







# **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 100** 

HTTP://WWW.VPASSOCIATION.ORG

**JUNE 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 on display at an air show at NAS South Weymouth sometime during the early 1990s. Got something similar to share? If so, contact Marc Frattasio at marc\_frattasio@yahoo.com.

#### A MILESTONE HAS BEEN REACHED:

If you have not noticed, and most of you probably haven't, we have reached a significant milestone. Specifically, this is the 100<sup>th</sup> issue of the VP Association newsletter created and distributed since your newsletter editor took over from the late Herb Tallent back in 2006!

#### **FINAL FLIGHTS:**

We lost Bill Barry and Harvey Shore recently. Bill Barry was an AW in VP-92 and Harvey Shore was an AD in VP-92 and NS Rota 0391. Both men were SELRES at NAS South Weymouth.

#### 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.

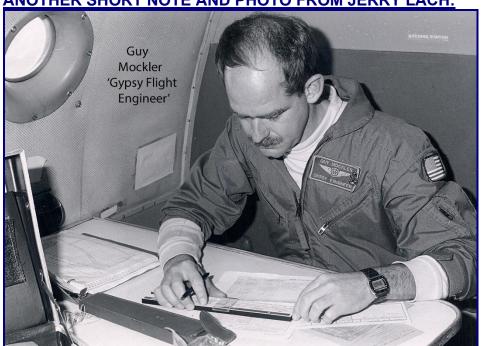
A SHORT NOTE AND PHOTO FROM JERRY LACH:



Just wanted to pass on to you that we enjoyed another NAS JAX 2025 Maritime Patrol Association reunion and symposium. There was, however, a lower attendance turn out for the Heritage dinner and the Flight Suit Social this year. They said it was due to DoD travel restrictions!!?? Saying that, the Golf Tournament was fully sold out. Great meals and service all around.

At the dinner, officials presented various MPA personnel awards. They also announced the '2025ASW Fleet Challenge' Winner. It is an ASW competition (in the simulator) for all P-8 squadrons. The winner was Whidbey Island's VP-69. Great News, a reserve VP squadron beat out the best!!!

ANOTHER SHORT NOTE AND PHOTO FROM JERRY LACH:



Jerry Lach, who came to VP-92 from VP-93, sent the photo at left and this short note to go with it: "Great Newsletter once again. I was sad to read that Guy Mockler had died. He did a detachment with me and I remember him well. Here is a photo of him that I took years ago."

#### A PHOTO FROM MARK HAUSLER AND RICK CAESAR:

Mark Hausler (left) and Rick Caesar (right) recently met up at Rick's time-share vacation condominium in New Hampshire and sent this photo to prove it. Both were AWs in VP-MAU Brunswick and VP-92.



#### BRUNSWICK NAVAL AVIATION MUSEUM REPAINTING SP-2E NEPTUNE GATE GUARDIAN:



In late May the Brunswick Naval Aviation Museum, which operates from the former base chapel on old NAS Brunswick, started to repaint the SP-2E Neptune located near the old main entrance to the base. Several former VP-92 people are active with the museum and are involved with this effort including Kevin Cahill, Herman "Nick" Nichols, and Jeff Smat. The VP Association and several individual members contributed financially towards this project. Work is expected to run through June or July. For more information about the Brunswick Naval Aviation Museum go to www.bnamuseum.org.

#### SHEA NAVAL AVIATION MUSEUM REOPENING JUNE 14th:

As some of you may recall, for many years the Boston area chapter of the Association of Naval Aviation, the ANA Patriot Squadron, operated a small military heritage museum in the former base gymnasium at the Union Point real estate development on what used to be NAS South Weymouth. In June 2017 the group was forced to close the museum and put its collection of artifacts into storage so the old base gymnasium building could be restored and returned to its original purpose. This was supposed to be a temporary situation but due to issues with the previous master developer at Union Point it looked like it might become permanent.

We have good news to report today. In recent months the ANA Patriot Squadron made arrangements to lease one of the last remaining military buildings on the old base still in decent condition, the former Coast Guard housing office building. As of this writing, this building is in the

final stages of cosmetic renovation and the group intends to reopen the Shea Naval Aviation Museum there on Saturday June 14<sup>th</sup>.

A public ceremony will be conducted at the Shea Memorial Grove park at Union Point between 11 AM and noon on that date to rededicate the recently restored A-4B Skyhawk jet and the large wooden blue and gold signs at the park. The aircraft was recently repainted by a company with experience painting static display aircraft using funds raised by the ANA Patriot Squadron. The signs were recently restored by students from the Weymouth Middle School as a shop class project.

After the ceremony concludes, all attendees will be invited to come to the museum for its grand reopening. If you live in the Weymouth area, come on by! The new museum building is located directly behind the sports complex at Union Point. It's a small white-painted cinder block structure. For more information about the ANA Patriot Squadron or the Shea Naval Aviation museum go to www.anapatriotsquadron.org.

SOUTH KOREAN P3-C ORION CRASH KILLS ALL FOUR CREW MEMBERS (Euro News 5/29):



All four crew members aboard a South Korean navy plane have been killed after the aircraft crashed in the southeastern coastal city of Pohang, the navy has said. The P-3C Orion turboprop plane which is used for marine patrols, took off from its base in the city at 1:43 pm and crashed due to unknown reasons, the navy said in a statement. It said it had identified the bodies of the four crew members and was in the process of recovering them. There were no immediate reports of civilian casualties on the ground.

The navy has set up a task force to investigate the crash and has temporarily grounded its fleet of P-3s, dubbed "submarine killers" due to their submarine fighting abilities. An emergency office in Pohang said that rescuers and fire trucks were dispatched to the site after receiving reports from residents that an aircraft had crashed on a hill near an apartment complex and caused a fire.

Photos showed firefighters and emergency vehicles near the P-3C crash site with flames flickering as smoke engulfed nearby trees. Local emergency services said two helicopters and 40 firefighters had been deployed to the area to fight the fire. The South Korean navy is in the middle of plans to upgrade its aeroplane fleet to Boeing P-8A Poseidon, set to be completed by mid-2025.

Euro News article by Gavin Blackburn

## SOUTH KOREAN NAVY PATROL PLANE CRASHES DURING TRAINING (Defence Blog 5/29):



A South Korean Navy P-3C maritime patrol aircraft crashed during a training mission on May 29 near the southeastern city of Pohang, according to military and emergency officials. The aircraft, a U.S. made Lockheed Martin P-3C Orion, went down around 1:50 p.m. local time, just seven minutes after taking off from a naval base in Pohang's Nam-gu district. The plane had four crew members onboard.

Witnesses reported heavy black smoke and flames rising from the crash site, which was located in a forested area near Sinjeong-ri. Footage released by local media showed the aftermath of the crash, including visible fire damage and emergency responders at the scene. According to Yonhap News Agency, bystanders nearby were able to observe the blaze from several dozen meters away.

The South Korean Navy said in a statement that the aircraft had departed at 1:43 p.m. for a routine training exercise when it "crashed near the base for reasons yet to be determined." No immediate details were released about the condition of the crew.

Manufactured by Lockheed Martin, the platform is equipped with four turboprop engines and capable of deploying torpedoes, depth charges, and anti-ship missiles. South Korea initially acquired eight P-3C aircraft and later added eight more upgraded P-3CK variants, modified by Korea Aerospace Industries (KAI) from former U.S. Navy P-3B airframes. In total, sixteen aircraft have served in patrol roles across the East, West, and South Seas, with the P-3C earning a reputation as a capable "submarine killer."

The Navy previously marked two decades of accident-free operations with the P-3C in 2005 and 2015. However, the crash this week coincides with the fleet's 30th year in service. In 2017, a P-3CK mistakenly dropped six weapons, including Harpoon anti-ship missiles, due to crew error during a mission.

While the exact cause of this latest crash remains under investigation, defense analysts have pointed to the strain placed on the limited fleet. In contrast, Japan, for example, has operated more than 100 P-3C aircraft, offering broader coverage and more rotation opportunities for maintenance.

Defence Blog article by Gu Min Chul

CANADA OUTLINES ROLE OF P-8 AND MQ-9B IN ARCTIC DEFENSE (Flight Global 3/4):



A senior official with the Royal Canadian Air Force (RCAF) has offered some insight into how the service plans to deploy its future fleet of manned and unmanned surveillance aircraft. Speaking at the Air & Space Forces Association's Warfare Symposium in Denver, Colorado on 4 March, Major General Chris McKenna said Ottawa's new assets will be focused on oceanic reconnaissance. "You can imagine we are a maritime country with three oceans," McKenna said. "So we need to surveil the maritime domain." To achieve that, Ottawa plans to acquire a mixed fleet of maritime patrol aircraft consisting of at least 14 Boeing P-8A Poseidon twinjets and 11 unmanned General Atomics Aeronautical Systems MQ-9B SkyGuardians. Deliveries of both aircraft types are expected to begin before the end of this decade.

McKenna says the two platforms will work together collaboratively, with the unmanned, long-endurance MQ-9Bs conducting broad surveillance of Canada's more than 200,000 km (124,000 miles) of coastline – the longest of any country in the world – and proximal waters. Notably, the UAVs will focus on domestic operations, rather than supporting overseas deployments. "Initially when we ordered these aircraft, I think our view was more expeditionary than domestic use," McKenna says. "I would say that's flipped due to strategic changes and we are now looking at much more Arctic use."

The P-8As, which carry a crew of nine personnel, advanced sensors and anti-ship/anti-submarine weapons, will be used to investigate specific threats identified by the MQ-9B fleet, such as a

suspicious ship approaching Canadian waters. Canada currently operates 14 Lockheed Martin P-3 Orion patrol aircraft, locally designated the CP-140 Aurora. McKenna, who oversees the Canadian sector of the bi-national North American Defense Command (NORAD), says this two-pronged approach to maritime surveillance will allow the RCAF relieve its P-8As from the monotonous and time consuming task of broad open water searching. "It really leverages you to take your exquisite P-8s and put them on targets that require a long-range kill chain," he notes.

A unique challenge for Canada's surveillance fleet is operating at extreme northern latitudes above the Arctic Circle, even as far north as the North Pole. "I have landmass to 83 degrees north and contiguous waters to [90]," McKenna notes, referencing Canada's high latitude polar territories. The Arctic Circle lies at roughly 66.5 degrees north. In particular that could pose a challenge to MQ-9B operations, which rely on a satellite data links to maintain communication with remote operators thousands of kilometers away. Those linkages traditionally experience reduced performance in the polar regions.

McKenna recounts a previous test run by manufacturer General Atomics Aeronautical Systems (GA-ASI), which sought to establish the northern limit of that satellite link by flying an MQ-9 due north from the continental USA through Canada. "It's around 70 [degrees]," he says. "And then it gets a little autonomous and spins around and comes south." McKenna was apparently referencing a September 2021 test event, in which General Atomics launched a company-owned MQ-9 from North Dakota and reached Haig-Thomas Island just above the 78th parallel. This is deep inside Canada's Arctic territory, but still short of the far northern region specifically noted by McKenna. The flight covered more than 3,950nm (7,320km) over a priod of 25.5h. General Atomics on 5 March pushed back on the description of 2021 test flight head in Denver, telling FlightGlobal the MQ-9 in that event "was safely under consistent command and control of the GA-ASI crew for the duration of the flight". "This was both GA pushing the limits of what was possible, but also understanding that, as the world leader in UAS, we want our aircraft to be the best, and that includes being able to fly anywhere," said C. Mark Brinkely, senior director of strategic communications at GA-ASI. "We know that is important to our customers and it is certainly important to Canada."

Operating at the high latitudes of the northern and southern polar regions has traditionally posed a challenge to long-endurance UAS, which rely on low-angle geostationary satellite communication links that become less reliable above the Arctic Circle and below the Antarctic Circle. To surpass that 66.5 degree threshold, General Atomics and satellite communications provider Inmarsat developed special data systems able to retain the aircraft's link to a ground control station while operating in a high-latitude environment. The result was significantly improved penetration into the polar region. The distance between 66.5 degrees north and 78 degrees north is approximately 1,300km. However, the RCAF is apparently seeking even greater performance at the poles. McKenna says Canada and NORAD need a solution that will enable remote flight through to the country's northernmost reaches. "I think we need to solve that problem," he says. "We need to be able to surveil there."

Brinkely notes that since the 2021 test, satellite connectivity has significantly improved, particularly with the emergence of Proliferated Low Earth Orbit (PLEO) constellations like SpaceX's Starlink. These provide "pole to pole coverage", Brinkley says. "Several customer fleets are already on contract for this global capability," he adds. Those developments could allow Canada to expand the mission of its MQ-9B fleet even beyond surveillance. McKenna notes the RCAF is interested in exploring additional roles for the uncrewed aircraft, including anti-submarine warfare (ASW), signals intelligence collection and airborne early warning. A variant of the MQ-9B called the SeaGuardian is tailored for naval combat missions such ASW, anti-surface warfare and airborne mine countermeasures.

MQ-9B SEAGUARDIAN'S ASW CAPABILTY ENHANCED (The Aviationist 3/1):



General Atomics Aeronautical Systems (GA-ASI) has further expanded the role of its MQ-9B SeaGuardian UAS (Unmanned Aerial System), successfully deploying and testing anti-submarine sensors using multiple pre-production Sonobuoy Dispensing System (SDS) pods. The groundbreaking test took place from Jan. 20 to Jan. 30, according to a company press release.

The pods "deployed multiple sonobuoys to conduct onboard thermal-depth and acoustic data processing." The company further explained that "using Directional Frequency Analysis and Recording (DIFAR), Directional Command Activated Sonobuoy System (DICASS), and Bathythermograph sonobuoys, SeaGuardian effectively detected, tracked, and analyzed underwater targets while collecting critical acoustic intelligence." Multiple DIFAR and DICASS test sonobuoys were dropped during the tests, precisely correlating ejection speed with stress/strain data, as a part of the development process, "This provided a high-fidelity launch model to refine future deployment capabilities," the release added.

The test has enhanced the SeaGuardian's status as the only UCAV/RPA that can carry, release and monitor sonobuoys, whose data is then used by naval maritime patrol, ASW aircraft, helicopters and surface ships to hunt submarines. GA-ASI has been working for a long time on this capability to continue improving it. The company added that NAWCAD's (Naval Air Warfare Center Aircraft Division (NAWCAD) AIRWorks department "played a key role in supporting and overseeing the development, ensuring the system meets emerging warfighter needs." The statement further mentioned that "AIRWorks has partnered with GA-ASI in multiple ASW demonstrations, including the Rim of the Pacific (RIMPAC) exercise in July 2024."

The Sea Guardian is a highly sophisticated UAV which, besides ASW, is also capable of EW (Electronic Warfare), with endurance from a minimum of 24 hours to a maximum of 40 hours, depending on the payload. The drone is 11.8 meters (38.7 feet) long and has a wingspan of 24

meters (78.7 feet), and it can cover a cruising distance of approximately 4,300 kilometers (2,322 nautical miles). The SeaGuardian most prominent feature is its distinctive Raytheon SeaVue XMC radar pod installed under the rear fuselage, which has appeared as a standard feature across all of GA-ASI's renderings and images. This adds to the GA-ASI Lynx Synthetic Aperture Radar installed internally, as well as a Raytheon Intelligence & Space Multi-Spectral Targeting System, a Leonardo Electronic Support Measure (ESM)/Electronic Intelligence (ELINT) SAGE 750, a Shine Micro Automatic Identification System (AIS), an Ultra sonobuoy receiver and a General Dynamics Mission Systems-Canada sonobuoy processor.

The Sonobuoy Dispensing System has already been seen in renditions and subsequent releases, showing a large hexagon-shaped pod with diagonally downward-facing ejection ports. Although GA-ASI mentioned the pods are "newly designed," the SDS pods have already been tested a first time in November 2020 on a MQ-9A Block 5. More recently, the pod was mentioned again by GA-ASI in a release and a photograph of a Feb. 2024 test, announcing an exercise with NAVAIR (Naval Air Systems Command) at the Navy's W-291 test range in southern California. During the trials, a SeaGuardian carried the SDS pod and, using a pneumatic ejection system, dropped eight AN/SSQ-53 and two AN/SSQ-62 sonobuoys. The ejection system is developed by Italy's AREA, which also supplies the internal structure assembly of the pod. Interestingly, the MQ-9B SeaGuardian was flying with an Interim Flight Clearance from NAVAIR.

Nevertheless, this is a serious capability, especially when the SeaGuardian would be working in concert with other platforms like the P-8A Poseidon ASW and MPA aircraft. In fact, combining manned and unmanned ASW platforms would help to obtain persistent surveillance over sensitive areas. "This demonstration represents a major leap forward in unmanned capabilities and marks a major milestone in proving that an unmanned aircraft can perform end-to-end persistent ASW operations," said GA-ASI President David R. Alexander. "The success of this testing paves the way for enhanced anti-submarine warfare capabilities on the MQ-9B SeaGuardian. We look forward to continued collaboration with the U.S. Navy as they explore innovative solutions for distributed maritime operations in the undersea domain."

The MQ-9B SeaGuardian has also performed in large-scale exercises like the RIMPAC (Rim of the Pacific), including its latest iterations in 2024 and 2022. On Aug. 14, 2022, GA-ASI said that a company-owned system spent 100 flight hours during RIMPAC 2024 around the Hawaiian islands, providing real-time ISR and SIGINT data feeds, like parametrics and full-motion video, to the U.S. Pacific Fleet Command center. Interestingly, the MQ-9B also provided targeting for the AGM-158C LRASM (Long-Range Anti-Ship Missile), referring to the SINKEX where a U.S. Navy F/A-18F Super Hornet employed the weapon against the former USS Tarawa. The exercise also saw the employment of the SDS pods, says the company, however they were not present in the released photo. The company further identified the SDS pods seen so far as a "prototype", with the SeaGuardian able to carry four pods, each one deploying ten A-size sonobuoys for a total of 40 sonobuoys, along with Raytheon's SeaVue multimode radar. The sonobuoys are monitored and controlled by the RPA's onboard SMCS (Sonobuoy Monitoring and Control System).

In a "complex and challenging" May 2023 ASW test, GA-ASI said a ground-crew operated MQ-9B SeaGuardian, controlled via a satellite link, joined U.S. Navy helicopters, taking off from San Diego, over waters off southern California. Here, the helicopters dropped sonobuoys, of which the SeaGuardian took over monitoring. "Shortly thereafter, its sensors detected a simulated submarine. This meant other helicopters could deploy to the scene armed with precise data about the target's location and course and then attack," said the statement. That release was accompanied by a rendition showing a SeaGuardian releasing sonobuoys from the wing-mounted pods, surrounded by a MV-22B/CMV-22 Osprey, a MH-60R helicopter and a P-8A Poseidon. During RIMPAC 2022, the

SeaGuardian flew 11 flights totaling over 80 hours showcasing all operational payloads, including ELINT/COMINT, Automatic Identification System (AIS), ASW Anti-Submarine Warfare (ASW) and "monitor and control of sonobuoys," a GA-ASI developed Lynx Multi-mode Maritime Radar, high-definition Electro-Optical/Infra-Red (EO/IR) imaging system and Link 16.

In that exercise, GA-ASI said that the MQ-9B effectively passed ISR information to various surface and air units, such as the USS Abraham Lincoln, Guided Missile Destroyers, Littoral Combat Ships, frigates, patrol boats, P-8s, P-3s and a litany of other U.S. and foreign units. In Apr. 21, 2021, a SeaGuardian (number N34IHK) participated in the Pacific Fleet's Unmanned Systems Integrated Battle Problem (UxS IBP). The system's test is consistent with the U.S. effort to bolster its maritime surveillance and submarine-hunting capabilities in the Indo-Pacific region, with the JMSDF (Japan Maritime Self-Defense Force) and the Indian Navy set to become major MQ-9B SeaGuardian operators.

Early in Dec. 2024, Japan was reported to have finalized the acquisition of 23 MQ-9B SeaGuardian systems by fiscal year 2032, with a spokesperson telling Naval News that they are yet to identify the bases to operate the drone from. Prior to that, on Jun. 14 2024, an MQ-9B SeaGuardian landed at Kanoya Air Base in Japan's Kagoshima Prefecture for the first time, and took off the next day. In October of that year, India's Ministry of Defense (MoD) signed a contract with the U.S. government for a "Tri-Service procurement" of 31 MQ-9B Sea/SkyGuardian HALE (High-Altitude Long-Endurance) RPAs (Remotely Piloted Aircraft). Of the 31 drones, 15 will go to the Indian Navy and eight each will be operated by the Indian Army and Indian Air Force.

The Aviationist article by Parth Satam



According to both Marco Florian Geo and Pietro Batacchi, Director of Rivista Italiana Difesa, the Italian Air Force (Aeronautica Militare), in coordination with the Italian Navy (Marina Militare), seems to have chosen the Japanese Kawasaki P-1 as its preferred option for a new maritime patrol aircraft

(MPA), a purpose-built platform designed for long-range and persistent surveillance missions. This decision reflects an effort to restore a dedicated ASW capability following the retirement of the Breguet BR 1150 Atlantic aircraft in 2017 and the interim use of the Leonardo P-72A, which lacks anti-submarine warfare (ASW) armament. The aircraft would be customized with Italian components, likely including Leonardo's ATOS mission system, MU90 heavy torpedoes, and the Marte ER B2+ missile, offering both ASW and anti-surface warfare (ASuW) capabilities.

Italy's Multi-Year Programming Document for Defense (2022 to 2024) acknowledges the need for "aircraft equipped with special sensors for the purpose of providing the military instrument with a multi-purpose platform for long-range maritime surveillance under and above the surface," but no acquisition has yet been funded or specified. Given that delivery of even off-the-shelf solutions, such as Germany's P-8 order, can take up to three years from contract signature, delays in decision-making could exacerbate Italy's capability gap. The risk is not only operational. As Admiral Credendino warned, continued lack of ASW platforms may erode institutional knowledge in anti-submarine operations across the Air Force and Navy. Time is a critical factor, and any further delays in acquisition planning may prolong a gap that has already lasted more than six years.

Italy's current MPA fleet consists of four Leonardo P-72As, introduced between 2016 and 2017, as an interim replacement for the Breguet BR 1150 Atlantics, which were retired in 2017. While the Leonardo P-72A has been described as satisfactory for its intended surveillance role, it lacks the armament and operational reach needed for anti-submarine warfare (ASW). Although Leonardo has developed an ASW variant for export customers, the P-72 airframe may be deemed inadequate by decision makers to fulfill the operational requirements demanded for expanded patrol roles in the Atlantic and Mediterranean Sea. As noted by Admiral Enrico Credendino, Chief of Staff of the Navy, this absence has forced Italy to rely on allied support, particularly U.S. Navy P-8s stationed in Sigonella, Sicily. Credendino emphasized that whatever platform Italy acquires, domestic or foreign, it would take four to five years to reach operational readiness.



Brigadier General Francesco Agresti, an Air Force officer serving with the Navy's Office of the Marine Aviation Inspectorate (ISPAVIAMAR), also underscored this urgency in January 2024, stating that Italy aims to re-establish a long-range ASW capability by 2029. The Italian defense establishment is

concerned by the increased presence of non-NATO submarines in the Mediterranean and the ambitions of global actors such as Russia and China. These dynamics have prompted a reassessment of Italy's maritime surveillance posture, especially considering the geopolitical sensitivity of key choke points, undersea infrastructure, and the strategic value of the Eastern and Southern Mediterranean. The Italian Navy also views this program as urgent, with its patrol tasks extending from the Eastern Mediterranean to the Balearic Islands and possibly beyond.

The future Italian maritime patrol aircraft (MPA) must meet demanding specifications: high survivability in non-permissive environments, multispectral ISR, long-range net-enabled communications, a high endurance profile, and rapid deployability. Italy evaluated several candidates, including Boeing's P-8A Poseidon, Leonardo's C27J in an ASW configuration, and the Kawasaki P-1. The P-8, already adopted by several NATO countries including Germany and the UK, offers broad capabilities, including SIGINT and SAR roles. However, it is an expensive platform and may partially duplicate other systems already in Italian service, such as the G550 CAEW. Moreover, the P-8's configuration, derived from the Boeing 737, differs significantly from the turboprop aircraft historically operated by the Italian Air Force, complicating logistics and maintenance.

In contrast, the Kawasaki P-1 is a clean-sheet design optimized for maritime operations. Equipped with an internal bomb bay, larger than those found on the P-3C or P-8, is supplemented by eight external hardpoints. Its armament includes torpedoes such as the Mk 46, Type 97 (G-RX4), and Type 12 (G-RX5), as well as naval mines, depth charges, and air-to-surface missiles like the AGM-84 Harpoon, ASM-1C, and AGM-65 Maverick. The bomb bay, comparable in size to that of the Nimrod, can accommodate over 9,000 kilograms of munitions. For submarine detection and tracking, the P-1 carries up to 100 sonobuoys, with 30 pre-loaded in launch tubes and 70 stored onboard.

The Kawasaki P-1 originated from Japan's ambition to develop an indigenous replacement for its aging P-3C Orion fleet, which had been produced under license by Kawasaki. Initial studies for a new maritime patrol aircraft began as early as the 1970s, but the modern program took shape in the early 2000s when Japan's Ministry of Defense included the development of the P-X, later designated P-1, in its Five-Year Defense Plan. Kawasaki Heavy Industries was selected as the prime contractor in 2001, with the design aiming to avoid reliance on civilian airframes by creating a purpose-built platform for maritime patrol missions. The P-1 was developed alongside the C-X (now C-2) transport aircraft, sharing several structural and systems components to reduce costs. The aircraft made its first flight in September 2007 and officially entered service with the Japan Maritime Self-Defense Force in March 2013.

As of 2024, 34 aircraft have been delivered out of 48 ordered, with plans to procure around 70. Despite previous interest from countries like the UK, New Zealand, and Germany, export sales have so far not materialized. Germany reportedly abandoned its consideration of the P-1 due to concerns about certification timelines. However, Italy's growing strategic ties with Japan, underscored by a recent bilateral defense partnership, could favor a procurement agreement, potentially accompanied by localized maintenance infrastructure to offset the long Japanese supply chain.

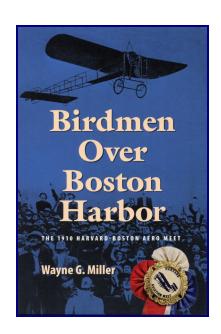
The P-1 also features a fly-by-optics control system, an industry first, which reduces electromagnetic interference. Its main radar is the Toshiba HPS-106 X-band AESA system, which features four antennas for continuous 360-degree coverage and supports various modes, including SAR and ISAR imaging. A retractable Fujitsu HAQ-2 electro-optical turret under the nose combines FLIR and visible/infrared imaging sensors for day/night operations. The aircraft also carries a CAE-developed magnetic anomaly detector (MAD), integrated by Mitsubishi Electric, capable of detecting submarine signatures at low altitudes. Additional systems include the HLR-109B electronic support measures, the HLQ-9 self-protection suite with radar and missile warning sensors, and a Link 16-compatible

data link terminal. The combat management system, known as the Advanced Combat Direction System (HYQ-3), uses artificial intelligence to assist the Tactical Coordinator (TACCO) in optimizing flight profiles and engagement sequences.

The Kawasaki P-1 possesses a maximum takeoff weight of 79,700 kilograms and measures 38 meters in length, with a wingspan of 35.4 meters and a height of 12.1 meters. Powered by four newly developed high-bypass IHI F7-10 turbofan engines, each delivering 60 kilonewtons of thrust, the P-1 reaches a maximum speed of 996 kilometers per hour and cruises at 833 kilometers per hour while offering quiet, fuel-efficient, and low-altitude flight suited for submarine detection. Its operational range extends to 8,000 kilometers, with a combat radius of approximately 2,500 kilometers. The aircraft operates at altitudes up to 13,520 meters and can carry more than 9,000 kilograms of munitions internally and externally, including torpedoes, depth charges, naval mines, and various anti-ship missiles. It is crewed by 13 personnel: two pilots and eleven mission operators.

## **RECOMMENDED READING:**

In September 1910 the first public air show in New England was held in Quincy, Massachusetts on the site of what later became NAS Squantum. This new book, written by Wayne G. Miller with the cooperation of the Quincy Historical Society, tells the story of this event, which was organized by a group of students and professors associated with Harvard University. A bomb-dropping contest at the air show, in which plaster of Paris balls were dropped on a wooden target shaped like a battleship, convinced Navy officials in attendance that aircraft could be useful weapons. This led directly to the Navy contracting with Glenn Curtis to demonstrate that it was possible to take off and land an aircraft from a ship a few months later and then to begin purchasing aircraft and training pilots in early 1911. "Birdmen Over Boston" (ISBN 979-8-218-99404-4) is a very interesting and well-written book. You can purchase it through Amazon or any good book store.



#### ON THE INTERNET:

From VP-92's Bob Mandeville, here is a short retrospective about the P-3 Orion that somebody posted on YouTube - https://www.youtube.com/watch?v=55JXNDgCtLc

**PARTING SHOTS:** 



ABOVE: VP-92 plane wash at NAS Roosevelt Roads Puerto Rico during the late 1990s.



**ABOVE:** VP-92's CAC-7 during the mid 1990s. **BELOW:** VP-92 exercise torpedo load around the same time. 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".

