or capability to the much larger Kilos.

The Kilos have been overhauled in local facilities rather than being sent back to more experienced Russian yards. These periods have been longer than expected and may could indicate supply or skills shortages. One of the boats has been in a dry dock in Bandar Abbas since 2019, according to satellite photos. Another has been at the Shahid Darvish yard west of the city for months. And in mid-December the third was also put in a dry dock in Bandar Abbas. As of Jan. 31, the situation remain unchanged.

The extended repair of Iran's Kilos has not been confirmed. But it certainly raises questions. Iran is now building indigenous submarines and has even claimed to be working on a nuclear powered boat. But even if the new subs are more capable than the small Fateh class, local production will take years to fill the shoes of the Kilos. Until then analysts will be watching Iran's maintenance cycles carefully.

News of the sidelined Kilos come as tensions between Iran and the U.S at sea remain high. Iran shared footage which appeared to show an Iranian Navy helicopter observing guided-missile submarine USS Georgia (SSBN-729). Two days later Iran fired a volley of ballistic missiles which reportedly landed within 100 miles of USS Nimitz (CVN-68). Possibly the American naval forces were observing Iran's first indigenous patrol submarine, the Fateh. This small submarine was reported to be conducting its first torpedo tests.

*USNI News article by H.I. Sutton*

#### **CHINESE SAILORS SUFFERING PSYCHOLOGICAL DISORDERS (Business Insider 1/29):**

Chinese submariners patrolling the contested South China Sea are suffering from "serious" psychological disorders, according to a recently published study first reported by Stars and Stripes. "One group of military personnel at high risk of mental health problems is the submarine force, especially in the South China Sea," five Chinese researchers affiliated with the Institute of Military Health Management at Naval Medical University in Shanghai wrote in an article published earlier this month in Military Medicine.

108 out of 511 surveys of Chinese submariners in the South China Sea showed signs of psychological disorders ranging from depression and anxiety to hostility, the study found. The results were compared to mental health norms among male service members across the Chinese armed forces and were found to be "significantly higher."

"This study demonstrates for the first time that soldiers and officers in the submarine force in the South China Sea are facing mental health risks and suffering from serious psychological problems," the researchers concluded. China claims the vast majority of the disputed South China Sea, and it has increased its naval patrols of the waterway over the years to reinforce its sovereignty claims.

"Studies have demonstrated that military maneuvers can produce psychological and physiological stress," the Chinese researchers explained, adding that life aboard a submarine can also lead to mental health issues. They wrote that submariners, who tend to have higher rates of neuropsychiatric illness, "are confined to tiny living spaces and exposed to manufactured air and artificial light," and "the submarine environment entails prolonged isolation, which can involve 60 to 90 days of submerged cruising." The study also found that sailors aboard nuclear submarines tended to be at a higher risk for psychological disorders.

Long overlooked in militaries around the world, mental health is an important part of determining the overall readiness of a force. For China, psychological evaluations were not included as part of the military recruitment process until 2006, and mental health services for Chinese troops are still works in progress.

Recognizing that life aboard naval vessels can be challenging for sailors, the US Navy began embedding psychologists aboard aircraft carriers in the 1990s, and it saw a dramatic decrease in emergency evacuations and administrative separations for misbehavior. This important program, known as the embedded Mental Health Program (eMHP), was later extended to additional surface vessels and appeared to be similarly effective.

An eMHP for the Navy's submarine force was piloted in 2013 in Norfolk, Virginia and showed positive results, reducing annual unplanned losses from 22 to 2 by 2016, when the program was expanded to provide greater mental health support to the larger submarine force. The Navy also set up eMHP services for Marines and the special operations forces as well.

The Chinese People's Liberation Army Navy, according to the latest Department of Defense assessment of the Chinese military, is the largest naval force in the world, but its capabilities still trail behind those of the US Navy. The overall quality of the Chinese navy is improving though as China builds new classes of ships and submarines and pushes forward with efforts to build a world-class fighting force by the middle of this century.

*Business Insider article by Ryan Pickrell*

### **SEA DRAGON EXERCISE TESTS ASW SKILLS FOR MPA AIRCRAFT CREWS (Seapower 1/28):**

Maritime Patrol aircraft and crews from five partner nations gathered at Andersen Air Force Base in Guam to participate in Sea Dragon 2021 Anti-Submarine Warfare (ASW) exercise. The exercise wrapped up Jan 27<sup>th</sup>.

The Sea Dragon series of exercises are led by commander, Patrol & Reconnaissance Force, 7th Fleet (CTF-72), based out of Misawa, Japan. They are intended to demonstrate advanced ASW tactics, while at the same time continuing to build on multinational participation with U.S. allies and partners, as well as commitment to the security of the Pacific region.

This year, P-8A Poseidon Maritime patrol and reconnaissance aircraft and crews from Patrol and Reconnaissance Squadrons (VP) 5 and 8 trained together with the counterparts from the Royal Australian Air Force, Japan Maritime Self Defense Force, Indian navy and the Royal Canadian Air Force during the exercise. The "Mad Foxes" of VP-5 are currently deployed to Kadena, Okinawa, and the "Fighting Tigers" of VP-8 are operating from Misawa, Japan. Both squadrons are based at Naval Air Station Jacksonville, Florida. The U.S., Australia and India took part in the exercise with Boeing P-8 Poseidons. Japan flew the Kawasaki P-1, while Canada operated the CP-140 Aurora.

Sea Dragon 2021 centered on ASW training and excellence. The exercise included 250 hours of ground and classroom training and 125 hours of in-flight training ranging from tracking simulated targets to the final problem of finding and tracking Los Angeles-class nuclear submarine. The classroom training sessions helped the aircrews build plans and discuss how to incorporate tactics, capabilities and equipment for their respective nations into the exercise.

At the beginning of the exercise, Lt. Cmdr. Kyle Hooker, officer in charge of the VP-5 detachment, said he was eager for the opportunity to further develop our partnerships with Japan, India, Canada, and Australia during at Sea Dragon 2021. "The COVID environment will be challenging for all our participants, but I know we will come together to adapt and overcome while executing our goal of anti-submarine warfare interoperability," he said.

VP-5 pilot Lt. Reed Arce said his squadron viewed Sea Dragon 2021 as an opportunity for both learning and competition. "VP-5 was certainly looking forward to the opportunity to flex our ASW



muscles and enjoy some friendly competition with our allied partners during Exercise Sea Dragon. We learned so much when comparing tactics between aircrews, and the ability to constantly improve our warfighting skills. We hope to leave Guam with all participants being at their peak performance in prosecuting sub-surface threats anywhere in the world,” he said.

VP-8 pilot Lt. Joseph Moralesvargas said Sea Dragon 2021 gave his squadron the chance to coordinate and be on station with other crews and other countries. “The opportunity to speak with other operators and hear their philosophy and insight on ASW has given me new perspective,” he said. “I can’t think of any other exercise that would give us this chance,” he said.

Sea Dragon culminated with live tracking exercises with the nuclear-powered fast attack submarine, USS Providence (SSN-719) acting as the adversary. The Sea Dragon events are graded, and the nation with the highest overall score wins the Dragon Belt award. The belt was awarded to the Royal New Zealand Air Force last year. This year, Royal Canadian Air Force 407 Long Range Patrol Squadron, which operates the CP-140 Aurora, had the highest total point score, and will bring the coveted Dragon Belt home with them to Canadian Forces Base Comox in British Columbia.

The importance of ASW in the Indo-Pacific region cannot be understated, with growing numbers of Chinese, Russian and North Korean submarines. The ability for allies and partners to work together with capable MPA aircraft and crews to successfully conduct ASW is vital to counter this threat.

*Seapower article by Edward Lundquist*

#### **IS THE BOEING P-8 POSEIDON TURNING INTO A BOMBER? (National Interest 1/24):**

Here's What You Need to Remember: U.S. Navy P-8s were part of NATO’s response after Russia in October 2019 sortied eight submarines at one time into into the cold waters of the Barents and Norwegian Seas. The U.S. Navy wants to arm its Boeing P-8 Poseidon patrol planes with new anti-ship missiles plus precision-guided bombs, mines and aerial decoys. If the fleet follows through on the plan, the Navy will acquire its first new bomber aircraft in generations. The last A-6 bombers left the fleet in the late 1990s.

The jet-propelled P-8, which rapidly is replacing older, propeller-driven P-3s in Navy squadrons, already carries anti-submarine torpedoes, Harpoon anti-ship missiles and Standoff Land-Attack Missiles Expanded Response, or SLAM-ERs. But now the Navy wants to add Long-Range Anti-Ship Missiles, Joint Direct Attack Munitions, Small-Diameter Bombs, Mark 62/63/65 mines and Miniature Air-Launched Decoys. The fleet announced the addition in a February 2020 solicitation to industry.

The new weapons greatly would expand the kinds of targets the P-8 can attack. The Poseidon is a modified 737NG airliner with a new wing, military sensors and communications as well as an internal weapons bay and wing pylons for munitions. With its current loadout, the P-8 can strike ships and land targets more than 150 miles away plus submarines at shorter distances. Adding LRASM would extend the Poseidon’s striking range to greater than 200 miles for sea targets.

JDAM and SDB, while more limited in range than SLAM-ER is, would give P-8 crews the option of striking coastal installations and supporting ground troops in lightly-defended air space. The addition of an air-launched decoy could improve the P-8’s survivability against enemy air-defenses. But adding these new munitions doesn’t necessarily alter the P-8’s role. The Navy uses its planned fleet of at least 177 Poseidons for maritime patrol, anti-submarine warfare, anti-ship strikes and over-land surveillance using a secretive, underslung radar. The APS-154 Littoral Surveillance Radar System transforms the P-8 into a surface-surveillance platform similar to the U.S. Air Force's E-8 radar plane.

U.S. Navy P-8s were part of NATO's response after Russia in October 2019 sortied eight submarines at one time into the cold waters of the Barents and Norwegian Seas. Between Oct. 25 and Nov. 7, 2019, the NATO planes flew more than 40 missions. Six Norwegian air force P-3s, four U.S. Navy P-8s and a Canadian air force CP-140 flew from Andoya in Norway. At least one additional P-8 flew from Keflavik in Iceland. A French navy Atlantic 2 patroller staged from Prestwick airport in Scotland. Flight-trackers followed the patrol planes as they flew hundreds of miles into the North Atlantic to fly racetrack patterns over the apparent locations of Russian submarines. The patrol planes use their radars, sonar buoys and magnetic detectors to find subs on and below the waves.

The U.S. fleet has not developed tactics for employing the P-8 as a true bomber. Nor is the relatively lightly-built P-8 necessarily suited for hard flying in dangerous environments. In adding new munitions, the Navy could make the P-8 better at what it already does. And in a way, the fleet simply is replacing existing capabilities. The patrol version of the P-3, which has served since the 1960s, is on schedule to leave the fleet in 2023. The Navy over the decades has added a wide range of weapons to the P-3 including torpedoes, anti-ship and land-attack missiles, unguided rockets, cluster bombs and even Maverick anti-tank missiles.

Other countries have planned or completed similar modifications to their maritime patrol planes. The Royal Air Force in the early 2000s weighed adding laser-guided bombs and land-attack cruise missiles to its planned fleet of Nimrod MRA4 patrol planes. But London canceled the Nimrod in 2010, leaving the RAF without a maritime patrol plane until the first of a batch of nine new P-8s arrived in the United Kingdom in 2019. It's unclear whether the RAF plans to add to its Poseidons the same weapons the U.S. Navy wants to add to its own planes. The French navy meanwhile has modified some of its twin-prop Atlantic 2 maritime patrol planes to carry laser-guided bombs.

*National Interest article by David Axe*

### **NEW PODS WILL ALLOW REAPER DRONES TO HUNT SUBMARINES (The Warzone 1/21):**

General Atomics recently announced that it had successfully flight-tested a dispenser pod as part of a broader demonstration of anti-submarine warfare capabilities it is developing for its MQ-9B SeaGuardian drone. In this particular test, the pods were used to release sonobuoys, but the company has said that they will also be able to launch precision-guided munitions, as well as small unmanned aircraft, the latter of which could then potentially operate as an autonomous swarm.

The anti-submarine warfare test took place last November, with an MQ-9A carrying one of the 10-tube dispenser pods and other anti-submarine warfare (ASW) related systems as a surrogate for an MQ-9B SeaGuardian. The demonstration, which was conducted in cooperation with the U.S. Navy, involved the drone flying over that service's expansive test ranges off the coast of Southern California, while transmitting data to a ground operations center hundreds of miles away at the U.S. Army's Yuma Proving Ground in Arizona. "This demonstration is a first for airborne ASW," said GA-ASI President David R. Alexander. "The successful completion of this testing paves the way for future development of more Anti-Submarine Warfare capabilities from our MQ-9s."

During the test, the MQ-9A deployed 10 sonobuoys, in total. These included one AN/SSQ-36B, two AN/SSQ-62F Directional Command Activated Sonobuoy Systems (DICASS), and seven AN/SSQ-53G Directional Frequency Analysis and Recording (DIFAR) buoys. The AN/SSQ-36B is a bathythermograph type that can detect underwater objects by changes in water temperature. The DICASS is equipped with an active sonar, while the DIFAR passively gathers acoustic data. The drone relayed data from the array to personnel on the ground, who were then able to successfully spot and track a Navy Mk 39 Expendable Mobile Anti-Submarine Warfare Training Target (EMATT).

The EMATT is a small torpedo-shaped device that simulates the acoustic and other signatures of a full-sized submarine.

Sonobuoys remain a critical part of modern ASW operations, with Russia notably announcing last year that it would equip its submarines with new expendable electronic warfare jammers as a countermeasure. The U.S. Navy, in particular, has been sounding the alarm in recent years about the growing threat posed by Russian, as well as Chinese, submarine fleets. Both countries are steadily increasing the size of their submarine forces, including the addition of more modern designs with various features that make them harder to detect and track underwater.

The clear benefits of MQ-9s, or any other type of drone, equipped to deploy sonobuoys is that this could help ease the burden on manned maritime patrol aircraft, as well as their crews, and provide a lower-cost capacity to rapidly deploy arrays of buoys over a broad area. The cost-per-flight-hour to operate an MQ-9-sized drone is significantly lower than that of the Navy's P-8A Poseidon, for example, as a direct product of the drones requiring fewer resources to operate and maintain.

In the future, a single P-8A working together with unmanned aircraft loaded with sonobuoys could cast a far wider net for enemy submarines in a shorter period of time without a dramatic need for additional manpower and other resources, something that could be particularly valuable in an expeditionary context. This would also turn the Poseidon and its crew effectively into the ASW battle manager on scene. The drones, acting anti-submarine "loyal wingmen" of sorts, could be redirected as necessary. Since sonobuoys have limited battery life, during sustained operations, arrays need to re-seeded from time to time, too. Drones would be able to perform this re-seeding as required, as well, freeing up the manned aircraft to focus more on classifying, tracking, and potentially engaging contacts of interest.

Unmanned aircraft tending to sonobuoy arrays could also potentially do some pre-processing of the data before passing it along to other platforms, such as maritime patrol planes or ships hunting down below. Developments in artificial intelligence and machine learning could help automate the process of detecting and classifying potential threats, helping to weed out false positives or other unwanted information, to reduce the workload on actual human personnel.

The November 2020 test also underscored that other MQ-9 variants beyond the SeaGuardian, and potentially other types of unmanned aircraft, could carry these dispenser pods and operate in the ASW role. This could be of particular interest to the Marine Corps, which has been working to acquire a small fleet of Reapers and other larger drones in the past few years, and is also now looking at how it might be able to contribute to submarine hunting missions in the future. In recent months, the U.S. government has approved a number of export sales of MQ-9Bs to be equipped with ASW packages or that could be fitted with them, including to the United Arab Emirates and Taiwan.

While all of these ASW-related developments are significant, General Atomics has also outlined broader plans for the dispenser pods in the past. Last year, it released an infographic on various existing or in development payloads for the MQ-9 series, including the dispensers, which a Reaper can carry up to four of at once. It mentioned the plans for the November sonobuoy test, but also said that it could be configured to release precision-guided munitions or small drones.

While the exact types of munitions General Atomics might be considering integrating into the pod are unclear, the infographic showed a Dynetics GBU-69/B Small Glide Munition (SGM) and said that dispenser was compatible with the Common Launch Tube (CLT). Various elements of the U.S. military, including Air Force Special Operations Command (AFSOC) and the U.S. Marine Corps, have been employing launchers using CLTs on multiple types of manned and unmanned aircraft. These

include certain AC-130 gunship variants and KC-130 tanker-transport with the Harvest Hawk kit, as well as MQ-9s, for years now. The CLTs themselves can fire various small glide bombs, such as the GBU-44/B Viper Strike and GBU-69/B, as well as diminutive missiles, such as the AGM-176 Griffin.

Interestingly, back in 2018, Northrop Grumman also showed off models of dispensers for the MQ-9, as well as the U.S. Army's MQ-1C Gray Eagle, which were capable of carrying dozens of small precision-guided munitions at once. At the time, we at The War Zone highlighted how such a dispenser could significantly increase the magazine depth of an individual drone, allowing it to either engage more targets in a short period of time or provide more persistent firepower during longer-duration armed overwatch or similar missions over a particular part of the battlefield. Launchers using CLTs have been used to deploy small drones from aircraft, as well. These include aerial launches of Raytheon's Coyote, which is also shown on the General Atomics infographic, as well as the Area-I Air-Launched, Tube-Integrated, Unmanned System 600 (ALTIUS 600).

The Army is notably working on acquiring a family of so-called Air Launch Effects (ALE), which it hopes will eventually include small air-launched drones equipped with various sensors and electronic warfare packages. Some ALEs could also be loitering munitions, also known as "suicide drones," capable of carrying out kinetic attacks directly. There are also plans for the various ALE types to be able to operate together as fully-autonomous swarms, which inherently have the capability to confuse and overwhelm enemy defenses, including in maritime environments. If it could be adapted to the MQ-1C, one of the platforms the Army wants to integrate the ALEs onto, General Atomics' dispenser pod would certainly seem to be a good fit for the effort. Last year, General Atomics demonstrated the ability of the Gray Eagle to launch an ALTIUS 600 from a CLT under its wing.

Using the pods to launch drone swarms from larger unmanned aircraft flying further away from enemy air defenses could help breathe additional life into the MQ-9, which the Air Force views as increasingly vulnerable, especially in higher-end conflicts. The service, which is now looking for a Reaper replacement, presently dubbed MQ-Next, had sought to stop buying MQ-9s entirely, but Congress has blocked those plans, at least for the time being. This would actually, in many ways, reflect the Army's plans regarding ALE-armed MQ-1Cs, which present the same survivability concerns. A contracting notice the service released last year offered some insight into their planned concepts of operation.

"Army Futures Command (AFC) has identified a future fight in an Integrated Air Defense Systems (IADS)-rich environment where platforms must be survivable, attritable, or expendable to deliver sensing capabilities effectively where 1) the MQ-1C Gray Eagle flies racetrack patterns tangential to the IADS threat, at 80 km [~50 miles] distance, 2a) ALEs deploy from the MQ-1C Gray Eagle as the forward most element of the advanced team in areas of expected enemy contact in order to detect, identify, location and report (DILR) and attack/disrupt/decoy threat assets to initiate disintegration of the IADS," the notice read. A reference is made here to "attritable" platforms, which means designs that are low-cost enough for commanders to employ them in riskier situations that would preclude the use of a more expensive, exquisite assets.

The U.S. military, as a whole, is increasingly interested in swarming technology and has publicly demonstrated numerous developments in that regard in the past few years. These efforts have included additional experiments involving other air-launched drones, including multiple tests of the Perdix miniature unmanned aircraft deployed from flare launchers on U.S. Air Force F-16 Vipers and from underwing dispenser pods on U.S. Navy F/A-18 Hornets between 2014 and 2016. General Atomics has, of course, also been working on its own larger air-launched and air-recoverable drone, Sparrowhawk, with pictures showing a prototype underneath the wing of a Reaper.

All told, these new dispensers for the MQ-9 look set to help enable the drone to take on all-new submarine-hunting missions. At the same time, the pods open the doors to significantly expanding the firepower of the Reaper, as well as potentially other drones, and help transform it into a platform able to send drone swarms heading into enemy territory.

*The Warzone article by Joseph Trevethick*

### **COULD PROTECTOR AUGMENT POSEIDON? (UK Defense Journal 1/19):**

A recent announcement from the builders of Protector, General Atomics, signals their continued effort to push the aircraft as a viable, long endurance maritime patrol platform. Protector is the British variant of the MQ-9B SkyGuardian and the UK intends to purchase 16 examples of the UAV to replace the RAF's current fleet of MQ-9A Reapers. Protector is the world's first certified Remotely Piloted Air System, enabling it to fly in busy, unsegregated airspace, including civilian airspace, thanks to its 'sense and avoid' technology.

The P-8 Poseidon, developed by Boeing, is designed to conduct anti-submarine warfare, anti-surface warfare, and shipping interdiction, along with an electronic signals intelligence role. This involves carrying torpedoes, anti-ship missiles and other weapons. It's one of the most capable maritime patrol aircraft ever to fly. The problem for the UK, according to a number of people, is that the UK order of nine aircraft just simply "isn't enough".

Back in 2018, we reported that many believe that number of P-8A Poseidon aircraft being purchased is "too low to fulfil the range of tasks under its responsibility". The Defence Committee advised in 2018 that it had received detailed written evidence from former RAF officers with extensive experience of ASW operations who argue that "the intended aircraft and crew provision for the MPA force is too low to fulfil the range of tasks under its responsibility." Their report on the procurement stated "Unrealistic assumptions have been made about the ability of NATO allies to contribute to MPA provision and that at least 16 aircraft and a higher crewing requirement is needed to attain the necessary coverage."

More numerous, cheaper aircraft able to augment the nine Poseidon aircraft seems like a no-brainer, surely? What makes the two types similar enough for this to be an option? Very little at first glance but recent news from Leonardo that General Atomics is working with Leonardo to integrate the Leonardo Seaspray 7500E V2 radar into the centerline radar pod of the MQ-9B makes it a more viable maritime patrol platform.

Leonardo published the following yesterday: "GA-ASI's MQ-9B is revolutionizing the long-endurance RPAS market by providing all-weather capability and compliance with STANAG-4671 (NATO airworthiness standard for Unmanned Aircraft Systems). These features, along with an operationally proven collision-avoidance radar, enables flexible operations in civil airspace. SeaGuardian has a multi-mode maritime surface-search radar with Inverse Synthetic Aperture Radar (ISAR) imaging mode, an Automatic Identification System (AIS) receiver, and a High-Definition – Full-Motion Video sensor equipped with optical and infrared cameras. This sensor suite, augmented by automatic track correlation and anomaly-detection algorithms, enables real-time detection and identification of surface vessels over thousands of square nautical miles. The Seaspray 7500E V2 radar is well-suited to the SeaGuardian mission set, using Active Electronically Scanned Array (AESA) technology to detect, track and classify hundreds of maritime contacts."

Their release also adds: "The Seaspray greatly enhances the capabilities of the MQ-9B and builds on the already close working partnership between GA-ASI and Leonardo. Earlier this year GA-ASI announced the completion of initial integration work of Leonardo's SAGE electronic surveillance unit

onto the SeaGuardian, equipping the aircraft with the ability to gather intelligence information on maritime and land-based radar emitters over a wide area.”

General Atomics also say that, during trials, the MQ-9 also demonstrated the operation of a multi-mode, maritime surface-search radar, and High-Definition/Full-Motion Video Optical and Infrared sensor. “This sensor suite enables real-time detection and identification of large and small surface vessels in all-weather at long ranges, 360 degrees around the aircraft.”

Would this be a good idea? It certainly isn’t a new idea, back in July last year, General Atomics were pushing the MQ-9B in a maritime patrol role in Japan, touting its 35 hour endurance as being ideal for maritime patrol. Additionally, General Atomics demonstrated the capabilities of the MQ-9B in December last year to European nations.

Would it be a good idea for the UK, though? Andy Netherwood, a veteran of 26 years service in the Royal Air Force with operational tours flying the C-130 and C-17 as well as staff tours in Strategy, Policy & Plans, Capability Development and on the Directing Staff at the UK Defence Academy, thinks it would be a good idea: “MQ-9B SeaGuardian will be equipped with Leonardo’s Seaspray radar capable of detecting, tracking & classifying hundreds of maritime contacts. MQ-9B Protector enters service with the RAF in 2024; this seems like a sensible option to augment Poseidon. It can be fitted with sonobuoy dispensers and also process data from sonobuoys dropped by other aircraft. Brimstone will be integrated on UK Protector & GA has talked about a lightweight torpedo for subs.”

Will it happen? Hold on, let me just get next weeks lottery numbers for you. Joking aside, we can only wait and see if the UK plans to adopt this capability.

*UK Defense Journal article by George Allison*

### **US NAVY TESTS HUNTING SUBS WITH AN AERIAL DRONE (Defense News 1/18):**

The U.S. Navy and General Atomics in November used sonobuoys dropped from an MQ-9A Block V Reaper to track a simulated submarine target on a U.S. Navy Pacific test range, in what the contractor says is the first time an aerial drone has deployed a self-contained anti-submarine warfare system. The Reaper deployed a mix of 10 sonobuoys – deployed to measure water conditions and monitor for targets – then received and transmitted the data in real time to a monitoring station at Laguna Flight Operations Facility located at Yuma Proving Ground in Arizona.

The test was part of the development of the MQ-9B SeaGuardian drone, which is part of a research and development project in conjunction with the Navy’s Naval Air Systems Command. If the Navy can make this concept of operations work, it has the potential to significantly lower the cost of submarine hunting and free up larger, more expensive manned sub-hunting platforms such as the P-8A Poseidon, to act as a command-and-control platform. The Reaper managed to acquire and track an expendable anti-submarine warfare training target for three hours using the General Dynamics UYS-505 acoustic processing software.

According to a General Atomics readout of the test, the MQ-9B SeaGuardian will have four wing stations available to carry up to four sonobuoy dispenser system pods, packing up to 40 ‘A’ size or 80 ‘G’ size sonobuoys. “This demonstration is a first for airborne ASW. The successful completion of this testing paves the way for future development of more Anti-Submarine Warfare capabilities from our MQ-9s,” said General Atomics Aeronautical Systems President David Alexander in a statement. “We look forward to continuing collaboration with the U.S. Navy as they explore innovative options for distributed maritime operations in the undersea domain.”

Doing airborne anti-submarine warfare is an all-around cheaper way to do ASW than with multiple P-8As, which cost much more per flight hour, said Bryan Clark, a retired submarine officer and senior fellow at Hudson Institute who co-authored a recent ASW study that looked at this concept. “What it does is it allows now the P-8 doesn’t have to be the only thing that delivers the sonobuoys,” Clark said. “So the P-8 can start to step back to be more of a [command and control] platform, it doesn’t have to service all sonobuoy fields.

“Right now what has happened is a P-8 goes out, drops all the sonobuoys and hangs around burning flight hours while it monitors the sonobuoy field. And of course, you’ve got to have multiple P-8s to be able to cover the area. Whereas with this idea, you could have MQ-9s doing the deploying and the servicing of the sonobuoy field at a much lower flight hour cost.”

The limitation is P-8As have a much larger capacity for sonobuoys, which over large areas means they’ll still be important, Clark said. But with the support of drones able to receive and process data, you won’t need to risk as many P-8As to service the sonobuoy field, making the whole operation cheaper. “It really breaks the cost structure of the current ASW concept of operations,” he said.

*Defense News article by David Larter*

#### **BAE TAPPED TO DEMONSTRATE P-8 COUNTERMEASURE SYSTEM (Seapower 1/5):**

BAE Systems will be demonstrating for the U.S. Navy this spring a podded radio frequency countermeasures (RFCM) self-protection system on the service’s P-8A Poseidon maritime patrol reconnaissance aircraft, the company said. BAE Systems has received a \$4 million contract from the Navy to conduct a quick-turnaround demonstration of a new RFCM system for the P-8A, the company said in a Jan. 5 release.

The RFCM is designed to jam or decoy missiles guided by RF energy, including radar-guided surface-to-air missiles and some air-to-air missiles. A maritime patrol reconnaissance aircraft is more likely to face these threats while operating against a near-peer competitor than in the more benign environment of the past three decades.

“The P-8 is now considered a high-value asset with these emerging threats from hostile countries,” said Donald Davidson, director of the Advanced Compact Electronic Warfare Solutions product line at BAE Systems, in a Jan. 5 interview with Seapower. “The Navy was interested in an ability to rapidly prototype and demonstrate an RF counter-measures system for the platform.” Davidson said the Navy desired a system housed in a pod similar in its outer mold lines to a Harpoon missile that could be mounted on the aircraft’s existing wing stations.

The lightweight, high-power RFCM system pod will include some components that have been proven in the ALQ-214 electronic countermeasures system installed on the F/A-18E/F Super Hornet strike fighter, including a high-powered electronics frequency converter, a launch controller, and expendable ALE-55 fiber-optic towed decoys. The RFCM pod for the P-8A will include a component called the MDX, a small form factor jammer which is about half the size of a loaf of bread and integrated with the decoy, Davidson said.

The RFCM system will be demonstrated in the spring of 2021, Davidson said, “and if the demonstration proved effective, then [the Navy] would look to move to a more formal EMD [Engineering and Manufacturing Development]/production program to get it fielded as soon as possible.” He said that a successful demonstration would “lead to opportunities for additional funding” as the Navy develops its program budget in the 2022-2023 time frame.

“The ability to meet this unprecedented response time underscores our agility, focus on meeting customer needs, and our ultimate goal of protecting our warfighters,” Davidson said in the BAE release. “A process that used to take 18 to 24 months has been scaled to five or six months, which is remarkable, as is deploying this new self-protection capability.

BAE Systems said the “rapid response is the result of collaboration among small focus teams who developed an innovative approach to the design and fabrication of the system’s mechanical parts. As a result, BAE Systems will design, build, integrate, and ship the RFCM system in approximately five months, followed by two months of flight testing on the P-8A Poseidon platform.” Work on the RFCM contract will be performed at the company’s facility in Nashua, New Hampshire, the release said.

*Seapower article by Richard Burgess*

### **USCG WON'T “CLOSE THE DOOR” ON HUNTING SUBS AGAIN (Business Insider 12/08):**

The US Navy is scrambling to adjust to what it sees as growing threats posed by the Russian and Chinese navies, particularly their submarine fleets, which are getting larger and more effective. The US Coast Guard, which hunted subs during World War II, doesn't have plans to help keep an eye on those subs, but its top officer isn't ruling it out either.

Asked at a Navy League event on December 1 about the service's requirements to conduct ASW, Commandant Adm. Karl Schultz said "you have to turn the clock back" to an era when the Coast Guard was fully equipped for that mission. "The predecessors to the national security cutters, the 378-foot high-endurance cutters, [the] Hamilton class, we had sonar capability, and we had sonar techs," Schultz said, referring to a class of cutters that arrived in the 1960s that also carried torpedoes and other weaponry. "We're not building any capabilities, installing any capabilities on our ships today that would put us back in that mission," Schultz said. "We've ceded that to the Navy."

The Coast Guard already faces "unprecedented" demands, Schultz said, referring to the service's 11 official missions, ranging from patrolling inland waterways to high-seas drug busts. But the Coast Guard chief didn't rule out helping counter underwater threats in the future. "If there was a requirement that was at the joint Coast Guard-Navy-[Department of Defense] level that said, 'Hey, there's an urgent need to bring that capability back in Coast Guard,' I'm not saying we couldn't revisit that," Schultz said. "I'm not so sure I see an immediate return to that mission space here, but again, I don't close the door on anything since we live in an increasingly complicated world ... and requirements change," Schultz added.

Coast Guard crews guided hundreds of ships through submarine-infested waters during World War I. During World War II, its aircraft and ships, led by the Treasury-class cutters, hunted subs on the East and West coasts and escorted convoys across the Atlantic. The Treasury class was replaced by the Hamilton class, the 12 ships of which could perform scientific and law-enforcement missions but were also equipped to find, track, and destroy submarines. The first Hamilton-class cutter arrived in 1965 and only two remain in US service. A modernization program in the late 1980s outfitted Hamilton-class ships with better sensors and weapons, including upgraded torpedoes and new Harpoon anti-ship missiles, in addition to their helicopters. But the end of the Cold War lowered concern about undersea warfare, and those sensors and weaponry were removed.

That perception is changing, and the military is responding to what it sees as a growing submarine threat. Navy Secretary Kenneth Braithwaite's announcement this month that Virginia-based Fleet Forces Command would become US Atlantic Command underscores the shift. "We will refocus our naval forces in this important region on their original mission: controlling the maritime approaches to the United States and to those of our allies," Braithwaite told lawmakers. "The Atlantic Fleet will



confront the re-assertive Russian navy, which has been deploying closer and closer to our East Coast, with a tailored maritime presence, capability, and lethality."

Observers have already called for Coast Guard cutters to take a larger role as surface combatants to bolster the Navy, arguing that capabilities the Coast Guard has for missions like catching narco-submersibles can be adapted for military operations. "The US Coast Guard and Navy should move jointly and decisively to arm, train and equip the major cutter fleet so that it can perform a useful set of defense and expeditionary missions," Cmdr. Gregory Tozzi, a US Coast Guard cutterman, wrote in 2017, arguing that doing so was "a reasonable response to threats posed by increasingly capable, bold and bellicose competitors."

Schultz and other officials have also said new Coast Guard ships will be able to adapt for future missions. "We're putting in what we call space, weight, and power to be able to plug and play for all kinds of mission support," Shannon Jenkins, senior Arctic advisor at the Coast Guard's Office of Arctic Policy, said at an event in August when asked about arming icebreakers. "It certainly will have the capacity and the abilities to add in whatever we need to execute our national missions, not just Coast Guard missions."

*Business Insider article by Christopher Woody*

#### **4<sup>TH</sup> FLEET PATROL AIRCRAFT AIDS IN SUCCESSFUL SAR OPERATION (USN 12/04):**

Crewmembers assigned to the "Golden Eagles" of Patrol Squadron 9 assisted in rescuing 18 mariners in distress on December 4<sup>th</sup>. U.S. Coast Guard District 11 received an alert from an emergency position-indicating radio beacon from an unknown vessel north of the Galapagos Islands and a P-8A Poseidon aircraft from VP-9 was dispatched to aid in the Search and Rescue effort.

Upon receiving the request for aerial support, the aircrew launched from El Salvador and proceeded to the last known beacon location. The crew located the capsized vessel with an inflatable life raft in tow. The crew was able to vector in a nearby tanker, the Hai Soon 26, via VHF radio, who was willing to render assistance to the distressed mariners. The P-8A remained on station until the Hai Soon 26 arrived and the 18 mariners were safely transferred aboard the tanker.

"We were extremely happy to have contributed to the success of this rescue mission," said Lt. Cmdr. Brandon Collins, Mission Commander. "Knowing we played an integral role in returning 18 men to their families after an unfortunate day at sea is one of the most rewarding aspects of the work we do here in 4th Fleet."

U.S. and coalition forces have a long-standing tradition of helping mariners in distress by providing medical assistance, engineering assistance and search and rescue efforts. The "Golden Eagles," stationed in Whidbey Island, Washington, are currently deployed to Command Security Location (CSL), Comalapa, El Salvador, conducting Maritime Patrol and Reconnaissance missions and supporting enhanced counter narcotics operations in the U.S. 4th Fleet area of operations.

U.S. Naval Forces Southern Command/U.S. 4th Fleet supports U.S. Southern Command's joint and combined military operations by employing maritime forces in cooperative maritime security operations to maintain access, enhance interoperability, and build enduring partnerships in order to enhance regional security and promote peace, stability and prosperity in the Caribbean, Central and South American region.

*US Navy Press Release*

## **HOW A US NAVY SUB CHASER FOUND TWO MISSING MARINERS (Popular Mechanics 12/03):**

A U.S. Navy P-8 Poseidon maritime patrol aircraft found a pair of missing mariners on Monday. The two men had failed to come home on time after a fishing trip, sparking a rescue effort that involved the Japan-based P-8 aircraft. The aircraft, designed to stay aloft for hours to detect enemy submarines, is turning out to be particularly good at rescuing people who have gone astray.

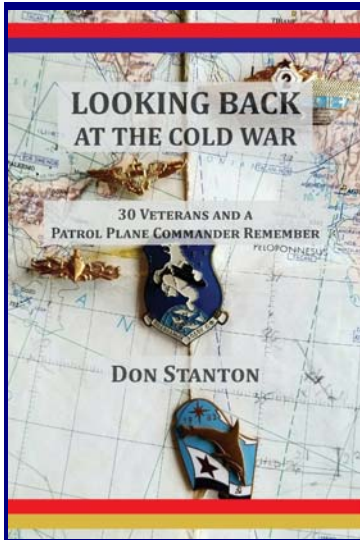
The incident took place in the central Pacific Ocean in the Northern Mariana Islands. The mariners had departed the island of Saipan on a 21-foot fishing vessel on the morning of November 26. The men were declared overdue when they failed to return on schedule. A U.S. Navy P-8 Poseidon operating from Kadena Air Base on the island of Okinawa was dispatched to assist with the search.

According to the Guam Daily Post, the P-8 located the boat and crew on the second leg of a search pattern 128 miles west of the island of Tinian in the Philippine Sea. The Poseidon kept watch over the boat and crew until the Coast Guard Cutter Myrtle Hazard was able to reach them.

This isn't the first time a Poseidon has rescued wayward mariners. In 2016, a P-8 located three men shipwrecked on Fanadik Island, approximately 300 miles south of Tinian. The three men had been stranded for three days and had made the words "HELP" out of palm fronds. And in 2018, a Poseidon located fishermen who had been adrift at sea for 8 days. The aircraft deployed an air-droppable UNIPAC II survival kit—with food, water, and communications for up to 16 people—to the fishermen.

*Popular Mechanics article by Kyle Mizokami*

## **RECOMMENDED READING:**



"Looking Back at the Cold War" by former Navy P-3 patrol plane commander Don Stanton (ISBN 978-1595946232) is a compilation of essays about the Cold War written by thirty veterans. There's quite a bit of interesting information in this book. For example, I'll bet you didn't know that the Strategic Air Command's alert posture was directly affected by the Navy's ASW patrol planes between the 1950s and the end of the Cold War in 1992. SAC "alert crews" were positioned closer to or further from their bombers, and in some cases required to sit in them, depending upon how far out from the US coasts Navy P-2s and P-3s reported Soviet SSBNs. The closer the subs were, the less time it would take for one of their missiles to hit the SAC bomber bases, and therefore the crews had less time to get their aircraft off the ground. As far as I know this book is only available from [www.amazon.com](http://www.amazon.com). It is very good. Check it out!

## **ON THE INTERNET:**

The Navy History and Heritage Command has produced a very interesting web series called "The History Galley" that covers some of the most popular menu items served to naval personnel by the galleys on shore bases and ships. Each episode, which lasts for only ten minutes or so, covers how to prepare some kind of food item drawn from the Navy's 1945 recipe book. There are 38 episodes in all. To check them out, go to [www.youtube.com](http://www.youtube.com) and do a keyword search on "The History Galley".

**PARTING SHOTS:**



**ABOVE:** VP-92's CAC3 posed at NAS South Weymouth in the 1990s. **BELOW:** VP-92 personnel relaxing at NAS South Weymouth's enlisted club, the "Nor Easter Club", sometime in the late 1970s.





**ABOVE:** Plane wash time in Puerto Rico during the late 1990s. **BELOW:** Enjoying breakfast in the galley of a VP-92 P-3C on patrol somewhere over the Atlantic. If you have something similar to share please contact Marc Frattasio at [marc\\_frattasio@yahoo.com](mailto:marc_frattasio@yahoo.com):



**Until Next Time, Lose Not Thy Speed In Flight Lest The Earth Rise Up And Smite Thee – “Frat”.**

