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 101 **HTTP://WWW.VPASSOCIATION.ORG** **SEPT 2025**

Welcome to another edition of the VP Association newsletter. 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.

RECCO:

ABOVE: *VP-92 P-3C with two engines turning at Roosevelt Roads PR circa 1995 courtesy of Jerry Lach. Got something similar to share? If so, contact Marc Frattasio at marc_frattasio@yahoo.com.*

FINAL FLIGHTS:

We lost Barry Ward recently. He was an AO in VP-0810 and VP-92 at NAS South Weymouth. We also lost Joe Klippel, who was an FE in VP-92 during the squadron's final years at NAS Brunswick.

ILL SHIPMATE IN NEED OF CHEERING UP:

Al Firnrohr, who was a P-2 and P-3 sensor operator in VP-92 at NAS South Weymouth, has had surgery and is undergoing chemotherapy. You can reach him via e-mail at akamacs40@gmail.com.

REGARDING 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 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.

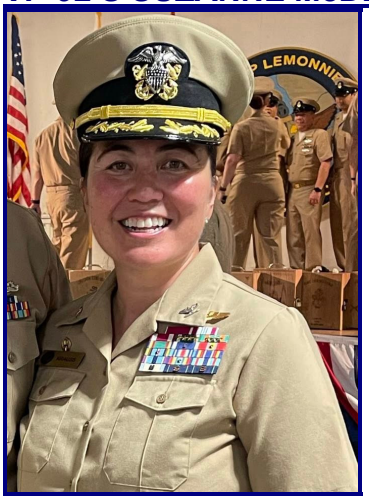
LOST CONTACT:

Be sure to inform George Driscoll at gnddriscoll@gmail.com about home or e-mail address changes.

THE 2025 MINUTEMANCIPATION WEEKEND:

During the extended weekend of Thursday, Friday, Saturday, and Sunday August 7th though the 10th several former VP-92 AWs and a token few other aircrew rates turned out at Chuck Pierce's beautiful vacation home on Hubbard Lake in Michigan for the 2025 Minutemancipation Weekend. Although this was the very first time the annual event has been hosted outside the New England region, a total of thirteen former Minutemen made it there. From left to right in the photo presented above are Marty McCormack, Matt Sharpe, Chuck Pierce, Tom Drapeau, Scott Andrews, Steve O'Donoghue, A. J. Bucci, Rick Caesar, Marc Frattasio, Jerry Lach, Tom Valdez, Scott Savelle, and Darrell Davis. Everybody who went had an extremely good time. To see more photos taken at this event, go to the VP-92 Alumni group on Facebook at www.facebook.com.

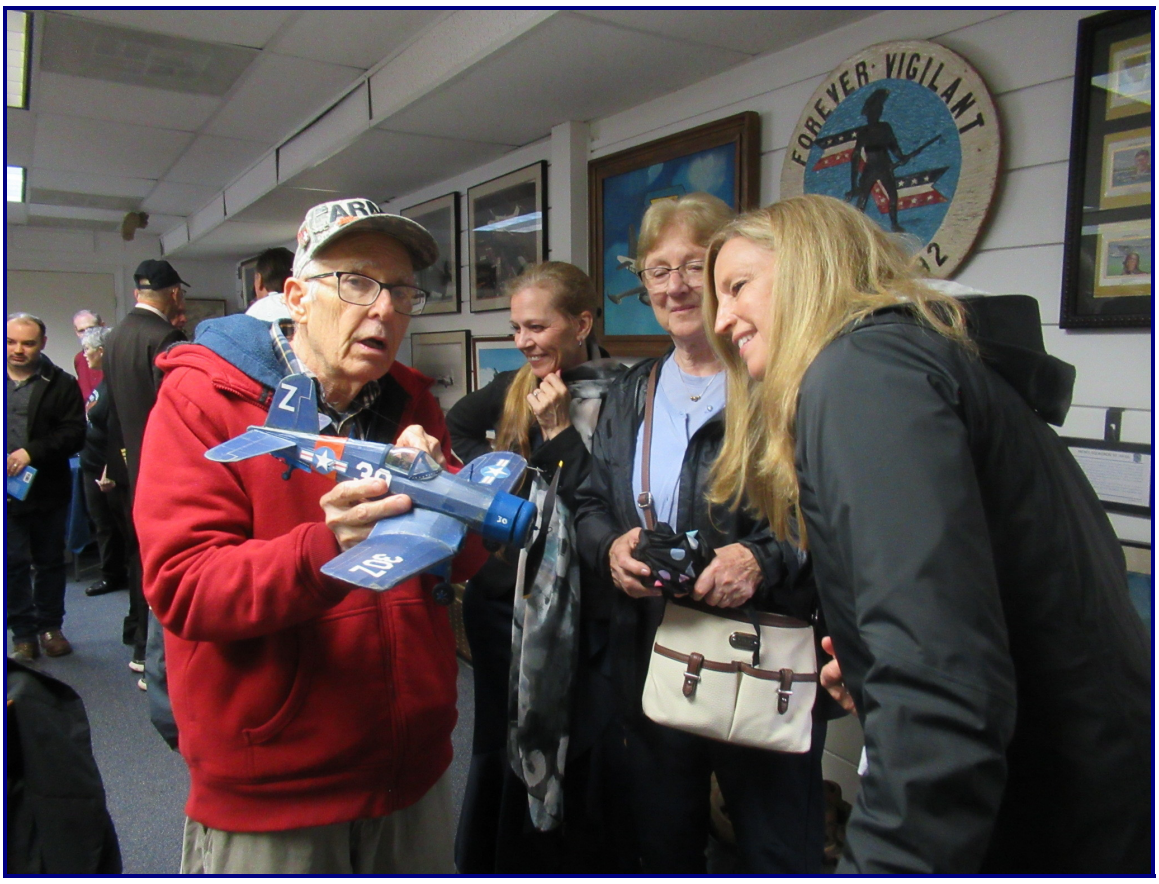
VP-92'S SUZANNE McDERMOTT KRAUSE IS NOW A REAR ADMIRAL!:



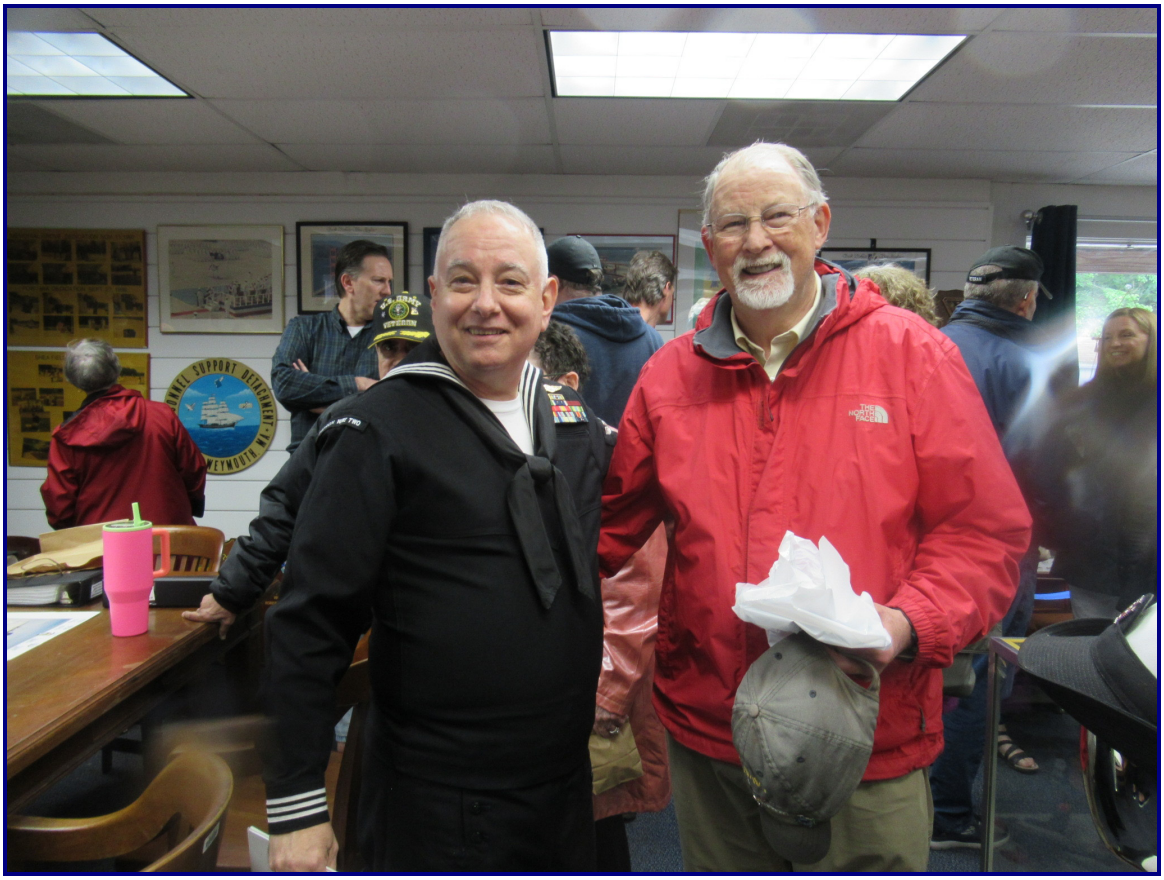
Suzanne McDermott Krause, who was a SELRES P-3 pilot in VP-92 during the squadron's final years, is still going strong in the Navy Reserve. She's been doing extended periods on active duty and after a challenging tour of duty in Africa was recently promoted to Rear Admiral. We believe that Suzanne is the seventh Minuteman to achieve flag rank, which is a pretty good record for a reserve unit. Here is a recent photo of Suzanne in uniform. We'll post another photo with Rear Admiral's rank as soon as we get one. As many of you should know, Suzanne is married to final VP-92 Commanding Officer Scott Bailey and lives in Brunswick, Maine.

THE SHEA NAVAL AVIATION MUSEUM REOPENED AT OLD NAS SOWEY ON JUNE 14th:

On Saturday June 14th the Shea Naval Aviation Museum was reopened at Union Point on old NAS South Weymouth, Massachusetts. The museum had been closed since June 2017. Here is former VP-92 P-2 and P-3 sensor operator Al Firnrohr and his family visiting the museum during its grand reopening.



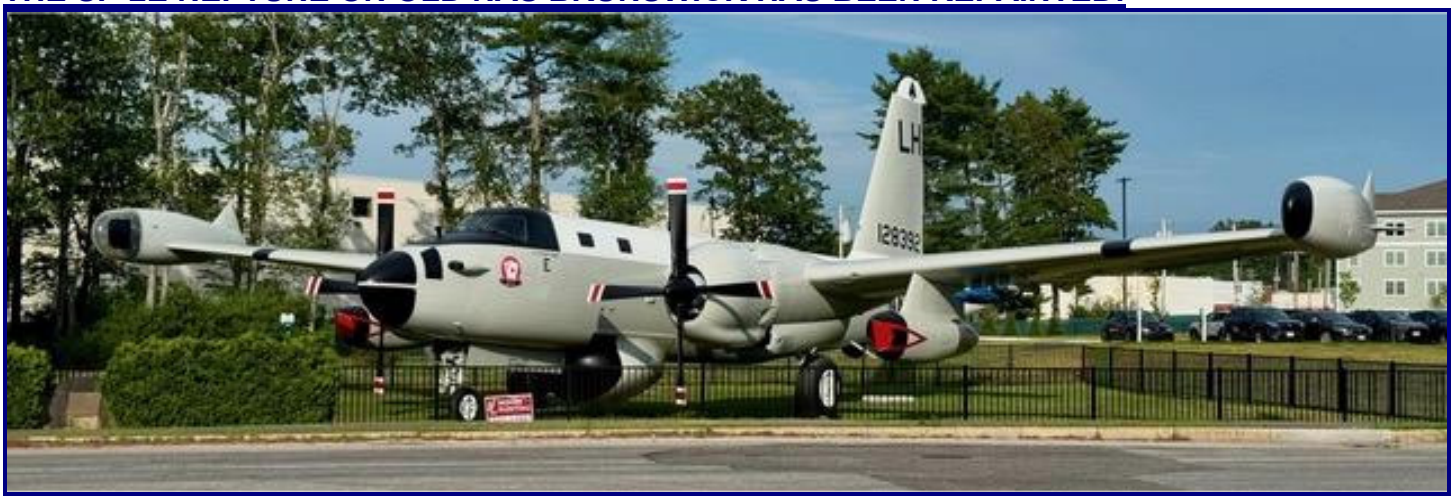
Left: Richard Tucceroni, who was an MS in VP-92 shows a model of an FG-1 Corsair that he built and donated to the museum to Shea family members Jennie Ankley, Claudette Shea, and Christy Pitts. Note the VP-92 medallion from the podium used for change of command ceremonies, inspections, etc., while the squadron was at South Weymouth.



Left: Your newsletter editor (who had served in uniform as the master of ceremonies for a public rededication ceremony at the Shea Memorial Grove park at Union Point just before the grand reopening of the museum) with former VP-92 TACCO "Nuclear Ned" Rodgerson.

The Shea Naval Aviation Museum is located in what used to be the Coast Guard Housing Office building on old NAS South Weymouth. It is located directly behind the soccer fields at the Union Point Sports Complex. The museum is open from 9 AM to noon on the second and last Saturdays of the month. Several former VP-92 people are actively involved with the museum. More volunteers are needed to help operate the museum and if more people become involved the days (and possibly the hours) of operation will be expanded. For more information about the ANA Patriot Squadron and the Shea Naval Aviation Museum go to www.anapatriotsquadron.org.

THE SP-2E NEPTUNE ON OLD NAS BRUNSWICK HAS BEEN REPAINTED:



The Lockheed P2V-5/P-2E Neptune that has been positioned near the old main gate at former NAS Brunswick, ME since the late 1960s or early 1970s was recently cosmetically restored by the Brunswick Naval Aviation Museum. The aircraft was repainted by Moore Painting with markings

provided by Carrot Signs using funds raised by the Brunswick Naval Aviation Museum. The work was completed in late June and a public ceremony to celebrate the restoration was held plane-side on Friday July 25th. Several VP Association members are active with the Brunswick Naval Aviation Museum and were involved with this effort. Many individual VP Association members contributed financially and the organization made a substantial donation on behalf of the entire membership.

The Brunswick Naval Aviation Museum would eventually like to relocate the aircraft next to the Lockheed P-3 Orion on the old base, but this will take more money to accomplish. If you would like to help, contact the Brunswick Naval Aviation Museum at treasurer@bnamuseum.org.

BLUE ANGELS COMING TO BRUNSWICK IN 2026:

The Navy's famous flight demonstration team, the Blue Angels, will be coming to old NAS Brunswick, ME over the weekend of July 11th and 12th in 2026. As you should know, old NAS Brunswick is now a combination residential community, industrial park, and civilian airport called Brunswick Landing. Plan on coming to see the Blue Angels next July, if you live within driving distance of Brunswick, and while you are there check out the Brunswick Naval Aviation Museum. Kevin Cahill from VP-92 volunteers there and he'd love to give any of his old shipmates a personally guided tour of the place!

VP-6 REUNION COMING UP:

Eric Jenson wants all former "Blue Sharks" to know that there will be a VP-6 reunion at the DoubleTree Hilton Hotel in Jacksonville, FL April 15-19 2026. For more information reach out to Eric directly at eric.jensen.aa@gmail.com. Note, if you are involved with a squadron reunion and want us to publicize it here reach out to *Marc Frattasio at marc_frattasio@yahoo.com*.

RAF SCRAMBLES JETS IN HUNT FOR RUSSIAN SUBMARINE (The Sun 8/26):

Britain, America, and Norway have launched a major hunt for a Russian submarine suspected of threatening a US aircraft carrier. Specialist sub-hunting Poseidon planes have made 27 sorties to scour the Norwegian Sea since Sunday. The RAF made eight P-8A Poseidon flights from RAF Lossiemouth in Scotland. The Norwegian Air Force launched three from Evenes Air Base near Narvik, inside the Arctic Circle. The US Navy used a base in Iceland but the scale of the operation meant they were reinforced by at least two US Poseidons from Sicily.

The Poseidon maritime patrol aircraft are armed with a range of Top Secret sensors, torpedoes, missiles and sonar buoys which they can drop into the ocean to listen for the sound of submarines. A defence source said the mission was a "highly unusual surge". It came as the USS Gerald R. Ford aircraft carrier strike group trained with the Norwegian Navy on drills in the North Sea. The Ministry of Defence confirmed it was an operation not an exercise but refused to divulge details.

Ex-submarine captain Ryan Ramsay said: "This is Nato showing they are in control." He added: "Either they have already found the submarine, or submarines, and they are holding it. "Or they haven't got it yet and need to get hold of it." HMS Somerset, a specialist sub-hunting frigate, was also in Norwegian waters. Tom Sharpe, a former Navy commander, said: "It looks like they have found a Russian submarine and they are hammering it. "It is telling Russia: 'We see you.'"

Most of the Poseidon aircraft turned off their transponders – which reveal their locations to other pilots – as they approached the search area. But flight tracking websites showed an RAF Poseidon spent hours circling over the Norwegian Sea, some 60 miles west of the Lofoten Islands where the seabed drops a thousand metres. The mission appears to have started around 7pm on Sunday and lasted almost 48 hours.

An MOD spokesperson said: “The UK’s P-8 Poseidon aircraft work continuously on operations, protecting national interests and keeping the UK and our allies safe. “For security reasons we will not comment on operational details.”

The Sun article by Jerome Starkey

US NAVY P-8 POSEIDONS COULD END MADURO’S REGIME (The National Interest 8/22):

The Trump administration has made a series of interesting military moves in recent weeks—particularly the repositioning of large numbers of its forces into the Western Hemisphere. Specifically, the Pentagon is moving amphibious landing ships, thousands of US Marines, and other significant assets to the Pacific Ocean and the Caribbean Sea, devoting them to what the White House is describing as “anti-cartel” activities. But the regime of Nicolas Maduro in Venezuela doesn’t buy it. Caracas is mobilizing its militia, and distributing weapons across the country, in preparation for what they believe will be a US invasion. And with the introduction of US Navy P-8 Poseidon surveillance aircraft into the area, Caracas’ rulers are not wrong to fear Uncle Sam.

The P-8 Poseidon’s origins trace back to the early 2000s, when the US Navy sought a successor to its aging P-3 Orion fleet, which had served since the 1960s. In June 2004, Boeing was awarded the contract to develop the Multi-mission Maritime Aircraft (MMA), later designated as the P-8A Poseidon. Based on the commercial Boeing 737-800ERX airframe, the P-8 was designed for enhanced reliability, range, and integration with advanced sensors. Its first flight took place in 2009, and it achieved initial operational capability in 2013. As of 2025, the US Navy operates over 120 P-8A aircraft

What sets the P-8 Poseidon apart from contemporary surveillance planes are its multifaceted capabilities, making it an indispensable tool for maritime domain awareness. Equipped with an advanced radar system, it can detect and track surface vessels and submarines over vast ocean areas. The aircraft can deploy sonobuoys for underwater acoustic detection and features electro-optical/infrared sensors for real-time imaging, even in adverse weather. Nor is the Poseidon’s role restricted to observation; it carries a range of armaments—torpedoes like the Mark 54, Harpoon anti-ship missiles, and depth charges, enabling it to engage naval threats directly.

The Poseidon’s intelligence, surveillance, and reconnaissance (ISR) suite supports data sharing with other platforms, including drones and satellites, fostering networked warfare. Recent upgrades have also improved its anti-surface warfare (ASUW) and electronic warfare (EW) features, ensuring adaptability to emerging threats like hypersonic missiles and unmanned underwater vehicles. Its crew of nine, including pilots and sensor operators, operates in a spacious cabin with ergonomic workstations, enhancing mission efficiency.

Globally, the P-8 Poseidon bolsters US Navy operations across theaters, from the Indo-Pacific to the Atlantic. It has been pivotal in monitoring Chinese naval expansions in the South China Sea (SCS) and Russian submarine activities in the Arctic. In alliance-building, joint exercises with NATO partners demonstrate its interoperability, strengthening collective defense. The aircraft’s ISR prowess extends to countering non-state actors, such as anti-piracy patrols off Somalia or drug interdiction in the Pacific. By integrating with carrier strike groups and amphibious forces, the P-8 enhances force projection, providing real-time intelligence that informs command decisions.

And, as of August 20, the US Navy has intensified its use of P-8 Poseidon aircraft around Venezuela amid heightened concerns over that country’s involvement in drug trafficking and regional instability. Deployed as part of a broader operation approved by the Trump administration, these surveillance missions focus on intercepting narcotics routes linked to Venezuelan cartels, including the “Cartel of

the Suns." P-8 aircraft have been spotted patrolling the Caribbean coast, using their advanced sensors to detect smuggling vessels and monitor human trafficking activities associated with the Maduro regime. This deployment coincides with the arrival of no fewer than three Arleigh Burke-class destroyers and a nuclear-powered attack submarine off Venezuela's shores, aimed at disrupting narco-terror groups. The Poseidon aids in this mission through round-the-clock surveillance, cueing interdictions by naval assets and supporting international partners like Colombia.

Congressman Carlos Gimenez highlighted the operation on social media, noting the P-8's role and warning that "les queda poco" ("time is short" in Spanish) for Maduro and his allies. Earlier in August, the State Department also placed a $50 million bounty on Maduro's head. These actions come amid Venezuela's political turmoil following its transparently fraudulent presidential election last year. Amid domestic unrest and international pressure, it is widely believed that the Maduro regime has taken a more active role as a facilitator of drug flows into North America. The P-8's involvement underscores a shift toward proactive maritime security, deterring threats while avoiding direct confrontation.

The Navy's P-8 Poseidon surveillance aircraft is one of the most important platforms in its arsenal. Its recent operations near Venezuela illustrate how this platform addresses contemporary challenges like transnational crime and geopolitical tensions. As global threats evolve, the Poseidon's adaptability ensures it remains a vital asset for safeguarding US interests. With ongoing upgrades and international collaborations, the P-8 Poseidon will continue to dominate the skies over the seas, securing peace through superior surveillance. And while the intent of the US operation is probably not regime change in Caracas, the presence of US military might near Venezuela's shores suggests that the days of Maduro's regime may be numbered, one way or another.

The National Interest article by Brandon J. Weichert

MARINES REFINE MV-22B OSPREY ASW ROLE IN PACIFIC (USNI News 8/12):

The U.S. Marine Corps continues to refine the role of MV-22B Ospreys in anti-submarine warfare, this time with an eye on the Indo-Pacific. An Osprey teamed with two U.S. Navy MH-60R Sea Hawks to distribute sonobuoys in the Philippine Sea in an exercise on Friday. The Osprey from Marine Medium Tiltrotor Squadron (VMM) 265 (Reinforced) with the 31st Marine Expeditionary Unit (MEU) was embarked on amphibious assault ship USS America (LHA-6).

While the Marine Corps tested the use of Ospreys to deploy sonobuoys in Exercise Atlantic Alliance in mid-July, Friday's iteration was the first time a forward-deployed Osprey assigned to the 31st MEU operated in an anti-submarine warfare (ASW) role in the Indo-Pacific theatre, the unit said in a news release. "The Marine Corps has spent the past five years retooling to fight in the Pacific, and the submarine threat can't be ignored. The MV-22B complements the Navy's capabilities so well that it's hard to believe this wasn't thought of sooner," Col. Chris Niedziocha, the commanding officer of the 31st MEU, said in the release. "We've validated the utility of both amphibious warships and littoral forces, demonstrating the ability to fight as the landward component of the fleet."

Integrating the Osprey into ASW operations expands the MEU's ability to detect, track, and deter potential adversaries operating in the maritime domain. The capability leverages the unique range, speed, and carrying capacity capabilities of the Osprey through the deployment of advanced sensors and integration with U.S. Navy capabilities, allowing for rapid response and persistent surveillance, according to the release.

The 31st MEU embarked on America conducted joint drills from Aug. 4 to Tuesday in the Philippine Sea alongside the George Washington Carrier Strike Group (CSG), the U.K. CSG and the Japan Maritime Self-Defense Force (JMSDF) Kaga Task Group, which includes a Japanese submarine. The two U.S. Navy helicopters were likely from the George Washington CSG, consisting of aircraft carrier USS George Washington (CVN-73) with embarked Carrier Air Wing (CVW) 5, cruiser USS Robert Smalls (CG-62) and destroyer USS Shoup (DDG-86). The joint exercise included ASW drills, but it is unclear whether Friday's training was a separate U.S. event or part of the drills. It is also unclear if the ASW drill involved a submarine or the use of an MK39 Expendable Mobile Anti-Submarine Warfare Training Target (EMATT), which simulates the acoustic and dynamic characteristics of a submarine.

During Atlantic Alliance 2025, held June 28 to mid-July, Ospreys from Marine Medium Tiltrotor Squadron (VMM)162 delivered A-size sonobuoys while training off the East Coast of the U.S. alongside forces from the U.S. Navy, the U.K., the Netherlands and Canada. The Office of Naval Research also supported automated sonar processing and sensor command and control tools during the exercise, with the technologies allowing the Marine Corps systems and platforms to contribute to real-time undersea warfare, USNI News previously reported. "We're past the question of whether the Marine Corps can contribute to ASW," Capt. Bill Howey, the director of maritime operations for Submarine Group 2 said at the time. "Now we're refining how they contribute and then integrating that into the fleet playbook."

USNI News article by Dzirhan Mahadzir

P-8 PARTNERSHIPS IN THE NORTH ATLANTIC GAINING MOMENTUM (Navy Lookout 7/15):

The Poseidon maritime patrol aircraft has become a key element of NATO's efforts to monitor the increasingly contested undersea domain in the North Atlantic. Flown by the RAF while supporting Royal Navy and allied operations, the UK's Poseidon fleet forms part of a growing community of users working together through shared infrastructure, common systems and aligned strategic aims.

The P-8 Poseidon (called MR1A by the RAF) fleet based at RAF Lossiemouth in Moray is now well into its stride, and the gapping of fixed-wing maritime patrol capability that came with the axing of the Nimrod MRA4 program is a thing of the past. The RAF declared Full Operating Capability (FOC) for the Poseidon force in January 2024, following several years of staged aircraft deliveries, infrastructure upgrades, and integration with NATO tasking. The fleet of nine aircraft, operated by 120 (CXX) and 201 Squadrons, now provides regular patrol coverage across the Greenland-Iceland-UK (GIUK) gap and beyond into the Norwegian Sea and North Atlantic.

Increased Russian submarine deployments, particularly by the highly effective Yasen-class SSGNs, have driven a renewed sense of urgency. The poor performance and degradation of the Russian land and air forces seen in Ukraine is not common to the submarine fleet, which remains a very significant threat to NATO. The focus on ASW surveillance of the GIUK gap, a strategic maritime choke point, has returned to the levels of the Cold War. Poseidon aircraft play a key role in this effort, capable of rapidly deploying sonobuoy fields, processing acoustic signatures, and relaying information to submarines, frigates, and allied headquarters in real time. The P-8A is a flying hunter that can react quickly and cover distances that surface ships cannot.

Lossiemouth, now fully developed as a modern MPA base, includes dedicated hangars, upgraded runways, a tactical operations center, and on-site data processing facilities. The base also regularly hosts US Poseidons, which rotate through Scotland as part of USN Task Force 67, adding further flexibility to alliance patrol patterns. However, beyond sortie generation, the emphasis is increasingly on the coordination of post-mission data, ensuring that acoustic intelligence gathered from dispersed patrols is analyzed and shared quickly.

In early July 2025, USS Newport News conducted the first-ever port visit by a US SSN to Iceland. The visit to Grundartangi was highly symbolic, underlining Iceland's strategic role in North Atlantic defense. Poseidon aircraft from both the US and RAF supported the submarine's deployment, conducting pre- and post-visit surveillance operations and monitoring regional undersea activity. This level of coordination between air and undersea assets reflects a shift in NATO's ASW concept, from platform-centric operations to a tightly integrated, layered approach.

Boeing has rolled out the Increment 3 Block 2 modifications for the US Navy, which is now the baseline standard for new deliveries. I3B2 includes improvements to the APY-10 radar suite for better surface contact detection and offers enhanced sea state discrimination for periscope detection. Modifications to the electronic surveillance systems onboard have expanded the detection range of emissions from both submarine masts and surface radar sources. The integration of improved satellite communications and data links has also enhanced Poseidon's ability to feed into the NATO Recognized Maritime Picture in near-real time. As a major export customer, the UK fleet is eligible for these upgrades, although the RAF has not yet confirmed if they will be funded.

In November 2023, it was confirmed that the UK-made Sting Ray Mod 1 lightweight torpedo will be integrated into the P-8A Poseidon. This software enhancement, made available across the entire global P-8A fleet, will enable operators to load either the US-built Mk54 or Sting Ray. The RAF initially procured a limited number of Mk54 torpedoes to provide an early operational capability, but this integration will allow the aircraft to draw on the UK's more substantial Sting Ray inventory and the future Sting Ray Mod 2, which is currently in development. This move also strengthens interoperability between the RAF, Royal Norwegian Air Force and US Navy Poseidon fleets.

The United States has separately developed the High Altitude Anti-Submarine Warfare Weapon Capability (HAAWC), a winged kit that allows torpedoes to be deployed from medium to high altitude. This significantly extends the stand-off range between the aircraft and the drop point, while eliminating the need to descend to low altitude for weapon release, reducing transit time, fuel consumption and airframe fatigue. Adapting HAAWC for compatibility with Sting Ray would appear to be a logical upgrade for the RAF to consider, particularly as the aircraft has to operate in more contested environments.

In January 2025 with the Joint Expeditionary Data Integration (JEDI) Symposium, hosted at Lossiemouth. The event brought together operators, engineers, and analysts from the UK, US, Norway, Germany, and New Zealand to share lessons, refine detection techniques, and begin

aligning post-mission data standards. While NATO forces already operate with considerable tactical interoperability, variations in signal processing methods, sonobuoy pattern layouts, and classification thresholds have at times led to inconsistent assessments of submarine contacts. JEDI sought to address these gaps by establishing a new baseline for acoustic data exchange and analysis across the P-8A community.

Delegates also examined the application of machine learning to sonobuoy processing and reviewed the rollout of acoustic libraries that better account for the quieting techniques used by modern Russian submarines. Analysts from General Dynamics UK demonstrated updates to the RAF's post-mission processing suite, which is now integrated with the UK Defense Digital backbone to enable faster cross-domain sharing with Royal Navy and NATO maritime task groups.

Germany has now begun receiving its own Poseidon aircraft, with eight on order and the first aircraft expected to begin full operations from Nordholz Air Base by early 2026. German crews have already conducted familiarization patrols alongside the RAF, and a bilateral agreement will see Marineflieger aircraft making use of Lossiemouth. Germany's entry into the P-8A community strengthens NATO's surveillance capability across the North Sea, Baltic, and High North, and brings another interoperable operator into the alliance's expanding airborne ASW network.

Canada is acquiring up to 16 aircraft, with deliveries beginning in 2026, and Denmark is also exploring a potential buy. Norway continues to operate five Poseidons from Andøya Air Station, providing coverage of the Barents Sea and reinforcing operations alongside the UK and US forces. Each new operator not only expands geographic coverage but also contributes to the shared acoustic data pool, helping to refine detection methods and improve submarine classification fidelity.

The global Poseidons fleet is now large and reliable, 185 are in service around the world at present, so far having accumulated around 660,000 flying hours with only a single minor accident. The industrial and financial benefits of the P-8A program overwhelmingly flow to the US through Boeing and its subcontractors. The upside of this is that NATO partners are accruing operational advantages through the platform's standardization, joint development, and interoperability.

For the UK, the Poseidon is not just a national asset but a component of a wider surveillance architecture that increasingly relies on collaboration, shared infrastructure, and common understanding of the underwater battlespace. The challenges facing the UK Poseidon force extend beyond low aircraft numbers. Nine aircraft are barely sufficient for routine peacetime tasking, and the ability to surge operations or conduct sustained high-intensity surveillance is limited. The RAF's woeful lack of ISR platforms has placed increased demands on the Poseidon force and increased the need to deploy beyond the core North Atlantic operating area.

At its mid-1980s peak, the RAF had about 35 Nimrod MPAs in frontline service. Although Russian boats are far less numerous than during the Cold War, maybe 6 or 7 are at sea in the North Atlantic at a given moment, they are much harder to detect than their Soviet predecessors. The size of the ocean does not change, and there is a strong case for doubling the Poseidon fleet size. This ambition is, of course, subject to the usual funding and personnel constraints common to UK defense.

One way MPA mass could be increased would be if the Royal Navy and/or the RAF bought the General Atomics MQ-9B Sea Guardian (a maritime variant of the MQ-9B Protector that the RAF is bringing into service). Although far from a complete substitute for a P-8A, this remotely piloted aircraft can fill gaps in surveillance and can deliver sonobuoys. Sea Guardian could potentially be operated from both modified hybrid aircraft carriers and bases ashore.

Supply chain delays have affected the availability of US-supplied A-size sonobuoys to the Poseidon force, primarily sourced from manufacturers like Sparton and Ultra Maritime (formerly Ultra Electronics, with factories in the US and UK). For now, at least, British sonobuoys have not been integrated or certified for use on the P-8A, despite the UK's history of cutting-edge sonobuoy development. This has created periodic constraints on both training and live operations, and if there were a major conflict, then sonobuoy stocks would be rapidly depleted. There has also been a lack of spare parts and maintenance equipment, which has reduced aircraft availability at times. In addition, the RAF has faced a shortage of experienced acoustic analysts, with post-mission data often outpacing the capacity of trained personnel to assess and exploit it fully.

With further software upgrades on the way and the next generation of sensors already being trialed, the P-8A remains a critical tool in the alliance's arsenal for countering undersea threats. In future, Poseidons will also have to integrate more closely with uncrewed assets embodied by the RN's project CABOT vision. As adversaries grow more sophisticated, it is the fusion of platforms, operators and data, not simply the aircraft, ships or submarines alone, that will determine NATO's ability to prevail below the surface.

US NAVY WELCOMES FIRST UPGRADED P-8A FROM L3HARRIS (Naval Today 7/11):

The US Navy has taken delivery of the first overhauled P-8A Poseidon aircraft from American tech company L3Harris Technologies. L3Harris is performing program depot maintenance along with repair and overhaul for the Naval Air Systems Command's (NAVAIR) fleet of 139 aircraft.

The platforms perform missions that include maritime patrol, long-range anti-submarine warfare, anti-surface warfare and intelligence, surveillance and reconnaissance. The contract was awarded last October. "We're keeping the Navy's fleet mission-ready with this first P-8A delivery," said Jason Lambert, President, Intelligence, Surveillance and Reconnaissance, L3Harris.

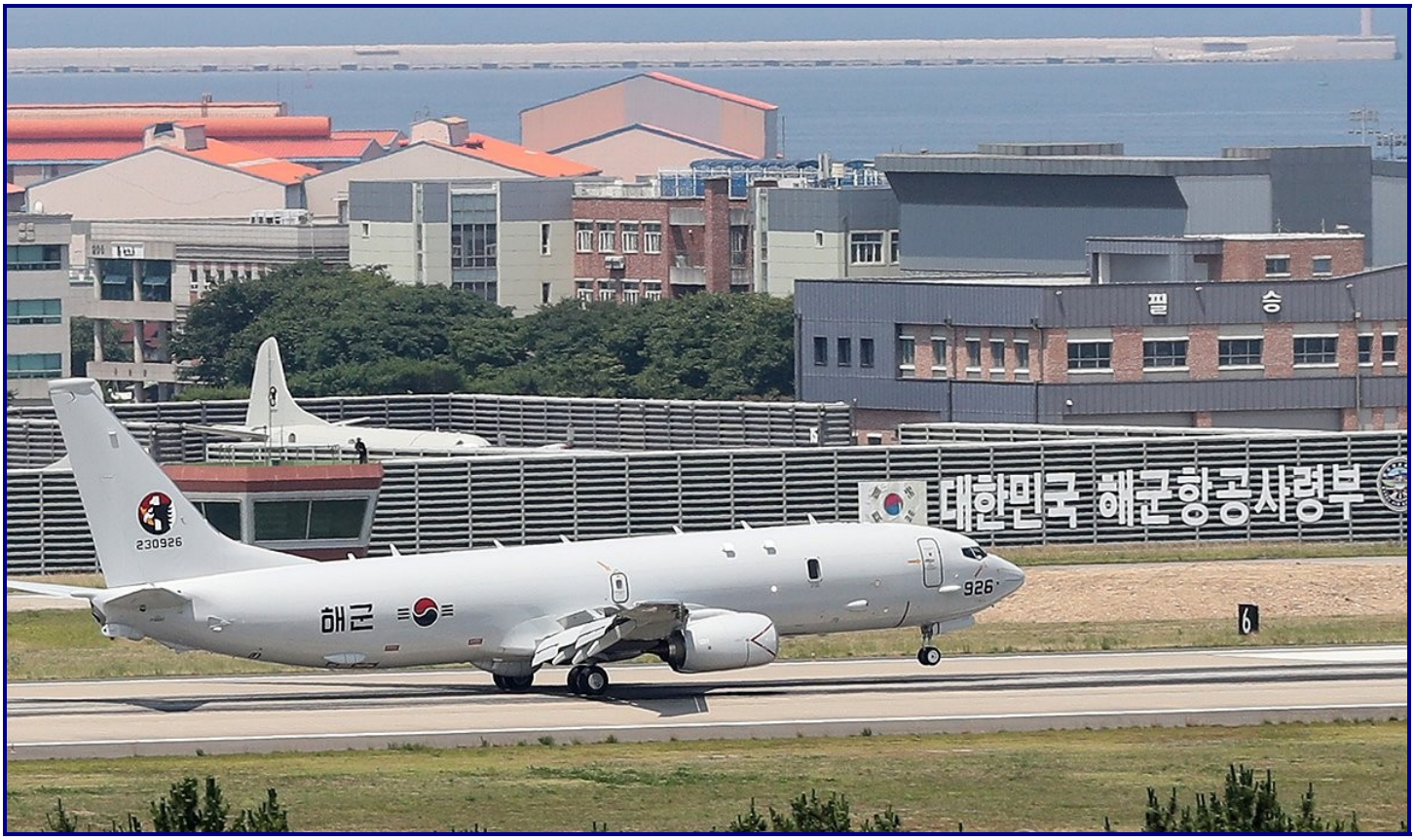
Work on the navy's P-8A fleet began in 2024 at L3Harris' aircraft modification facility in Waco and continues through September 2029. The company is currently overhauling seven aircraft, with all on track for delivery this year. L3Harris anticipates up to nine aircraft inductions during the first contract year. The firm will also support foreign military sales of P-8A aircraft. In May this year, Canadian Commercial Corporation awarded a contract to L3Harris to provide surveillance and targeting systems to support the country's P-8A aircraft.

Naval Today article by Fatima Bahtić

SOUTH KOREA'S P-8 POSEIDONS ARE NOW OPERATIONAL (The Aviationist 7/7):

The Republic of Korea Navy (ROKN) is now employing operationally its new fleet of six P-8A Poseidon maritime patrol aircraft, after their arrival in South Korea last year. According to Yonhap News, officials said the aircraft are "tasked with detecting underwater North Korean threats." The aircraft were ordered in 2020 as part of a Foreign Military Sale (FMS) and arrived at the Naval Air Command in Pohang in June 2024, in two batches of three aircraft each.

The Poseidons will replace 15 Lockheed P-3 Orions still in service, of which eight are in the P-3C-III+ standard and seven in the more advanced P-3CK standard, according to FlightGlobal. An eighth P-3CK was recently lost during a routine training flight on May 29, 2025, causing the death of the four crewmembers. An investigation is currently being conducted to discover the causes of the crash, which reportedly happened six minutes after takeoff and is the only of the type in ROKN service since the introduction in 1995.



Following the delivery of the new P-8s, the ROKN continued the training for both air and ground crews. After a year of training and operational evaluation, the aircraft "have been assessed fit for operations" and ready to "take part in anti-submarine, anti-surface ship and maritime patrol missions." The operational introduction of the P-8, although it was already planned to happen by mid-2025, comes at a delicate time with North Korea flexing its muscles in the maritime domain. In fact, North Korea's naval forces are undergoing their most ambitious modernization in decades, which might signal a shift from their past use of the vessels.

In April 2025, state media showcased the Choe Hyon-class frigate, a new 5,000 ton multipurpose warship which was equipped for the first time in North Korea with phased-array radars, vertical-launch missile systems (VLS), cruise and surface-to-air missiles and a helicopter deck. A month later, the second ship of the class, the Kang Kon, capsized during launch but has been quickly salvaged, with plans for more vessels. Simultaneously, North Korea is also accelerating on the development of new submarine capabilities. For an instance, the country unveiled the construction of what is said to be a nuclear-powered submarine (est. 6,000–7,000 tons) which could potentially carry about 10 ballistic missiles. The new frigates and submarines might be able to extend North Korea's reach, enabling missile strikes on land and sea targets. The real capabilities of these vessels are unclear, however they are not to be ignored to avoid miscalculation and reduce the risks.

The P-8A Poseidon is a long-range, multi-mission maritime patrol aircraft developed by Boeing for the U.S. Navy to replace the aging P-3C Orion. Based on the 737-800ERX airframe, the aircraft incorporates numerous structural and systems modifications to meet the demanding requirements of anti-submarine warfare (ASW), anti-surface warfare (ASuW), intelligence, surveillance and reconnaissance (ISR), and search and rescue (SAR) operations. Internally, the Poseidon is equipped with an advanced mission suite that integrates multi-mode radar, an electro-optical/infrared (EO/IR) turret, magnetic anomaly detector (MAD), and a comprehensive acoustic system capable of

processing data from over 100 sonobuoys. The aircraft is also capable of deploying Mk 54 lightweight torpedoes, depth charges, and AGM-84 Harpoon anti-ship missiles from both its internal bomb bay and under wing hard points.

The P-8A is currently undergoing a significant capability enhancement with the Increment 3 Block 2 (I3B2) upgrade. First flown in June 2025, the Block 2 configuration introduces improved multi-static acoustic processing, new mission systems, an upgraded EW suite, and the integration of advanced weapons such as the AGM-158C Long Range Anti-Ship Missile (LRASM). The update also includes provisions for additional ISR and electronic support payloads, increasing mission flexibility. Among the key enhancements is the High Altitude Anti-Submarine Warfare Capability (HAAWC), which enables the Poseidon to release torpedoes from high altitude using a winged glide kit. This development significantly increases survivability by allowing the aircraft to remain outside the threat envelope of submarine-launched or ship-based air defenses. To improve survivability in contested environments, the U.S. Navy has also contracted BAE Systems to develop the Advanced Survivability Pod (ASP). The pod integrates radio-frequency and infrared threat detection, countermeasures, and a fiber-optic towed decoy system, providing protection against radar-guided and heat-seeking missiles.

In service with the U.S. Navy since 2013, the P-8A Poseidon is now also operated by several allied nations including Australia, the United Kingdom, Norway, India, and Germany. As maritime competition intensifies globally, the P-8A's multi-mission capabilities, ongoing upgrades, and interoperability make it a cornerstone of modern naval operations.

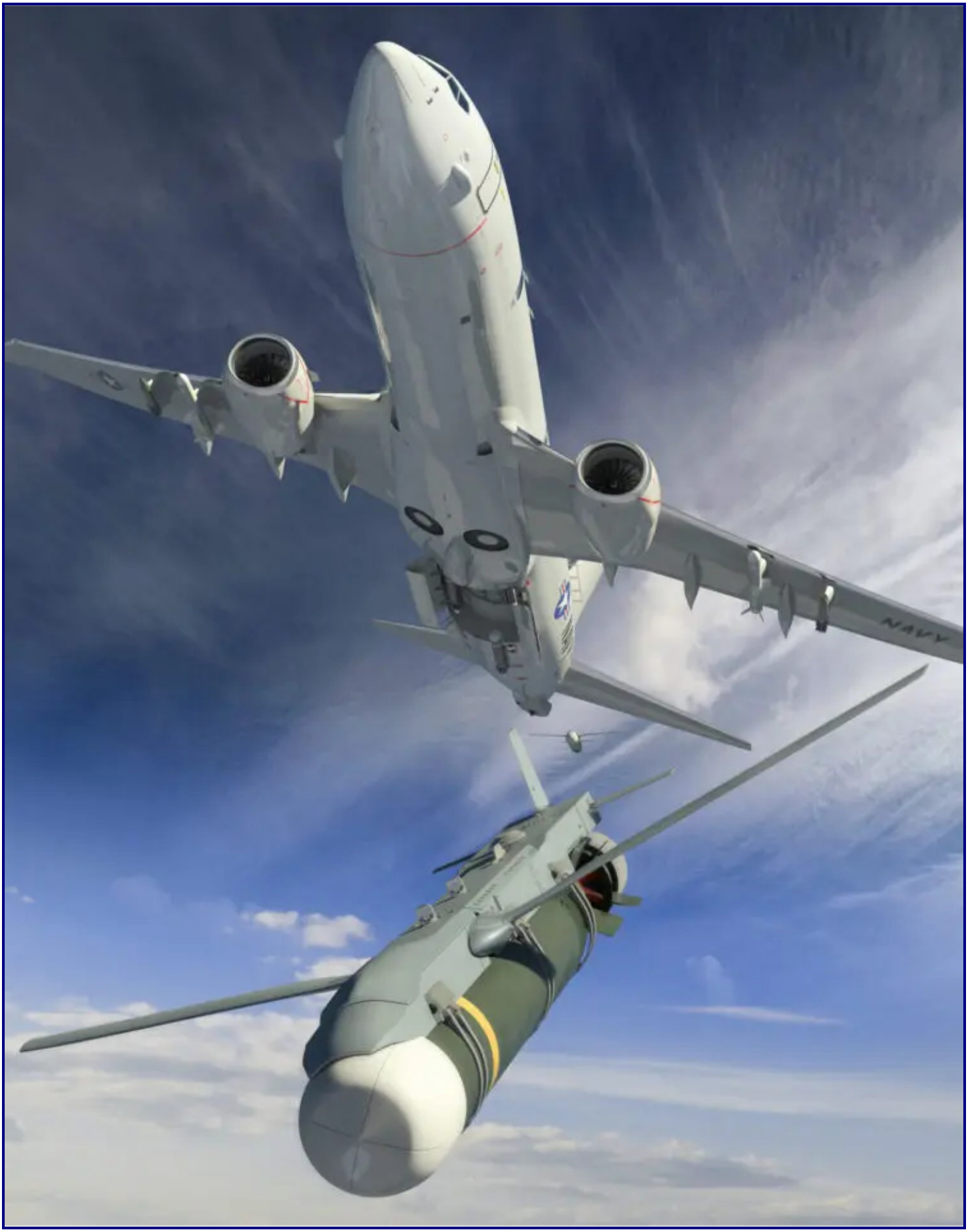
The Aviationist article by Stefano D'Urso

PENTAGON AWARDS CONTRACT FOR HAAWC MODULES (Defense Industry Europe 7/4):

The U.S. Department of Defense has awarded Boeing a $61.2 million contract for additional HAAWC (High Altitude Anti-Submarine Warfare Weapon Capability) modules, as announced on 2 July. The new order supports the U.S. Navy's fleet of P-8A Poseidon maritime patrol aircraft and forms part of a broader multi-year procurement agreement. This latest deal is fully funded and scheduled for completion by the end of 2027. All equipment acquired under the contract will be delivered exclusively to the U.S. naval aviation forces.

HAAWC modules allow the Poseidon aircraft to release Mk 54 anti-submarine torpedoes from high altitude, eliminating the need for abrupt descent maneuvers. This capability helps reduce airframe wear, conserve fuel, and expand detection and engagement ranges. The system, developed by Boeing since 2013, integrates foldable wings and GPS-based navigation, enabling the module to glide long distances after release. "The system is based on lessons learned from the development of long-range guided bombs," the Pentagon confirmed.

Once the module reaches its designated target area and altitude, it automatically deploys the torpedo. The torpedo then uses a parachute to enter the water and initiate its search-and-destroy operation against underwater threats. Previously, torpedo deployment from land-based aircraft required flying at lower altitudes in line with strict operational protocols. The broader procurement program began in 2022 and has already cost $161 million, with potential future orders bringing the total value up to $349 million. HAAWC modules are also available to international customers through the U.S. Foreign Military Sales (FMS) system.


NAVY

IMPROVED MULTIROLE POSEIDON AIRCRAFT PREPARES FOR SERVICE (AIN 6/14):

This month Boeing expects to deliver back to the U.S. Navy the first production modification of the P-8A Increment 3 Block 2 (I3B2) aircraft, with another two already at an advanced stage of the update process. By the end of the year, six modifications should be complete, with the aim of achieving initial operating capability next April, and permitting the start of crew training on the new version of the multi-role platform.

Previous P-8A upgrades primarily concerned software, but the Increment 3 Block 2 is a major update that allows the P-8 to fully match the ambitions of its original procurement strategy. The modification requires the cabin to be stripped, and its cabinets, avionics racks, and crew stations to be replaced. Much of the wiring is replaced, and the airframe requires some modifications to accommodate new antennas. Among the I3B2's new systems are enhanced wideband satellite communications, providing higher data transfer rates. The new secure communications suite improves the ability of the P-8 to operate more effectively with carrier battle groups and also enhances mission interoperability with other navies.

I3B2 adds an anti-submarine warfare signals intelligence capability and an enhanced multistatic active coherent sonar system that tracks detonation sounds reflected off submarines and detected by receiver buoys. A new track management system fuses data from multiple sensors and determines which can be amalgamated into a single track. Computing power is increased to meet the new and emerging demands of the improved mission suite.

Following on from two aircraft updated to Increment 3 Block 2 configuration for test and evaluation purposes, which have been ongoing for over a year, Boeing inducted the first fleet aircraft into its production modification process in late March 2024. The upgrade is being conducted at the company's Cecil Airport facility in Jacksonville, Florida, which can perform 12 modifications per year. Boeing is currently on contract for seven I3B2 upgrades for the U.S. Navy, with a follow-on contract being finalized. Ultimately the U.S. Navy plans to update all of its planned fleet of 135 P-8As. At press time, 124 of them had been delivered and are serving with 14 fleet squadrons and a single fleet replenishment unit. The U.S. Navy has surpassed 500,000 flight hours in the Poseidon.

Australia's 14 Poseidons are also due to receive I3B2 modifications as part of the joint P-8 development program with the U.S. Navy. For other export customers, both existing and potential, the question of whether I3B2 will be available is in the hands of the U.S. government, with Naval Air Systems Command's PMA-290 program office managing all aspects of the Poseidon program. Currently the P-8 has achieved 72 export sales from eight nations: Australia (14); Canada (14 plus two options); Germany (eight); India (12 P-8Is); New Zealand (four); Norway (five); South Korea (six); and the United Kingdom (nine). Germany's first aircraft is due to be one of seven P-8As delivered in 2025, the rate having been hit by last year's IAM machinist strike. Boeing continues to pursue opportunities, including additional purchases from existing users. The company is currently negotiating Lot 13 production, which includes the first aircraft for Canada.

I3B2 forms a new baseline for further rapid technology insertions. Boeing and the P-8 community continue to look at improvements and new capabilities to add to the Poseidon. Areas that are being examined include the improved resilience of communications in denied environments, including the possibilities offered by low-earth orbit satellite constellations. Open-ocean search-and-rescue capability could be expanded, driven in part by the needs of Australia and New Zealand, while the AGM-158C Long-Range Anti-Ship Missile could be fully integrated to give a powerful anti-surface warfare capability. Fit checks were undertaken by VX-20 in 2023.

AIN article by David Donald

SUBMARINES: CHINESE TYPE 094 SSBN (StrategyPage 6/13):

China recently did something unusual, they revealed details of their 8,000-ton Type 094 nuclear powered SSBN. This ballistic missile carrying boat is 135 meters long and 13 meters wide with a top speed of 54 kilometers an hour. Maximum operating depth is 400 meters and the crew of 140 can stay submerged for several months, or until food and other crew supplies run out.

The six current 094's entered service between 2007 and 2021 and two more are supposed to be added. So far there are no indications that any more of these SSBNs are under construction. Each Type 095 carries twelve solid-fuel JL-2 or JL-3 ballistic missiles. The three-stage JL-2 weighs 42 tons and is 13 meters long. Each one can carry up to eight 150 kiloton nuclear warheads. Maximum range is 7,400 kilometers and this SLBM entered service in 2015.

The more recent JL-3 has a longer range of 10,000 kilometers and is not much larger or heavier than the JL-2. This was accomplished by using a lighter version of the JL-2 warhead, carrying up to three warheads, with redesigned rocket motors and missile casing to achieve longer range without a significantly larger or heavier missile. Apparently, JL-3 missiles replaced JL-2s in 2022. China was apparently dissatisfied with the performance and reliability of the JL-2. This was confirmed by how quickly the older JL-2 missiles were replaced by the JL-3.

The Chinese Navy has 78 submarines but 90 percent of them are conventional diesel-electric designs. China has some nuclear powered attack subs and SSBNs. What is more difficult to create are proficient crews. The U.S. Navy has established and maintains very high standards for officers and sailors on its nuclear subs. American submarines remain at sea much longer than Chinese submarines. China is trying to catch up but is finding that serving on submarines is not a popular career choice. As a result the submarines' officers are low quality and would rather not be serving on submarines.

Because of this China has had a lot of problems with its submarines. Their submarines are poorly designed and built. The crews are often poorly trained and supervised. Back in 2003 this led to an incident where 70 officers and sailors aboard a Chinese submarine suffocated and died. The sub did

not sink; it just drifted for weeks until the Chinese Navy searchers found it and all the dead personnel on board. To remedy this situation the Chinese Navy was ordered to improve crew training and demonstrate the success of that by keeping the subs at sea longer while operating as they would in wartime. That is still a work in progress.

This means the U.S. Navy is encountering Chinese submarines in areas of the central Pacific where Chinese subs had rarely been seen. This has put a strain on Chinese submarines and their crews because neither has operated this far into the Pacific before. The Chinese government ordered its submarines to regularly patrol the central Pacific, rather than just along the Chinese coast as they had in the past. The Chinese are new to operating on the high seas, otherwise known as far out in the open ocean. The Americans have long been out there because the United States has not had local enemies on the north and south American continents for more than a hundred years.

The Americans and Chinese are both dependent on seaborne imports and exports. Thousands of ships regularly operate out of American and Chinese ports because these two countries are the largest importers and exporters in the world. Keeping those ocean sea routes safe is important for both countries. Enemy submarines are the major threat to those commercial transports and it's been eighty years since there has been a threat to commercial sea lanes. The U.S. Navy exists to, among many other things, protect American seagoing trade and threaten that of its enemies. The only potential enemy now is China but the Chinese are far more dependent on trade by sea, both for imports to keep the Chinese population fed and supplied with the raw materials to manufacture the exports to keep its population employed, plus all manner of goods they have become accustomed to consuming. The U.S. is the largest exporter in the world and the American economy is dependent on that trade to maintain the high standards of living Americans have become accustomed to.

For both China and the United States, control of seaborne trade is essential in wartime. American submarines have operated off the Chinese coast since World War II when the Americans began mining the waters around Japan to block essential food imports from Japanese occupied northern China. In the 21st century China is dependent on imports of food, potash fertilizer and other goods. So are the Americans, but not to the extent the Chinese are. America can survive without seaborne trade but modern China cannot. Not only because the Chinese population might starve, but because so many Chinese jobs are dependent on exported goods. China is currently the largest exporter in the world. But China needs the export business more than the customers for these goods do. The rest of the world would miss Chinese exports but they would not starve, despite China being a major exporter of fertilizer. For China it's mainly about the jobs and large-scale unemployment is something the current communist government cannot tolerate if it wants to remain in power. Before the 20th century China used seaborne trade to bring in luxuries, not essentials. That has changed and China is scrambling to build a navy that can protect its trade routes.

Currently the Americans are easily able to threaten those trade routes and China is having a difficult time coping, particularly as the Americans have local friends and even allies with significant navies and air forces, all of whom the Chinese have unwisely antagonized. Chinese submarines in the central Pacific and even along the American West coast are a possible solution but one that is very difficult to achieve. At the moment China is trying to build submarines and train crews that can operate on the high seas and threaten U.S. Navy operations in the western Pacific and off the Chinese coast. At the same time. Both navies are increasingly arming their submarines with missiles that can be launched from torpedo tubes or Vertical Launch System tubes built into the hull. In the Far East South Korea is doing this with its new submarines.

Since the 1970s, China has been trying to develop and build nuclear submarines competitive with Russian and Western boats. Their latest nuclear submarines, the Type 096 SSN and Type 094

SSBN, appear to have closed the quality and performance gap with similar Russian subs. Except for one item; the Chinese subs are still too noisy and easy for much quieter American SSN attack subs to follow.

This first Chinese Type 091 sub entered service in 1974 after being under construction for nearly a decade. It was retired in 2000 but three of the other four o91 SSNs remained in service, undergoing numerous upgrades. In 2013 Chinese media declared that in 42 years of operation no Chinese nuclear sub has ever suffered a nuclear reactor accident. This was an indirect dig at the Russians, who are the only nation with nuclear subs to have suffered nuclear accidents, in part because most nuclear subs ever built were Russian. During the first 60 years of existence several hundred billion dollars has been spent on developing and building nuclear powered submarines. Some 400 have been built so far, most of them Russian. In 2000 China joined this club and retired its first nuclear submarine, the Type 091 Long March No. 1. This sub was demilitarized. That meant taking it apart to remove the nuclear reactor and then reassembling and cleaning it up for display.

The Chinese navy is modernizing and that means more nuclear subs and modern surface ships. Since 1949, when Communist China came to be, the navy has been organized into three fleets: Northern, Eastern and Southern. Back then the Chinese navy was a coastal defense force. For thousands of years China has been content to have little more than a coast guard, mainly to deal with pirates and smugglers. On only a few occasions there was a high seas or blue water fleet.

Since the 1980s China has become a major importer and exporter and, to protect its growing overseas trade, something China has never had before, needs a blue water navy. Such a navy requires not just experienced sailors but also support ships. These are the tankers, supply, and maintenance ships that can keep warships operational when they are far from China. In the 1990s China began investing heavily in these ships, by 2021 had the largest fleet in the world in terms of numbers of warships, and expected to increase the size of their fleet nearly 30 percent by the end of the decade while the Americans were having problems maintaining the force that China just passed in terms of number of warships, but not yet in total tonnage.

China still has some more fundamental naval needs. For example, China has never demonstrated any talent or enthusiasm for anti-submarine warfare. Considering the number of nuclear and conventional subs arrayed against it, anti-submarine warfare should have higher priority in China. Another serious shortcoming is mine-clearing capability. The Chinese Navy is well equipped to plant mines off hostile shores and in defense of its own waters but there is not a lot of capability to clear enemy mines. Many navies share this shortcoming but for a major maritime trading nation like China, it would be sad to see all that trade shut down by a few hundred naval mines.

China is still addressing anti-submarine warfare/ASM and mine-clearing, but has a modern navy. The three fleets are equipped with modern ships and the composition of each of the three fleets reflect current needs, including dealing with ASM as well as the nearest naval threats. Each fleet has over a hundred aircraft for ASM, recon and fighters for air superiority and bombers carrying anti-ship missiles.

For example, the Northern Fleet faces Korea and southern Japan. The Eastern Fleet faces the East China Sea and Taiwan. The Southern Fleet faces Taiwan and the South China Sea. The Northern Fleet must deal with the two largest and most formidable fleets in the region, South Korea and Japan. The Eastern Fleet has the longest coastline to defend and the new coast guard comes in handy to help, often using retired and repurposed corvettes. The Eastern Fleet also must assist the Northern Fleet against South Korea and Japan as well as any attack on Taiwan. The Southern Fleet is

currently concentrating on the South China Sea, as well as contributing forces for any attack on Taiwan.

To even the odds, China has built a network of underwater sensors in the South China Sea that is complemented by ASW aircraft and surface ships. South Korea and Japan have similar technology monitoring their coastal waters. The only nation capable of blocking Chinese subs from moving out of the South China Sea is the United States, which has underwater sensors and a large fleet of ASW aircraft. The problem is defeating the Chinese diesel-electric submarine force. China has been trying to build effective SSNs for decades and that is still a work-in-progress. Chinese non-nuclear subs are another matter and they have become world-class.

US NAVY TO DEVELOP NEW ASW GROUND REPLAY SYSTEM (Global Defense News 6/6):
On June 5, 2025, the United States Department of Defense awarded a $12.88 million contract to the American company RTX BBN Technologies Inc., based in Cambridge, Massachusetts. The contract covers the design, development, integration, and testing of a new engineering tool known as the Ground Replay System (GRS), aimed at enhancing the U.S. Navy's anti-submarine warfare (ASW) capabilities.

Amid growing strategic competition with China and Russia, the U.S. Navy continues to invest in technological tools to sustain its undersea operational edge. The GRS program is part of this modernization effort, particularly for ASW missions conducted by aerial platforms. The system's main function will be to collect, analyze, and replay mission data for tactical assessment, training, and operational development purposes.

The contract awarded to RTX BBN includes not only the design and testing of the system but also its installation, integration with Navy systems, and training for end users. The company is also tasked with developing technical documentation and creating training programs for the fleet. Funding has been partially allocated under the fiscal years 2024 and 2025, and the work is scheduled to continue through June 2030.

RTX BBN, a subsidiary of RTX (formerly Raytheon Technologies), is known for its work in acoustic signal processing, multi-sensor analysis, and advanced defense software development. The company has specific experience in maritime detection and data analysis systems, and this contract consolidates its role in the development of future naval technologies.

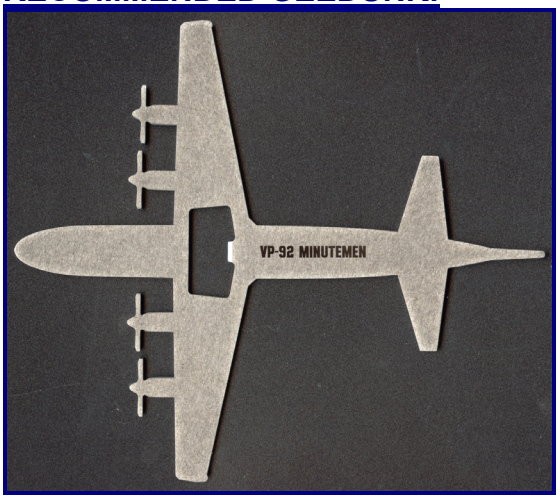
The Ground Replay System is not an onboard system but a land-based tool designed for use by Navy analysts, instructors, and technical personnel. It will be deployed at shore-based analysis centers to replay, visualize, and process mission data, including acoustic, radar, and other sensor inputs, collected by ASW aircraft. The system will also be used to support training programs by reconstructing real mission scenarios, as well as for operational testing of new ASW platforms, sensors, and tactics.

The GRS is expected to be integrated into facilities such as NAS Patuxent River in Maryland or NAS Whidbey Island in Washington, and to support maritime patrol squadrons operating platforms like the P-8A Poseidon and MH-60R Seahawk helicopters.

Awarded without competition, the contract reflects both the exclusive technical capabilities of BBN and the Pentagon's intent to shorten development timelines for systems considered critical. Anti-submarine warfare remains a central element of U.S. naval strategy, particularly as rival states invest in quieter, more autonomous submarines capable of operating in contested environments.

The new GRS will add to the Navy's ASW capabilities by providing advanced tools for post-mission analysis, contributing to operational preparation, tactical evaluation, and improved situational awareness in undersea domains. In a strategic environment where control of deep-sea areas is again becoming a priority, innovation in undersea warfare systems continues to be a key objective. RTX BBN is positioned to play a central role in the implementation of this capability.

RECOMMENDED GEEDUNK:



Everybody who went to the recent Minutemancipation Weekend was presented with a stainless steel P-3 Orion-shaped bottle opener like the one shown here. If you weren't at the Minutemancipation Weekend and want one of these things too, you can get one from the manufacturer Planeform at www.planeform.com. Planeform can make a bottle opener in the shape of a P-2 Neptune, P-3 Orion, or other types of military and civilian aircraft. They can even laser-engrave them with the text of your choice. The bottle openers handed out at the 2025 Minutemancipation Weekend were laser-engraved with "VP-92 Minutemen", as shown here.

PARTING SHOT:

ABOVE: *VP-92 AOs with loaded bomb carts at NAS Roosevelt Roads, Puerto Rico during annual training sometime during the mid-1990s. Photo provided by Jerry Lach. Have something similar to share? Contact Marc Frattasio at marc_frattasio@yahoo.com.*

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