



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 85

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

SEP 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.

RECCO:



ABOVE: VP-92 P-3A "Lima Yankee Seven" at NAS South Weymouth during the summer of 1976. Got something similar to share? Contact Marc Frattasio at marc_frattasio@yahoo.com.

FINAL FLIGHTS:

We recently lost shipmates Chuck Hasley, Tom O'Connor, and Corey Schoonmaker. Chuck was a TAR flight engineer with the VP-MAU at NAS Brunswick during its final years. Tom was a sensor operator who was in several reserve VS and VP squadrons at NAS South Weymouth in the 1960s. Corey was a P-3 pilot in VP-92 during the 1990s.

2021 MINUTEMANCIPATION REUNION:



Over the extended weekend of August 27-28-29 members of VP-92's CAC-1 and CAC-3 had a get-together at Marty McCormack's beach house at Green Harbor, MA. Present for the festivities at one time or another over the weekend were Scott Andrews, A. J. Bucci, Rick Caesar, Ron Clemments, Darrell Davis, Tom Drapeau, Marc Frattasio, Tom Gamble, Tom Hagen, Mark Hausler, Marty McCormack, Randy Minet, Steve O'Donoghue, Chuck Pierce, Sean Reid, Scott Savelle, and Matt Sharpe. All of these people are shown in the photo above, except for Sea Reid who was only present for a time on Friday night and Marc Frattasio, who took the photo. Everybody is wearing custom-embroidered VP-92 command ball caps with their names, rank insignia, rates, crew numbers, and crew positions that were provided by VP-92 alumnus Larry Daly's Eastern Embroidery. Larry can make a cap (or shirt) for you if you want one. Contact Larry directly at easternemb@msn.com.

George Driscoll and Bob Mandeville have been visiting Bill Hanigan at the Newfield House in Plymouth, MA on a regular basis. Your newsletter editor recently caught both of them there during a visit on a rare day off from work. Again, visitors are welcome. See contact information at the top of page two.



NAS BRUNSWICK REUNION:

The NAS Brunswick base reunion (September 17-18-19) is rapidly approaching. As of this writing over 550 people have made advance reservations to come and more are expected to sign up as the weekend approaches. This is more than twice the number that the organizers had expected to come! There will be many events each day with the main event being a traditional Maine seafood banquet catered by Cook's on Saturday between 5:30 and 10 PM.

The Navy has committed to send not one but **two** P-3C Orions, one from VP-62 and the other from VX-30, and VP-8 is sending a P-8A Poseidon. There is also a good chance that the Navy and the Coast Guard will some other aircraft. The maritime patrol aircraft, at least, will be open for visitors on Saturday afternoon between noon and 4 PM. Since the Navy intends to retire all remaining P-3s in 2023 this may be the last chance for most of you to get inside one, which is a good reason in itself to plan on coming. You can check out the schedule of events for the reunion, a list of people who have made advance reservations to attend, and make reservations on-line at <https://bnamuseum.org>.

If you intend to go, please make your reservations as soon as possible. The cut-off date for banquet reservations was going to be September 10th, but due to the high demand it has been changed to midnight Friday September 3rd. Please note that no more banquet reservations will be taken after this time. If you want to go to the banquet, you must get your reservations in before the cut-off. Anybody will be able to attend the reunion as a walk-in, but to get into the banquet on Saturday afternoon you will need to have an advance reservation. So please, if you want to go to the reunion and also attend the banquet, you must get your banquet reservation in before midnight on Saturday September 3rd.

The Brunswick Naval Aviation Museum will be open on all three days. If you have any NAS Brunswick related photos that you'd be willing to let them scan for their digital collection, please bring them with you. If you have any NAS Brunswick base or squadron related memorabilia such as insignia patches, award plaques, squadron belt buckles, command ball caps, etc., gathering dust that you no longer want, please consider donating them to the museum.

The guest speaker at the banquet on Saturday will be Admiral Bill Moran, who served as the Vice Chief of Naval Operations between 2016 and 2019. The museum has also made arrangements to bring a 100-year-old Navy veteran named Jack Holder in from Nevada. Mr. Holder was a flight engineer on PB4Y-1 Liberators who was at Pearl Harbor during the Japanese attack on December 7, 1941. He is expected to give at least one presentation about his experiences. Mr. Holder was a plank-owning member of VP-23, although your newsletter editor is not sure if he was a plank-owner in the WW2 VPB-23 (1944 to 1946) or the "modern" VP-23 (1946 to 1995) that was based at NAS Brunswick in later years. The Navy considers both squadrons to have been separate entities that do not share a common history. Mr. Holder wrote a book about his military experiences and will be selling and autographing copies for purchasers.

The museum has made arrangements with a professional videographer to record interviews with NAS Brunswick veterans. Interview sessions are being scheduled for 30-minute blocks throughout the weekend. If you would like to talk about any aspect of your military experiences at NAS Brunswick and have it recorded for posterity, please schedule an interview session before they fill up. You can reserve a session through the reunion event schedule web page.

We will not have a VP Association reunion this year. If you would like to get together with your old shipmates from VP-92, the VP-MAU, or any other command associated with NAS Brunswick this year, then the NAS Brunswick reunion is the place to do it.

The organizers of the NAS Brunswick reunion are making space available in the Brunswick Naval Aviation Museum's main exhibit hall at one-hour intervals on Saturday September 18th for squadron alumni associations to conduct "mini-reunions". Your newsletter editor has scheduled a joint VP-92 and VP-MAU "mini-reunion" from 11 AM to noon. Please note that this is a new time for the "mini-reunion". We had to reschedule it in order to accommodate Jack Holder. If you are coming to the NAS Brunswick reunion and were in VP-92 or the VP-MAU please come to the museum at 11 AM on Saturday. Please note that there is no additional fee over and above the regular NAS Brunswick reunion admission fee to come to the VP-92 and VP-MAU "mini-reunion". If you are coming to the base reunion at Brunswick on Saturday and were in VP-92 or the VP-MAU please stop by the museum's main exhibition hall. Your newsletter editor will have some specially commissioned souvenirs to hand out to former VP-92 and VP-MAU personnel at this "mini-reunion". The supply is limited. Only one set per person will be handed out while they last on a first-come first-served basis.

BLUE ANGELS COMING TO BRUNSWICK:

The Navy's Blue Angels flight demonstration team will appear at the "Great State of Maine Air Show" at old NAS Brunswick during the weekend of September 4th and 5th. This is an unexpected turn of events and you may not see Brunswick, ME appear on the team's event calendar for 2021, which has led to some confusion, but they are definitely coming. What happened is that the Blue Angels were scheduled to appear elsewhere else that weekend, but cancellation of this event made them available for Brunswick. Please note that the air show at Brunswick will not coincide with the upcoming base reunion – they are on different weekends. So, if you are coming to old NAS Brunswick for the base reunion on the weekend of September 17, 18, and 19 do not expect to see the Blue Angels there!

WHITE HOUSE TAPS SEAN COFFEY FOR US NAVY GENERAL COUNSEL (Reuters 8/11)

After decades shifting between roles in the defense and plaintiffs bars, John P. "Sean" Coffey is poised to return to his U.S. Navy roots. The Biden administration on Tuesday announced it will nominate Coffey - a onetime federal prosecutor, class action plaintiffs lawyer, political candidate, litigation funding pioneer and corporate law firm partner - to serve as the U.S. Department of the Navy's general counsel.

Coffey retired from the Navy with the rank of captain in 2004, after 30 years of uniformed service, both in active duty and in the U.S. Naval Reserve, according to the White House. He now chairs the complex litigation group at Kramer Levin Naftalis & Frankel, where he's been a partner since 2013. Earlier, as a securities class action lawyer at Bernstein Litowitz Berger & Grossmann, Coffey helped recover \$6.1 billion for WorldCom investors who sued the bankrupt telecom company for violating federal securities law.

On the defense side, Coffey's clients have included U.S. hedge fund Pershing Square Capital Management and its founder, Bill Ackman; former Yahoo CEO Marissa Mayer; BlackRock Inc chairman and CEO Larry Fink; and Fabrice Tourre, the former Goldman Sachs trader who was found liable for defrauding investors over a failed mortgage transaction. "I don't consider myself a plaintiffs' lawyer or defense lawyer, I consider myself an advocate who likes to try cases," Coffey told Reuters in November 2013.

He did not respond to a request for comment on his nomination. "We couldn't be more proud of Sean," Kramer Levin co-managing partner Paul H. Schoeman said in a statement. "As a legal strategist and trial lawyer, he has made invaluable contributions to Kramer Levin and our clients. Those qualities, among others, recommend him highly for general counsel of the Navy."

Coffey joined the Manhattan U.S. attorney's office in 1991 after working as an associate at Paul, Weiss, Rifkind, Wharton & Garrison for four years, according to his LinkedIn profile. After a four-year

stint as a federal prosecutor, Coffey became a counsel at Latham & Watkins, eventually rising to partner. He joined Bernstein Litowitz in 1998, then left in 2009 to launch an unsuccessful run for New York attorney general as a Democrat, losing the party's nomination to Eric Schneiderman a year later. He also tried his hand at litigation financing – his firm, BlackRobe Capital Partners, closed after two years in 2013.

Reuters article by David Thomas

NORWAY'S FIRST P-8A POSEIDON FLIES FOR THE FIRST TIME (Naval News 8/10):

The Norwegian Defence Materiel Agency (Forsvarsmateriell) announced the first P-8A Poseidon maritime patrol aircraft for the Royal Norwegian Air Force (Luftforsvaret) flew for the first time. According to the tweet published by the Forsvarsmateriell, the purpose of the flight was to test the engines, technical systems, and to move it towards the facilities where the military equipment will be installed.

The first P-8A Poseidon fuselage for Norway arrived on April 12, at Boeing facilities in Renton, Washington, from Spirit AeroSystems in Wichita, Kansas and rolled out of the Boeing's painting hall in Seattle on July 8. The Norwegian Defence Materiel Agency should take in charge the aircraft by year-end and deliver it in 2022. In total, five P-8s will replace Norway's current fleet of six P-3 Orions and three DA-20 Jet Falcons. Recently, the Norwegian Air Force revealed the names of its five P-8A Poseidon aircraft: Vingtor, Viking, Ulabrand, Hugin and Munin as it is the tradition in the institution.

The P-8A is a long-range multi-mission maritime patrol aircraft capable of broad-area, maritime and littoral operations. A military derivative of the Boeing Commercial Next-Generation 737 airplane, the P-8A combines superior performance and reliability with an advanced mission system that ensures maximum interoperability in the battle space.

The P-8A is militarized with maritime weapons, a modern open mission system architecture, and commercial-like support for affordability. The aircraft has been modified to include a bomb bay and pylons for weapons – two weapons stations on each wing – and can carry 129 sonobuoys. The aircraft is also fitted with an in-flight refueling system. With more than 180,000 flight hours to date, P-8 variants, the P-8A Poseidon and the P-8I, patrol the globe performing anti-submarine and anti-surface warfare; intelligence, surveillance and reconnaissance; humanitarian; and search and rescue missions.

Norway is one of six international customers for the P-8A Poseidon, with the first aircraft delivery expected in 2022. The first British Poseidon MRA Mk1 took flight for the first time in mid-July 2019. As a direct commercial sale, India has received eight of the P-8I variant to date with four more in production. The U.S. Navy is on contract to receive 111 with the potential for additional quantities based on the fleet's needs. As a cooperative partner with the Maritime Patrol and Reconnaissance Program Office, Australia began receiving their P-8A aircraft in 2016 with eight delivered and four more in production; both New Zealand and South Korea have signed agreements with the U.S. Navy to purchase four and six aircraft respectively.

Naval News article by Martin Manaranche

TRITON DRONE CLOSE TO TAKING OVER FOR PATROL AIRCRAFT (Military.Com 8/3):

The Navy's new MQ-4C Triton drones hit a new development milestone last week, the Navy's project manager announced Tuesday. Capt. Dan Mackin, the naval program manager for the Triton program, said that a new configuration of the drone, loaded with more sensors, had its first flight last Thursday over Southern Maryland. The drone's newly installed cameras and signals intelligence

collection systems "are performing better than expected at this point," Mackin said at a press conference at the annual Sea Air Space conference today.

The Northrop Grumman-made unmanned aerial vehicle, or UAV -- an enhanced variant of the RQ-4 Global Hawk -- is part of the Navy's Broad Area Maritime Surveillance program and boasts next-generation sensors specially engineered for seafaring operations. Despite the production milestones, the program's costs have grown in recent years. A Government Accountability Office (GAO) report found that projected Triton development costs had increased 61% from \$3.5 billion in 2009 to nearly \$5.7 billion in October 2018.

The Triton, which made its first flight in 2013, can stay airborne for more than 24 hours and fly 8,200 miles, according to Northrop. Triton's new configuration, known as IFC 4 (Integrated Functional Capability 4) or the multi-int (multi-intelligence) capability, is a critical part of the Navy's plans for maritime patrol, according to slides shown at the press conference. The slides noted that, once fully operational, the drone will replace many of the capabilities of the retiring EP-3 aircraft. The current fleet of Navy surveillance aircraft is rapidly aging, the last one having been delivered in 1997.

Northrop's program manager, Doug Shaffer, also argued that the platform would take some of the mission strain from the Navy's P-8 aircraft, allowing the service to focus more on its anti-submarine mission. Although still in development, two "fully operational aircraft" of an earlier equipment configuration already are flying out of Guam and Japan to support Navy missions in the Pacific region, Mackin said. The drones were initially deployed to Guam in January 2020 as part of an early operational capability (EOC) test.

Ultimately, the Navy plans to use the Triton in five areas or "orbits" around the world, according to Mackin. The aircraft will be based out of Guam; Sigonella, Italy; and locations on both coasts in the United States, Mackin said. Northrop said the program expects to sell 68 aircraft to the Navy with the drones reaching initial operating capability in 2023, according to a press release. "For the U.S. Navy, Triton is critical today and really indispensable tomorrow," Mackin said.

Military.Com article by Konstantin Toropin

THE CASE FOR STRIPPING THE P-8 INTO AN RB-8 ARSENAL SHIP (The Warzone 7/22):

Big, turbulent shifts are underway in the U.S. military as those in charge try to rebalance future capability wants against accessible combat capacity today. For instance, a reduction and reshuffling of types are planned across the U.S. Air Force's tactical jet fleet in the decade to come, and both the U.S. Navy and the Air Force are pivoting to what comes next in terms of tactical airpower in the form of their Next Generation Air Dominance (NGAD) initiatives. Yet long-range combat aviation is arguably under the most pressure. A new target of building 149 B-21 Raiders is taking shape, held up by the hope that what's left of the B-1 fleet will stay solvent long enough to be replaced by some of those new stealth bombers. At the same time, the B-52 is slated to soldier on for decades to come, hopefully with new engines, but even that initiative is hitting financial headwinds.

Even if these plans come to fruition, there will still likely be a long-range strike deficit as adversaries enhance their anti-access capabilities. As such, it's fairly clear that the Department of Defense (DoD), as a whole, isn't nearly as well equipped as it needs to be today should it get into a shooting match where long-range airpower becomes absolutely essential, such as during a war in the Pacific, and it will likely still struggle to meet demands in the decades to come. Yet there is one airframe in the inventory today that seems strangely overlooked for its potential to alleviate some of this pressure, as well as to help nullify other major pressure points among the DoD's collective air combat inventory. Its economy, serviceability, extreme flexibility, and its ability to play a major role in any

type of future fight the U.S. enters into, including one with a towering peer-state adversary like China, as well as playing critical roles in peacetime, is unrivaled. The aircraft I am referring to is Boeing's P-8 Poseidon, but not in its current configuration.

Untapped Opportunity

In most regards, the P-8 has been a major success. It is a versatile tool that leverages the most understood airliner airframe on earth at its core. While maritime patrol may be its central functionality, it has already proven itself well suited for electronic intelligence gathering and for toting outsized sensors for specialized missions. There is a very strong argument to be made that there are not enough P-8s slated for the Navy's inventory in order to pick up where the P-3 Orion left off, and especially in a new era of expanded submarine warfare, but that is not the focus of this piece.

While the P-8's ability to fulfill other roles is convenient, those other functions distract the relatively tiny fleet of a planned 128 examples from its highly critical primary mission set. In fact, the aircraft has so much latent potential, which is now slated to increasingly get unlocked via the addition of a slew of new weaponry and podded systems, that one can only imagine maritime patrol will continue to compete with everything else it can do. And since a P-8 can only be in one place at one time, regardless of how capable and versatile it is, this is a problem that seems to be demanding some sort of solution. That solution could, and very well should, go beyond the Navy.

Instead of thinking just about how the Navy can buy more P-8s as they are configured today, the Air Force, possibly in cooperation with the Navy, should also be examining the idea of buying a variant of the P-8 that is stripped down to its bare essentials. In effect creating an off-the-shelf, highly economical, and sustainable arsenal ship and sensor platform that can perform a huge array of tasks—submarine hunting and traditional maritime patrol not being one of them.

What I am proposing here is an 'RB-8' of sorts. A P-8 stripped of all its maritime patrol and anti-submarine warfare gear, aside from the relevant parts of its communications capabilities, defensive aid systems, FLIR turret, and outstanding electronic support measures (ESM) suite. In its nose, an off-the-shelf scalable fighter AESA radar would be installed. A substantial amount of its internal volume would be left empty, aside from packing as much additional fuel onboard wherever possible and housing a trio of open-architecture mission specialist/weapon systems officer consoles behind the cockpit. It would also retain the P-8's current sonobuoy launchers and racks.

What's key here is that the P-8's development is totally paid for. Its evolution continues with new weapons and other capabilities being added. With seven allied export customers now taking part in the program, sustainment of the type will be economical as it can be for decades to come. A fully-equipped P-8A has a unit cost of \$175 million, and a 737-800 costs roughly \$85 million new. One could imagine an additional large block buy of this stripped-down variant could be had somewhere in between, let's just throw a number on it, say \$130 million. What the total force would get for that price tag, roughly just 50% more than the price of an F-35A, would be absolutely outstanding. In fact, one could argue that it would be the most flexible, economical, and relevant combat aircraft in the entire arsenal.

Standoff Weapons Truck

With this whittled-down base 'RB-8' model, the Air Force would get an aircraft capable of executing electronic surveillance missions just like the P-8 does today. This would free up the Navy's P-8s for more maritime patrol-related tasks—especially anti-submarine warfare operations. But where the aircraft would really shine is in its ability to adapt to any combat scenario.

The P-8 has four wing pylons. Each of these stores stations, which are rated at 2,500 pounds, are able to carry standoff cruise missiles, such as AGM-84 Harpoons and SLAM-ERs, and eventually the stealthy Long-Range Anti-Ship Missile (LRASM). If the P-8 can carry LRASM, the RB-8 can carry its land-attack sister weapon, the Joint Air-Surface Standoff Missile (JASSM), as well as LRASM, and more types of advanced air-launched standoff weapons are on the way. But unlike a fighter, it can carry those weapons thousands of miles from an aerial refueling tanker, like U.S. bomber aircraft.

Four JASSMs delivered for standoff attacks by fighters flying from bases thousands of miles from their launch points in the Pacific would require a large tanker commitment. The RB-8 would require a fraction of those resources and it could actually execute that mission with near-737 efficiency, which is far cheaper and more reliable than a bomber or even a jet transport aircraft.

While using transport aircraft to chuck JASSMs at enemy targets by deploying them via air-dropped pallet is certainly a worthy endeavor to continue to explore, in reality, during any major conflict, especially one in the Pacific, America's airlift fleet will be pushed to its breaking point just trying to keep up with the basic logistics needed to sustain the war effort. So, unless you buy many more expensive transport aircraft—of which no Western long-range jet-powered types are in production—it's questionable just how useful this capability will be, at least in terms of sustained combat capacity.

Also, aside from the special operations MC-130s, these aircraft don't have the advanced ESM and self-defense suites that the RB-8 inherently does, making them more vulnerable to hostile forces, even far from the front lines. With the P-8 already getting towed electronic warfare-enabled decoys, its ability to survive even an unforeseen and more advanced threat will dramatically increase.

In addition to its wing stations, inside the P-8's weapons bay, there are five hardpoints, each capable of carrying 1,000 pounds. Mk 54 torpedoes, which weigh about 500 pounds each, are the baseline weapon of choice for the P-8 weapons bay, along with Quickstrike mines. It would seem that this same bay could hold between 10 and 20 GBU-53/B StormBreakers, previously known as Small Diameter Bomb IIs (SDB II). The precision-guided munitions can hit moving targets in any conditions at over 40 miles from their launch points, which gives them a brutal anti-ship capability, especially against swarms of small boats in the littorals.

Alternatively, 500-pound or 1,000-pound JDAMs or laser-guided bombs, or even five small cruise missiles capable of standoff attacks, such as Israel's Delilah or the new Sea Breaker anti-ship missile, could be carried internally. Israel is already intending on selling Sea Breaker to the United States. Finally, advanced air-launched decoys, like Miniature Air-Launched Decoy X (MALD-X), could be launched from the weapons bay.

Outfitted with a fighter's modular AESA radar, the RB-8 could also potentially carry air-to-air missiles, providing for its own contingency defensive air capability. In fact, this aircraft, with its inherent networking capability, could also carry oversized very long-range air-to-air missiles, or air-to-air missile delivery systems, on its external pylons, as well, acting as a remote arsenal ship for fighters deployed far downrange.

Swarm Mothership

Things get even more interesting when we look at the infrastructure left over from the RB-8's maritime patrol predecessor. The P-8 can carry 129 A-sized sonobuoys. The aircraft has three L3 Harris Sonobuoy Launching Systems, which are automated rotary launchers that can fire 10 sonobuoys in rapid succession before reloading, which happens inside the cabin. The P-8 also has individual manual sonobuoy launchers. While sonobuoys really don't apply to our notional RB-8, although they

could assist in seeding sonobuoy screens alongside their P-8 cousins, small drones can be deployed within the form factor of these A-sized sonobuoy tubes. Packing UAVs into this size sonobuoy tube was an initiative dating back to 2004. Fast forward to today and there are remarkably advanced off-the-shelf drone options.

For instance, the ALTIUS-500 was built to be launched from an A-sized sonobuoy launcher-equipped platform at altitude. The ALTIUS-500 has a range of over 150 miles and can be configured for a number of roles, although today it is made to act as a magnetic anomaly detector drone for submarine hunting. Just using what is leftover from the P-8, 30 of these, or a similar drone type that can fit into the A sonobuoy's form factor, such as Raytheon's Coyote, could be launched in rapid succession. Three additional reloads of 30 drones could be carried and quickly deployed in successive waves. We are talking about an amazing ability to rapidly deploy an overwhelming standoff swarming capability—one that could include any mix of surveillance, electronic warfare, decoy, and kinetic types in a single swarm.

The A-size sonobuoy launchers already included in the stock P-8 even have the ability to deploy stacks of 32 tiny CICADA drones in one shot. The point being, the existing launchers can be used to turn the P-8 into a seamless swarm delivery system/mothership and it also has space and communications to control those swarms once launched.

But things get even more interesting when you add apertures in the P-8's fuselage to support Common Launch Tube (CLT) weapons and pressurized launchers—like those found on the KC-130 Harvest Hawk. This opens up a huge array of possibilities for more advanced internally launched weapons and drones. The ALTIUS-600 is becoming more and more popular as the go-to-air-launched drone because it has been thoroughly tested and is extremely adaptable. Each weighs 27 pounds and can carry a seven-pound payload. This can include electronic warfare systems, signals intelligence and reconnaissance payloads, and a potent shaped-charge warhead. They are also capable of working cooperatively together in a swarm. Most importantly, the ALTIUS-600 has a range of roughly 275 miles, giving it true long-range standoff capability.

AREA-I

Because a good portion of the notional RB-8's cabin will be unused, packing it with tube racks for various CLT-compatible weapons turns it into an even more potent arsenal ship. A swarm of a couple of dozen ALTIUS-600 drones loaded with EW, intelligence, networking relay, and explosive payloads coming at an enemy low over the horizon from hundreds of miles away, and launching them from a distance thousands of miles from a tanker, while providing on-station command, control, and monitoring of the swarm, is one brutally powerful capability.

Being able to deliver multiple types of swarms and standoff weapons, and layering those into a target area, including against a naval flotilla or a set of well-defended shore targets, would pose a huge challenge to an enemy. The drones could provide stand-in jamming support, decoy, and suppression of enemy air defenses to ensure an incoming cruise missile strike, even one also launched by RB-8, is successful, for instance. In fact, the RB-8 could assist other aircraft with their own strikes, layering in swarms of jet-powered and lower-end decoys in order to make sure a large strike package of other aircraft is able to hit their own targets. Likewise, a single RB-8 could launch a devastating attack on a surface action group, using a mix of swarms, air-launched decoys, and cruise missiles from standoff ranges. And all that can be launched by a single aircraft with minimal modifications.

Close Air Support Arsenal Ship

What's so exceptional about the RB-8 concept is that it wouldn't just be a standoff weapons truck intended for a peer-state conflict. Its long endurance, 737-like economy, defensive suite, large electricity-generating capability, and wide array of payload options would allow it to be an outstanding close-air support and armed overwatch asset in more permissive airspace. It could stay on station for up to 10 hours without needing aerial refueling support. That is a far cry from fighters that can require refueling as constant as nearly every hour. Its powerful FLIR could help with identifying targets down below and additional electro-optical/IR targeting capabilities could be added by bolting targeting pods or other sensor payloads onto one of its wing stations or fuselage attachment points. Best of all, a standard crew of as many as five could work very complex CAS situations simultaneously.

In addition, 2,000-pound class bombs could be carried on its wing pylons, although those shouldn't be required on the majority of close air support missions. Its weapons bay could be packed with five JDAMs or laser-guided bombs, or at least double that in Small Diameter Bombs, while internally, a deep arsenal of Viper Strike, Griffin, and other Common Launch Tube-capable precision-guided weapons can be employed as needed, similar to how AC-130s and Harvest Hawks operate, but at jet speeds and altitudes. Even better would be the addition of a small guided direct attack munition that could fit within the confines of an A-type sonobuoy tube.

Drones can also be launched to provide additional eyes overhead areas that are outside of the RB-8 direct line-of-sight, but not beyond the reach of its Small Diameter Bombs, small cruise missiles, or its warhead-armed drones. With SDB alone, in many cases, it could theoretically provide close air support to multiple areas within about a 40-mile radius without turning to more advanced powered standoff weapons. Using its drones as reconnaissance platforms and munitions, that engagement range could be extended to over 250 miles. RB-8 launched drones could also be used to provide additional electronic surveillance or electronic warfare capabilities, work as communications relay platforms over mountainous terrain, or be used as loitering munitions. They could even possibly be used to intercept other hostile drones.

Electronic Missions With Ease

Bolting on a readily available system like the Intrepid Tiger II pod could also provide multi-role electronic warfare and communications intelligence support. Likewise, carrying the ASQ-236 Dragon's Eye radar pod could enhance the RB-8's ability to engage targets in any weather conditions and track enemy movements on the ground, finding enemy vehicles to stick its StormBreakers on. Self-protection jamming pods and towed decoys, paired with the RB-8's high-situational awareness, could allow it to execute these missions even along the fringes of higher-threat environments.

Once again, it can do this at jet speeds. As such, it can respond to areas of need faster than its turboprop-powered counterparts. Basically, if CAS is largely platform-agnostic as USAF's leadership have repeatedly claimed, ok, then you don't need a B-1B for it or an F-16. An RB-8 would be far more flexible, effective, persistent, and economical, and could provide for a far more independent concept of operations.

The RB-8 would be easily adaptable for other, non-kinetic roles. The airframe has already proven its ability to carry massively outsized radars and communications antenna farm pods using its under-fuselage attachment points. So, for the RB-8, anything you can strap on the wing or belly could potentially be employed. This could include powerful standoff jamming systems and even things like directed energy weapons that may be too cumbersome for a fighter aircraft to easily carry or too hard to integrate into a stealth bomber.

A critical communications gateway system is another possibility, a capability that will become increasingly important as time goes on and that can take advantage of the aircraft's existing communications suite. It's also worth noting that the P-8 produces a lot of electrical power—it has extra generators that a standard 737 does not have—which would help when it comes to accommodating these types of power-hungry systems.

Boeing is also actively developing an open-architecture and modular pod system for mounting on the P-8's fuselage. This system, known as the Multi-Mission Pod (MPP), will make integrating new outsized payloads onto the P-8, or a notional RB-8, simpler, as it will work directly with the aircraft's open-architecture mission system. Furthermore, Boeing tells us its form factor "has been very carefully engineered to add capability and versatility while maintaining P-8's ability to fly anywhere between 41,000 and 200 feet, fast or slow, near or far as the target and mission demands. It will not impact P-8's flight profile." As such, if you can fit it into the general form factor of the pod and it meets other basic requirements, it can be flown on the airframe without impacting its flight envelope. This will greatly streamline flight testing of new payloads, as well.

There is also the issue of unmanned aircraft control, not just for small drones, but also for loyal wingmen and even more advanced unmanned combat air vehicles (UCAVs). The RB-8 could operate as a forward control center for these largely autonomous systems. This concept of operations is especially relevant for loyal wingmen-like drones that will act as high-value asset protectors, an idea that is quickly gaining traction.

For instance, the Royal Australian Air Force's Air Teaming System (ATS) will likely be monitored and directed from tanker and/or airborne early warning aircraft, as well as fighters. Similar concepts are being pushed and even tested in the United States. The RB-8, with its open-architecture interface, would be ideal for this role and the drones' presence would give the plane a huge boost in survivability for operations in contested environments. Basically, it could provide an organic and highly dynamic self-escort capability. The RB-8 could also employ the advanced drones in offensive roles, as well.

Finally, the notional RB-8 could even fulfill light transport and on-demand logistics duties for small cargoes in a pinch. Simply put, the future growth and adaptability potential of an RB-8 would be unlike any other combat aircraft out there. Just how fast new or even existing capabilities could be added to it is a major sell in itself.

An Extreme Value Proposition

Rewinding a bit, it must be made clear that above all else, the RB-8 could provide an economical, very low-risk path to extra long-range strike capacity in the near term. This is in addition to the secondary electronic intelligence collection mission that is already endemic to the over-tasked P-8 community. Currently, the need for the long-range strike mission set outstrips the capacity at hand, and despite the Air Force's current plans, this situation could get worse long before it gets better. Procuring RB-8 aircraft would certainly offer some breathing room until the B-21 fully comes online and the tired B-1Bs can be finally pulled from service. After that, they can continue to augment the bomber force, while also addressing many additional mission sets that would be a poor, even fiscally irresponsible use of B-21 flight hours, or even those of an upgraded B-52.

Procuring the RB-8 would also help offset some of the risks posed by the USAF's aging aircraft fleet. While the B-52 is a marvelous warfighting machine, it continues to age. What the next few decades of service will look like for the bomber as it approaches its 100th birthday can only be predicted. The

RB-8 fleet would help hedge against any unforeseen issues with the type, and with the ultra-high-tech B-21, for that matter.

As far as actually seeing an RB-8 come to fruition, the problem is when you talk about buying something, no matter how 'off-the-shelf' it is, many will see it as a threat to other existing "sacred cow" programs. While it is important that the USAF buys enough B-21s, and 149 may be needed, anything with a major price tag that can help out with a portion of its mission set is viewed as some existential impediment to reaching that production number goal. There may be some truth to this, but at the same time, it is a poor way of looking at force structure, one that has done far more harm than good in recent decades.

The fact of the matter is 149 B-21s and 75 upgraded B-52s won't be enough in terms of long-range weapons delivery platforms. The RB-8 can help pick up the slack at a very low comparative cost. And really, if it is going to suck funding from other sources, it should be spread more evenly based on all the missions it can do—from alleviating pressure on the concerningly geriatric manned electronic intelligence gathering fleet to doing the same for the fighter community in terms of close air support. This holistic point of view will not place its required funding all at the expense of one program or another.

By producing say 75 RB-8, at the cost of 15 B-21s (the latter of which will cost very optimistically around \$650 million per copy), this could go a long way in providing more standoff strike capacity, and more flexible capacity at that, without digging deeply into the B-21's production numbers. You could say the same thing for F-35A. Would you rather have another 110 F-35As or 75 EB-8s? In the big scheme of things, I think with the multitude of long-range, high-endurance missions it could accomplish, and the huge array of weapons it could carry, it would be hard to argue for the relatively short-ranged F-35As considering many hundreds are already in the inventory.

So, maybe cut it in half, the tactical and strategic side of the equation both gives up something, like seven B-21s and 58 F-35s. And what about the strategic intelligence gathering community? Maybe they could pitch in a bit as well. Their fleet of aging RC-135-based airframes could surely use some augmentation, at least as an interim measure. There is also the possibility of working with the Navy to make this a joint program. Once again, these are just some examples of how we can view the RB-8 program if we have to look at every procurement opportunity as robbing Peter to pay Paul.

Finally, there is the issue of readiness. Neither F-35 nor B-21 will be ready to fly missions day in and day out like RB-8 would, or with such a low cost and logistical footprint. So while 75 airframes may not be a huge number, you would be squeezing many more completed sorties out of those airframes and at a much lower comparative price, in a given period of time. In addition, the P-8 shares vast commonality with the next-gen 737 airliner it was derived from. As such, sustaining it anywhere in the world, and especially during the duration of a conflict, will be a far easier proposition than a cutting-edge stealth bomber or fighter, or a 70-year-old B-52. With that in mind, the RB-8 could also provide a lot of forward presence at a relatively low cost and with a relatively small footprint. Its inherent flexibility, long loiter time, and endurance capabilities, as well as its ease of support, means RB-8s can be forward deployed anywhere in the world and they can provide the widest mission set in the entire force while there.

What we are looking at here is an F-15EX-like solution to a different problem, albeit under similar circumstances. Just the fact that the F-15EX made it to fruition at all is evidence that an RB-8 concept may have legs. F-15EX was all about bringing in a low-risk, mature capability set as soon as possible while also providing an airframe that has a very long service life, proven availability and efficiency, and one that can do a wide array of missions its higher-end counterparts are ill-equipped to

do, or doing so would be a waste of their precious airframe life. It was also an aircraft with the vast majority of its development already paid for, just like the RB-8 concept.

It may not be sexy, but the RB-8 is an incredible opportunity sitting on a plate before the Air Force and even possibly the Navy. It's a comparatively low-cost weapon system that can check so many boxes in any future fight the U.S. may find itself in. Luckily, the P-8 order book has remained strong for the time being, and an additional bulk order could potentially allow for a very attractive unit cost.

The P-8 is built on its own dedicated line in Renton, Washington. Boeing tells us this allows it to more easily scale up production if need be. Producing a couple of planes a month is not an issue now and that can be increased as needed. But once that line is shuttered, the 737 Max would have to be adapted for the role, which would take a lot of time and cost a lot of money to integrate and validates the original P-8's capability set onto. This will likely make the entire concept unviable. So, this isn't a wait for eternity proposition. There could be additional orders for a P-8 derivative, possibly from the Army, in the not-so-distant future, as well. This would only add to the supportability of the type and the potential for a big block buy at a very attractive price.

The RB-8 concept should at least be carefully and thoughtfully evaluated. In fact, in an age where those in command often talk about how many air combat capabilities are increasingly platformed agnostic, the bizarre reality that an off-the-shelf, fully militarized 737 isn't a compelling solution to a wide array of glaring challenges is quite puzzling.

The Warzone article by Tyler Rogoway

USMC HELICOPTERS HAVE BEEN ASSISTING IN THE HUNT FOR SUBS (The War Zone 7/21):

Utility helicopters from the U.S. Marine Corps have been conducting anti-submarine warfare maneuvers as part of the ongoing Summer Fury 21 exercise off the coast of southern California. UH-1Y Venoms from Marine Light Attack Helicopter Squadron 267 (HMLA-267) from nearby Marine Corps Base Camp Pendleton were seen dropping sonobuoys in what's an unusual mission for this type, but which reflects a growing interest in anti-submarine operations within the Corps. Photos released by the U.S. Department of Defense during Summer Fury 21 show this large-scale military exercise underway on San Clemente Island, involving elements of the 3rd Marine Aircraft Wing. The service describes Summer Fury as "the largest Marine aviation exercise on the West Coast [providing] 3rd MAW opportunity to improve warfighter readiness in support of a Marine Expeditionary Force maritime campaign."

As well as 3rd MAW F/A-18C Hornets and F-35B Lightning IIs flying a long-range maritime strike against a simulated enemy warship, the UH-1Y was also seen in the context of offensive maritime operations, in this case, its crew members helping to prosecute a submarine contact by dropping sonobuoys by hand out of the cabin door. Sonobuoys are expendable sonar devices that are used to fix the position of an opposing submarine and monitor its movements. While sonobuoys are a regular feature of anti-submarine warfare operations and are dropped in significant quantities by specially-equipped fixed-wing aircraft and helicopters, they aren't normally associated with the UH-1Y.

The UH-1Y, which has completely replaced the 1970s-vintage UH-1N within the Marine Light Attack Helicopter (HMLA) community, is potentially a useful tool for anti-submarine warfare work, being optimized for the maritime environment and also offering a useful speed of 170 knots, considerably faster than the old 'November' model. With a mission repertoire that already encompasses offensive air support, assault support, escort, supporting arms coordination, and forward air controller — airborne, it's maybe not such a surprise that the UH-1Y is also able to turn its hand to anti-submarine

warfare, too, albeit apparently on what must be a fairly rudimentary basis. After all, the UH-1Y has no actual submarine-hunting equipment on board, so its role is one of assisting in seeding sonobuoy screens, helping pinpoint the submarines, especially after initial detection or where they might enter particular choke points.

Since a single dedicated anti-submarine platform can only conduct its mission in one place at a time, any help in seeding sonobuoys across a wider area can serve as a significant force multiplier. A UH-1Y with sonobuoys dropped manually out of the door is also cheaper to operate than a specialized ASW asset and is also readily available. This use of the UH-1Y fits in with the increasing emphasis placed by the Marines on this mission, traditionally the domain of the U.S. Navy. The service's new-found interest in anti-submarine warfare is based on the shift toward distributed and expeditionary warfare operations, as part of the Expeditionary Advanced Base Operations (EABO) concept. Significantly, one of the stated focuses of Summer Fury 21 is defeating a peer adversary as part of distributed operations.

EABO calls for Marine units to quickly establish forward operating bases across a broad area and then use these as a springboard to launch various other missions, before moving on to the next area. This should make it harder for an enemy to counter the Marines but also lends itself ideally to the kinds of Asia-Pacific environments in which the U.S. might expect to go to war with China, for example, as well as in the Northern European context, around the coasts of Norway, Iceland, and Greenland. One of the potential problems with EABO is that it is likely to rely upon logistics and other supporting operations by sea and with both China and Russia rapidly modernizing their underwater capabilities, these could be threatened. This is where a Marine anti-submarine warfare component fits in, although in practice any such effort is likely to be conducted in cooperation with the Navy.

Among the potential different ideas for how the Marines can embrace anti-submarine warfare are using unmanned aircraft to deploy sonobuoy arrays and other anti-submarine warfare sensors in the waters around an expeditionary outpost. Manned aircraft could equally play a part, too, with the Marines flying KC-130 Hercules tanker-transport and MV-22 Osprey tilt-rotors, as well as various helicopters, all of which could also contribute to dropping sonobuoys, in particular. The concept of turning existing platforms into sub-hunters is nothing new, in fact, with the Navy having explored adapting its carrier-based tactical aviation assets for just this role half a century ago. Now, in Summer Fury 21, it seems at least a part of that Marine ambition has been fulfilled, with the delivery of sonobuoys from the UH-1Y.

A caption to one of the photos released explains the UH-1Y was involved in a concept described as Advanced Naval Basing, which is said to offer "forward logistics and support, as well as sensor and strike capabilities that make a significant contribution to undersea warfare campaigns in the Indo-Pacific region." Interestingly, back in 2016, the Marines came up with a wargaming "tool kit" that included a Navy SH/MH-60 Seahawk detachment flying from a Marine forward base on local anti-submarine operations, as well as anti-surface warfare and other missions. While the UH-1Y doesn't offer anything like the same full-spectrum anti-submarine capability in the role as the Seahawk, it's possible that the Venom was being used as an adjunct to the Navy helicopter, an example of the MH-60R also being seen in the Summer Fury 21 photo release. Since the exercise also includes establishing a forward arming and refueling point (FARP), it's also conceivable that these helicopters were flying their anti-submarine warfare missions from there, reflecting the proposal in the 2016 "tool kit." So far, however, it seems no other details have been released about the anti-submarine warfare portion of Summer Fury 21 and the particular role played by the UH-1Y. However, it seems clear that the Marines are at least now experimenting with using this platform as part of this mission.

However, as The War Zone has discussed in the past, there still remain significant hurdles before anti-submarine warfare can become anything approaching a core Marine Corps function. Despite the importance of defeating hostile submarines in modern warfare, this is a very particular skill set that requires intensive training and resources, including personnel, especially bearing in mind the number of other functions the service is expected to perform. With this in mind, assisting the Navy in these operations makes sense. As it is, we will have to wait and see to what degree the Marines will embrace anti-submarine warfare as part of their evolving EABO doctrine and, within that, what kind of expanded role will be played by the adaptable UH-1Y.

The War Zone article by Thomas Newdick

CHILEAN NAVY DIESEL-ELECTRIC SUBMARINE APPEARS IN SAN DIEGO (The War Zone 7/1):

A publicly accessible webcam shows what appears to be a Chilean Navy Scorpene class submarine sailing into the Port of San Diego earlier today. Though we don't know for sure what the purpose of its visit is, the U.S. Navy's Pacific Fleet has engaged with Latin American navies in the past as part of a program that offers valuable opportunities to work with, and train against, advanced diesel-electric submarines. Since 1990, the U.S. Navy has only operated nuclear-powered submarines.

The submarine first appeared on the feed from San Diego Web Cam at around 3:30 PM local time. At multiple points in the stream, the Chilean national flag is seen flying atop the boat's sail. At present, the Chilean Navy operates two Franco-Spanish Scorpene class submarines and a pair of German-made Type 209/1400-Ls, known in the country as the Thomson class. The Scorpenes are easy to separate from the Thomsons, with the former type having dive planes on the sail, while the latter does not.

The Chilean Scorpenes, the first of which, the O'Higgins, entered service in 2005, are fairly modern diesel-electric attack submarines. Among other things, they feature air-independent propulsion (AIP) systems, which allow them to dive for days at a time while remaining very quiet and, as a result, difficult to detect and track. AIP-equipped diesel submarines are now proliferating around the globe and are considered major threat. Each one of the Scorpene class has six torpedo tubes that can be used to fire Black Shark heavyweight torpedoes or Exocet anti-ship cruise missiles.

The reason for this submarine's visit to San Diego is unclear and we have already reached out to U.S. Third Fleet, which is headquartered there, for more information. In 2001, the U.S. Navy began working with boats from Latin American nations as part of the Diesel-Electric Submarine Initiative (DESI), a combined training program for units on the West and East Coasts. Ostensibly, these combined training events are meant to give all of the participants opportunities to practice various core skills sets relating to submarine and anti-submarine warfare (ASW) operations, as well as help broaden ties, in general, between the U.S. military and its partners in the Southern Hemisphere.

However, since the U.S. Navy does not have any diesel-electric boats of its own, DESI has also provided particularly valuable opportunities over the years for it to train against these kinds of submarines, which have distinct operational characteristics and signatures from nuclear-powered ones. "During these visits, we are able to simulate a variety of wartime scenarios against diesel submarines which adds an additional degree of difficulty and reality to fleet ASW, as diesel submarines have proven to be quiet and elusive," Navy Lieutenant Alexander Papadacos, a member of Submarine Squadron 11, said during a DESI engagement with the Chilean Navy's Thomson class submarine Simpson, in 2018.

The U.S. Navy has sought out these kinds of opportunities in different ways since 1990, when it decommissioned the Barbel class USS Blueback, its last diesel-electric attack submarine. Blueback,

one of just three Barbels the Navy acquired, had served for a time at the end of its career as an aggressor due to its unique characteristics among the rest of the service's submarine fleet.

In the mid-2000s, the Navy then leased Sweden's AIP-equipped HSwMS Gotland to serve as a diesel-electric aggressor. That period highlighted the value of being able to train against these kinds of submarines, with Gotland famously managing to sneak right into the middle of an aircraft carrier strike groups during exercises, as well as scoring simulated kills against various surface ships and other submarines during training engagements.

The Navy has acquired at least two large-scale training targets designed to mimic diesel-electric submarines in the past two decades. The service also operated the research and development submarine USS Dolphin until 2007, which was its last diesel-electric boat.

More recently, in 2019, the service stood up a new dedicated submarine aggressor squadron, or AGGRON, to help in training submarine and anti-submarine forces. However, as it exists now, this unit's primary job is schooling Navy personnel in enemy tactics, techniques, and procedures, and helping submarines acting as the "opposing force," or OPFOR, to better represent potential threats. At least as of last year, it has no submarines permanently assigned to it and the Navy still has no plans to acquire its own diesel-electric types, which could add greater realism to exercises.

In the meantime, combined training programs, such as DESI, remain the most readily available ways for Navy submarine and anti-submarine forces to train against these threats. So, while we don't know why exactly this Chilean Scorpene class boat is in San Diego, it is very likely there to, at least in part, provide very useful training for Navy personnel against a type of submarine they might not otherwise encounter on a routine basis during training.

UPDATE: 7/2/2021 -- The Chilean Navy has now officially confirmed the arrival of one of its Scorpene class submarines at Naval Base Point Loma in San Diego. A Spanish-language Tweet from that service simply says that it is there "to participate in an international operation with the USNavy." However, after our initial story was published, a reader also alerted us to a story in the Spanish-language defense and security magazine Infodefensa that said the Chilean Navy's Scorpene class submarine O'Higgins had left that service's base in Talcahuano in early June and that it was heading to the United States for exercises over the next five months.

"For more than five months it [the O'Higgins] will be deployed to operate with the most modern Navy in the world and even carry out submarine rescue operations," Rear Admiral Juan Pablo Zúñiga Alwayay, the head of the Chilean Navy's submarine force, was quoted as saying that story. "For this, a crew of more than 40 men, and with an average age of 32 years, will represent us. We wish them success, a good hunt, and a safe return home."

Infodefensa does not specifically mention the U.S. Navy's DESI program, but how Rear Admiral Zúñiga described the nature of the O'Higgins' current deployment, especially plans to conduct submarine rescue training, is well in line with previous Chilean Navy participation in that initiative. "The highlight of the DESI deployment is CHILEMAR VIII, a submarine search and rescue exercise that will take place in August," the U.S. Navy news item regarding the arrival of the Chilean Navy's Thomson class submarine Simpson in San Diego in 2018 said. "Chile remains the only South American submarine-operating country to conduct frequent live submarine rescue exercises with U.S. Navy rescue assets at Undersea Rescue Command."

The War Zone article by By Joseph Trevithick

VP-45 FINDS MISSING MARINER NEAR MICRONESIA (USN 6/11):

KADENA AIR BASE, Japan-- Patrol Squadron (VP) 45 located a missing mariner during a successful search and rescue (SAR) mission through Andersen Air Force Base (AFB), Guam, June 7. A mariner onboard a 19-foot long skiff was reported missing on June 5 off the coast of the Federated States of Micronesia. VP-45 received tasking from the Rescue Coordination Center (RCC) Guam and executed a search of an assigned search box 900 nautical miles south east in the waters off the coast of Guam.

The crew launched from Kadena Air Force base, Japan in the pre-dawn hours, stopping at Andersen AFB to refuel before entering their search grid. Combat Aircrew (CAC) 7 began their search pattern at approximately 1 p.m. local time. After searching for nearly one hour, CAC-7 reported sighting a vessel fitting the description given of the missing mariner. According to Lt. Michael Clark, CAC-7's Tactical Coordinator, "An open white 19 foot long skiff with a single outboard motor and a chainsaw onboard."

Naval Air Crewman Operator (AWO) 2nd Class Peter Shephard spotted a small vessel on the surface while utilizing the P-8A Poseidon's radar system. Shepard captured an Inverse Synthetic Aperture Radar (ISAR) image of the small skiff. ISAR is a radar technique using radar imaging to generate a two-dimensional high-resolution image of a target. From the imagery, the crew was able to determine that the radar contact was a small vessel drifting with the ocean currents. Although outside of their generated search area the crew determined it was worth investigating.

The crew flew inbound at 200 feet above the water to investigate the contact. After several low passes over the skiff, AWO3 Tyler Wooldridge, operating the camera, was able to confirm it was the missing mariner. Clark went on to explain the poor condition of the mariner, "He looked totally depleted; it was unclear whether he had any food or water in the last couple of days. He just slumped over and basically collapsed once it was clear we had seen him," said Clark.

The crew then proceeded to tactically deploy a SAR kit containing a raft with food, water and first aid accessories, in the vicinity of the isolated skiff. CAC-7 then contacted FSS Micronesia, the surface vessel participating in the search, roughly 25 nautical miles from their location. The Micronesia arrived at approximately 3:15 p.m. local time to rescue the stranded mariner.

Clark said, "It was enormously satisfying for all the crew to be working together to save a life. We expertly developed and executed a search plan in coordination with the Federated States of Micronesia National Police and found the missing mariner within an hour of searching." CAC-7 remained on scene throughout the rescue by the Federated States of Micronesia National Police and were "thrilled to hear that the mariner is doing well after receiving medical attention," added Clark.

VP-45, based out of Naval Air Station Jacksonville, is currently operating from Kadena Air Base in Okinawa, Japan. The squadron conducts maritime patrol and reconnaissance as well as theater outreach operations as part of a rotational deployment to the U.S. 7th Fleet area of operations.

US Navy press release by LT Alec Hardin and MC3 Thomas Higgins

P-8 CONDUCTED A FIRST-OF-ITS-KIND MISSILE LAUNCH (Business Insider 6/7):

US Navy P-8A Poseidons launched AGM-84D Harpoon missiles in Europe for the first time last month during an exercise off of northern Norway, another sign of the increasing military focus on the strategically important region. The P-8s, widely considered the best maritime patrol planes in operation, launched the missiles at a target barge near the Andøya Space Defense facility in northern Norway during the exercise At-Sea Demonstration/Formidable Shield. The exercise focused on

missile defense and most used during it were surface-to-air interceptors, but the Harpoons — so named because they were first designed to target surfaced submarines, or "whales" — were air-to-surface variants.

As an anti-ship missile, the Harpoon gives the P-8 "the ability to challenge enemy naval movements, either in support of offensive operations or in order to defend friendly forces," the US Navy's Sixth Fleet said in a release. "At-Sea Demo/Formidable Shield provided a realistic opportunity to exercise" the Poseidon's ability to "project lethal fires," Cmdr. Kyle Raines, Sixth Fleet public affairs officer, told Insider in a statement.

At a briefing before the exercise, which is held every other year, officials stressed the defensive focus and said it wasn't conducted with a specific foe in mind. US Navy Capt. Jonathan Lipps, who directed the exercise, said it wasn't "targeted against a specific country or threat" but had evolved in response to state and non-state actors' use of drones, cruise missiles, and ballistic missiles. "It's about protecting both maritime units and the land environment from the missile threat, not about, if you like, offensive missile capabilities. It's about defensive missile capability," said British Royal Navy Rear Adm. James Morley, deputy commander of Naval Striking and Support Forces NATO, which conducted the exercise.

This year's iteration was "the most complex joint and combined integrated air- and missile-defense exercise ever conducted at sea," Lipps said. The missiles used during the exercise were "a good example of a growing recognition" that successful combat operations in the future will "require close coordination of offensive and defensive systems," said Ian Williams, deputy director of the Missile Defense Project at the Center for Strategic and International Studies. "There are a lot of efficiencies that can be gained by integrating strike and defense, particularly in sensors, to detect enemy missiles and to locate and neutralize the shooter," Williams told Insider in an email.

There are also more practical reasons to fire Harpoons from P-8s. Like its predecessor, the P-3 Orion, the Poseidon "has an anti-surface-warfare mission, and the Harpoon missile is the current armament that meets that requirement, so it is not a surprise that the aircraft is exercising that capability," said Steve Wills, a military historian and expert on US Navy strategy. "Every naval platform has live-fire exercise requirements, so this firing could be one of those," Wills added in an email. Morley and Lipps both emphasized that At-Sea Demo/Formidable Shield — which began near Scotland and concluded around Andøya — was long-planned and preceded by notice about where it would take place, but comes as military activity in the region increases significantly.

In late 2018, NATO conducted exercise Trident Juncture in and around Norway. Some 50,000 personnel took part in the exercise, which saw a US aircraft carrier sail into the Arctic for the first time since the early 1990s. The US military has been more active in Norway in recent months. NATO navies have also conducted exercises in the Barents Sea, close to major Russian military installations, for the first time in decades. Russia, which has the world's longest Arctic coastline, has been increasing its presence in the region, refurbishing bases and deploying more forces. Its Nordic neighbors have been concerned by its military tests in the region, particularly with weapons like the Kalibr cruise missile. The Kalibr gives Russian ships and subs a land-attack capability that worries NATO. The Kalibr and other Russian weapons fired from the Barents Sea would be able to reach targets in Norway.

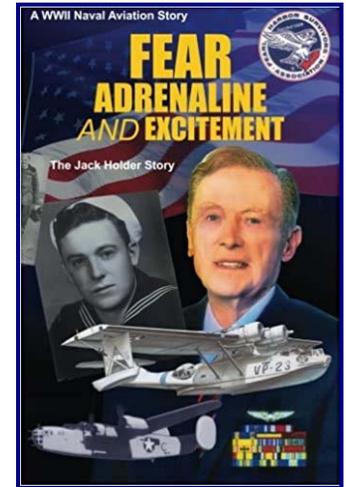
Russian submarine activity around the Norwegian Sea has also concerned NATO countries, particularly Norway and the UK, which have both purchased P-8s to patrol their waters. At-Sea Demo/Formidable Shield concluded on June 4 and navies involved touted several achievements during it. A US destroyer and a Dutch frigate worked together to "negate" a ballistic missile threat in

what the US Navy called "a groundbreaking cooperative engagement." Norway's navy said one of its frigates used a missile to down a target moving at supersonic speed for the first time. The British navy tested artificial intelligence against live missiles at sea, also for the first time. The exercise "unquestionably demonstrates" NATO's ability to defend its "integrity and resolve against credible threats from the ocean depths to low-earth orbit," Lipps said in a statement.

Business Insider article by Christopher Woody

RECOMMENDED READING:

"Fear, Adrenaline, and Excitement" by Jack Holder (ISBN 978-1622175215) is WW2 Navy patrol plane (PBY and P4Y) flight engineer Jack Holder's military memoirs. Among other things, Mr. Holder was at Pearl Harbor during the Japanese attack and he was a plank-owning member of the wartime VPB-23. This book is available from www.amazon.com and other book sellers. Check it out! Jack Holder will be at the upcoming NAS Brunswick reunion and will have autographed copies of his book available for sale there.



ON THE INTERNET:

A friendly reminder that there is a fairly active VP-92 group on Facebook. Go to www.facebook.com and do a search on "VP-92" to find it.

PARTING SHOT:



ABOVE: VP-92 P-3Cs at NAS Brunswick during the squadron's final years. If you 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".

