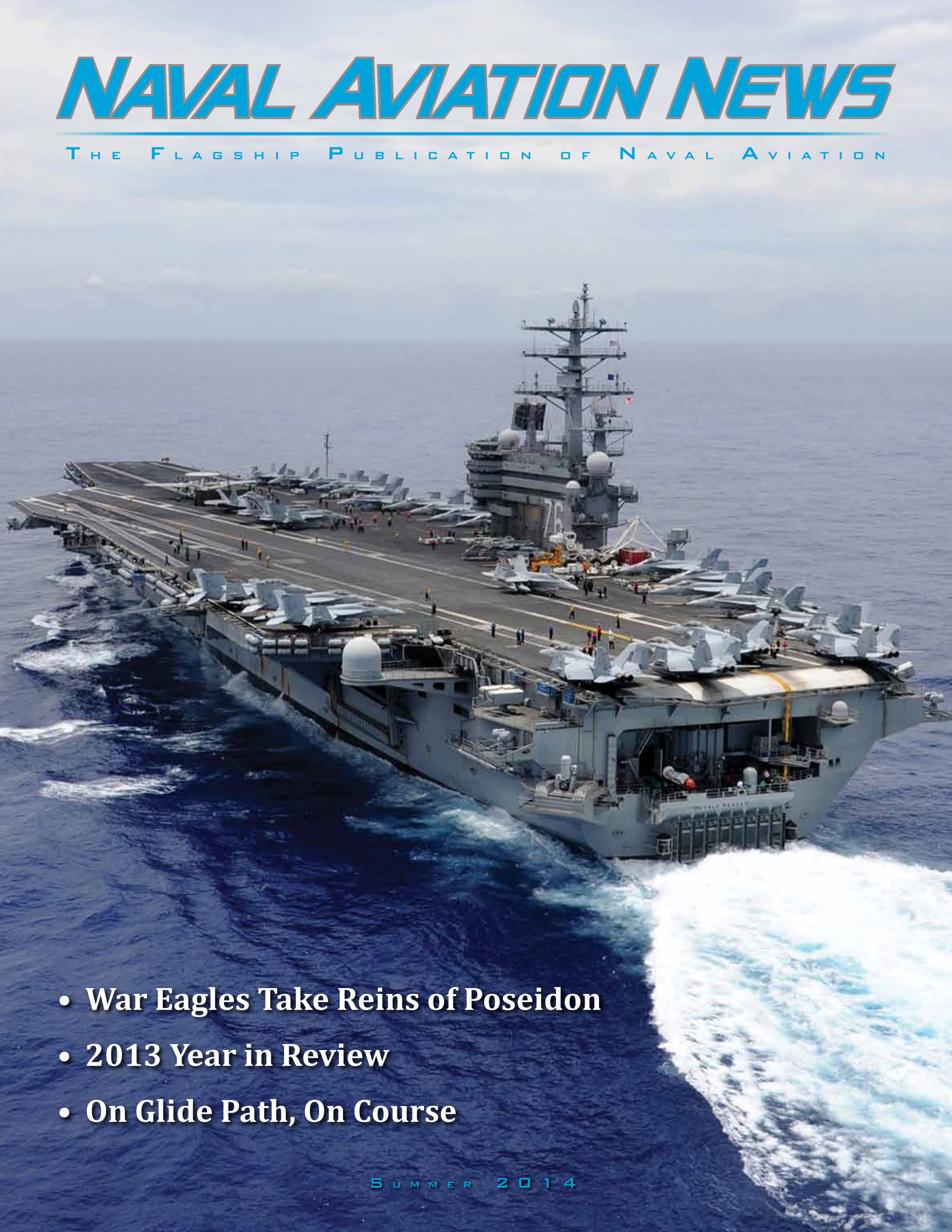
Naval Aviation News

The Flagship Publication of Naval Aviation



- War Eagles Take Reins of Poseidon
- 2013 Year in Review
- On Glide Path, On Course

Summer 2014

NAVAL AVIATION NEWS

Volume 96, No. 3, Summer 2014

In This Issue:

Features

Departments

The U.S. Navy's Oldest Periodical, Established 1917

Director, Air Warfare
Rear Adm. Michael C. Manazir, USN

Editor in Chief
Andrea Watters, Naval Air Systems Command

Editorial Board
Cmdr. Jeanette Groeneveld, USN, Naval Air Forces
Cmdr. Christopher Marsh, USN (Ret.),
Air Warfare N98
Capt. Patrick Herring, USN,
Naval Air Systems Command
Stanton Coerr, Headquarters, Marine Corps
FORCM Kenneth Daniels, USN,
Naval Air Forces Atlantic

Columnists
Cmdr. Peter Mersky, USNR (Ret.), *Book Review Editor*
Capt. Ted Wilbur, USNR (Ret.), *Contributing Artist*
Cmdr. Bryan Dickerson, USN (Ret.), *Contributing Editor*

Submission Guidelines
Commands may send news and announcements such as changes of command, awards, rescues, milestones and other achievements to nannews@navy.mil at any time. Photos of Naval Aviation-oriented activities are always welcome. For longer feature articles, contact the managing editor in advance. Military contributors should forward articles about their commands only after internal security review and with command approval. The deadline for feature submissions for the Fall edition is 7 November. For more information contact us at nannews@navy.mil or by phone at 301-342-6024.

Personal Subscriptions and Address Changes
A one-year subscription (four issues) is $23.00 domestic, $32.00 overseas. For online orders go to bookstore.gpo.gov. For mail orders, cite *Naval Aviation News* and send check, money order, or credit card information to U.S. Government Printing Office Orders, P.O. Box 979050, St. Louis, MO 63197-9000. For fax orders, call 202-512-2104. For phone orders, call 202-512-1800, Mon-Fri, 0700-1830. For email orders, send to contactcenter@gpo.gov. For changes of address, also send to contactcentergpo.gov; include full name and both old and new addresses.

Official Subscriptions and Address Changes
Subscriptions to military and government agencies, schools, and libraries are provided free of charge through the *Naval Aviation News* office. Email at nannews@navy.mil or send mail to *Naval Aviation News*, Naval Air Systems Command, 47122 Liljencrantz Road, Building 440, Room 24, Patuxent River, MD 20670 or call 301-342-6024.

Naval Aviation News (USPS 323-310; ISSN 0028-1417) is published quarterly for the Chief of Naval Operations by the Naval Air Systems Command. Periodicals postage is paid at Washington, DC, and additional mailing offices.

The Secretary of the Navy has determined that this publication is necessary in the transaction of business required by law. The use of a name of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Navy. Any opinions herein are those of the authors, and do not necessarily represent the views of *Naval Aviation News*, the Department of the Navy, or the Department of Defense.

Photographs are U.S. Navy unless otherwise credited.

Postmaster: Send address changes to *Naval Aviation News*, Naval Air Systems Command, 47122 Liljencrantz Road, Building 440, Room 24, Patuxent River, MD 20670.

Naval Aviation News is online at
www.navalaviationnews.navylive.dodlive.mil
For archived .pdf versions of the magazine, please contact **nannews@navy.mil** or call **301-342-6024**.

Stay in touch with us on Facebook at:
www.facebook.com/navalaviationnews

Cover: USS Ronald Reagan *(CVN 71) participates in the Rim of the Pacific 2014 exercise 21 July. Twenty-two nations, more than 40 ships, six submarines, more than 200 aircraft and 25,000 personnel participated in the exercise from 26 June to 1 August around the Hawaiian Islands.*
(Photo by Ens. Joseph Pfaff)

Back cover: Sailors prepare to run to safety after attaching cargo legs to an MH-60S Seahawk helicopter from the HSC-25 Island Knights during a replenishment-at-sea aboard USS George Washington *(CVN 73) 30 May.*
(Photo by MC3 Chris Cavagnaro)

An E-2C Hawkeye from the VAW-115 Liberty Bells launches from USS* George Washington *(CVN 73) 1 June.
(Photo by MC3 Chris Cavagnaro)

FLIGHTLINE

Aligning Past Lessons With Future Challenges

By Rear Adm. Michael C. Manazir
Director, Air Warfare (OPNAV N98)

The summer lull has come to a close in Washington D.C., and we are back to the business of building another Program Objective Memorandum as we start the process for fiscal year 2017. The battles over last year's proposals continue as we face significant pressure to field and operate an affordable force. Testimony from Navy leadership this summer reminded Congress and the nation of the important role our Navy serves in protecting the flow of commerce, while providing a means to dissuade, deter, prevent, coerce or compel potential adversaries. The same congressional testimony also explained how the Navy plans to improve our capabilities while reducing costs of procurement, operations and modernization of the force. More importantly, our Sailors and airmen provided testimony to the flexibility, reach and effectiveness of the carrier strike group (CSG) as CVW-8, aboard USS *George H.W. Bush* (CVN 77), conducted airstrikes against the Islamic State of Syria (ISIS).

While the ability of the modern CSG to target terror groups such as ISIS has been taken for granted, we must be mindful of the history that provided such capabilities. First, our diplomatic access and air superiority are the result of more than 20 years of shaping operations that assured access and established a visible naval presence to encourage diplomatic cooperation. Second, the capabilities of our carrier air wing are a result of the Naval Aviation Enterprise's (NAE) work to field precise and flexible demonstrations of air power. Third, we must acknowledge the sacrifices of our Sailors and airmen and their dedication to remain on watch throughout Operations Desert Shield, Desert Storm, Southern Watch, Northern Watch, Enduring Freedom and Iraqi Freedom.

History reminds us that Naval Aviation capabilities are a product of a long tradition — enabled by the Sailors and aviators on the front lines, as well as those working on the next generation of capabilities. While we remain steadfast in our commitment to "Warfighting First" and meeting the needs of our current conflicts, CNO Adm. Jonathan Greenert's *Navigation Plan for 2015 - 2019* articulates the requirement to field aircraft carriers, while calling for improved ability to execute both active and passive kill-chains of the carrier air wing. The CNO also reminds us that the aircraft carrier is intended to assure sea control and strike dominance in contested sea and air spaces. Past lessons should help guide our approach to future operations, the acquisition of new systems, and our understanding of requirements to meet national objectives.

Seventy years ago this summer, the Navy established air superiority in the maritime domain. During the 19 June

A U.S. Navy Grumman F6F Hellcat makes condensation rings as it awaits the take-off flag aboard USS Yorktown *(CV 10) 20 November 1943. (Photo by Edward Steichen)*

1944 Great Marianas Turkey Shoot, the United States decimated the remaining naval air forces of the Imperial Japanese Navy: the only other navy with comparable aviation capabilities. U.S. naval air superiority was developed over years of hard-fought combat, focused training of our aviators, and systematic improvements to our naval aircraft. Beginning in early 1942, the U.S. Navy and our industry partners built on lessons from the early battles of World War II to improve our force. Through an innovative and collaborative development process, engineers and naval aviators analyzed and countered the strengths of our adversary's air arm. Roy Grumman, along with his chief designers Jake Swirbul and Bill Schwendler, worked closely with the U.S. Navy's Bureau of Aeronautics and experienced F4F Wildcat pilots to develop a new fighter to counter the Japanese Mitsubishi A6M Zero's strengths and establish air command of the Pacific. The resulting F6F Hellcat proved to be a game-changing platform.

The significance of this development is exemplified by the performance of the Fighter Squadron (VF) 31 Tomcatters during the Turkey Shoot. As described on the VF-31 webpage, "At 1047 hours, the 11 Hellcats dove into a flight of [more than] 50 Zero fighter planes which kept them busy until they had downed 22 of them. Combined with the six earlier in the day, the total shoot down for VF-31 was 28 enemy aircraft without a single loss."[1] While statistics like this present an optimistic view of air combat, we are reminded that maritime air superiority purchased during wartime took more than two and a half years of sustained combat operations and proved costly in both blood and treasure.

Despite success during the Battle of the Philippine Sea, our carriers remained threatened by kamikazes and submarines. A rather illuminating Plan of the Day was recently discovered aboard the decommissioned carrier *Wasp* (CV 18). Dated 16 February 1945, prior to the Battle of Tokyo Bay, the plan highlighted the risks facing young carrier Sailors. Details included warnings of enemy attacks, instructions for protective gear and preventative measures such as flash-proof covers. Despite continuous kamikaze attacks, Task Force (TF) 58 assumed station and established air superiority over the enemy homeland as TF-58 pilots conducted strikes with devastating effectiveness. An article written in the *Hawaii Reporter* newspaper in tribute to Lt. John William Gage, a flight lead with the VF-81 Freelancers, reported, "Actually it was the second strike EVER on the Japanese homeland, the first being the Doolittle Tokyo Raid. [TF-58] pilots, which the Freelancers were a part of, swept airfields in Tokyo and the surrounding regions. They claimed 344 victories."[2]

The evolution of naval air forces continues to be a process that involves fleet Sailors and airmen, engineers and logisticians of the system commands (SYSCOMs), the requirements and resourcing teams under the CNO, and our industry partners. Naval Aviation recognizes the

Sailors move an F/A-18E Super Hornet attached to the VFA-31 Tomcatters on the flight deck of USS George H.W. Bush *(CVN 77) 26 August. (Photo by MC3 Joshua Card)*

F/A-18C Hornets attached to the VFA-87 Golden Warriors take off from the flight deck of USS George H.W. Bush *(CVN 77) 26 July. (Photo by MC3 Joshua Card)*

The Navy's X-47B Unmanned Carrier Air Vehicle, left, is readied for launch as an F/A-18 Hornet conducts flight operations aboard USS Theodore Roosevelt *(CVN 71) 17 August. (Photo by MCSA Alex Millar)*

importance of information, and we are molding the force to better dominate the electromagnetic spectrum through continued integration of the EA-18G Growler. The ability of this platform to support effects-chains described in the CNO's *Navigation Plan* represents game-changing approaches to warfare. The Growler is only one example of an evolving modern weapon critical to distributed and integrated capabilities of the air wing. The *Theodore Roosevelt* CSG is preparing for the initial deployment with Naval Integrated Fire Control-Counter Air capabilities. USS *Theodore Roosevelt* (CVN 71) is also at the center of other cutting-edge technologies, including the integration of manned and unmanned aircraft operations with the X-47B Unmanned Carrier Air Vehicle. The concept of operations (CONOPS) for manned and unmanned integration will inform future CONOPS to include the Unmanned Carrier Launched Airborne Surveillance and Strike System and other technologies such as the FA-18E/F replacement aircraft.

To maximize the effectiveness of new capabilities and platforms, we must examine tactics, engineering principles and sustainment concepts prior to fielding new systems. The concept of Integrated Warfighting Capability (IWC), championed by Commander, Naval Air Forces Vice Adm. David Buss and Commander, Naval Air Systems Command Vice Adm. David Dunaway, generates the same kind of warfighter/engineer/acquisition relationship that made the Hellcat such a successful platform. To increase the speed of fielding effective capabilities, the IWC monitors all aspects of interoperability of new capabilities to eliminate discrepancies prior to fleet induction.

Despite budget pressures, Naval Aviation is committed to improving the operating conditions of our fleet through efficient operations, logistics and training practices. Ongoing efforts among the fleets and SYSCOMs include examining interactions between supply chains and flying hours as well as training opportunities afforded by information technology. We need to determine the best mix of live, virtual and constructive (LVC) systems to efficiently train the most effective force in the world. LVC is not only necessary to meet budgetary pressures, but also affords opportunities to improve the pace of tactics development, test and evaluation, and engineering human systems interfaces. While virtual and constructive methods may provide unique opportunities for training, we recognize there is no substitute for time in the seat; and we are committed to maintaining safety of flight, preserving the ability to conduct large-scale exercises, and providing sufficient flight time to maintain long-term proficiency and development of our aviators.

As in the past, we must continue to improve the process of fielding systems, training Naval Aviators and maintaining readiness. This evolution must take place with close cooperation across the entire NAE. As a tribute to the entire team required to "Fly, Fight, Win," I offer the words of Commander, Task Group 58.1 Rear Adm. Joseph Clark prior to the Battle of Tokyo: "Our friends and loved ones

View of USS Hornet*'s (CV 8) island while en route to the Doolittle Raid mission's launching point. USS* Nashville *(CL 43) is in the distance. (U.S. Navy photo)*

back home have toiled long and faithfully to give us this opportunity to smite the enemy in his homeland. Make every bullet, bomb and rocket speed straight to its mark."

These words ring true today. Through the work of our engineers, logisticians and families, we are able to place Naval Aviation assets where they need to be to defend America's vital interests.

The carrier and air wing team is vital to America's ability to participate in international trade and provide the freedom of navigation required to enable a global economy. Whether providing power projection or presence, the aircraft carrier and carrier air wing have never been more relevant. Interoperable, integrated, advanced and relevant – *Naval Aviation's Vision 2025* is coherent and shining as our path ahead, no matter the budget top line.

Sailors aboard USS Carl Vinson *(CVN 70) use an aircraft elevator to move two EA-18G Growlers assigned to the VAQ-139 Cougars to the flight deck 31 May. (Photo by MC3 Giovanni Squadrito)*

[1] http://www.vf31.com/sorties/marianas_turkey_shoot.html
[2] http://www.hawaiireporter.com/grand-slam/123

Rear Adm. Manazir graduated from the U.S. Naval Academy in 1981. He earned his Naval Aviation wings in April 1983 and deployed in the F-14A Tomcat in July 1984. He qualified in the F-14A/D and F/A-18E/F and has flown more than 3,750 hours and completed 1,200 arrested landings during 15 deployments aboard aircraft carriers on both coasts.

He commanded the Fighter Squadron (VF) 31 Tomcatters from June 1997 to September 1998; USS Sacramento *(AOE-1) from January 2003 to July 2004; USS* Nimitz *(CVN 68) from March 2007 to August 2009; and CSG-8 embarked aboard USS* Dwight D. Eisenhower *(CVN 69) from September 2011 to June 2013. He currently serves as the Director, Air Warfare (OPNAV N98) on the staff of the CNO. He is the recipient of various personal and campaign awards including the Legion of Merit (6), the Defense Meritorious Service Medal, the Meritorious Service Medal (2), and the Strike/Flight Air Medal (2). In 2007, Manazir was recognized as the "Tailhooker of the Year" by the Tailhook Association.*

To read and download a copy of the *Naval Aviation Vision 2014 – 2025*, please visit http://navylive.dodlive.mil/2014/04/16/naval-aviation-vision-a-preeminent-warfighting-force-today-and-in-the-future/.

Grampaw Pettibone

Illustration by Ted Wilbur

Gramps from Yesteryear

Naval Aviation News *May - June 2001*

Danger Zone

Hidden Dragon

A CH-53D Sea Stallion was conducting practice landings at confined-area landing sites. As a demonstration, the helicopter aircraft commander (HAC) would make the first landing at each of a succession of different sites, after which the copilot would take over and make two landings at each site.

One of the locations had an upward sloping landing zone when approached on a southerly heading and was 150 feet in diameter with trees around the perimeter. The HAC made his demonstration approach and landing to the upper portion of the site on a southerly heading. The aircraft experienced an unexplained loss of lift on short final. The HAC initiated a moderate flare and power application to arrest the sudden rate of descent, and landed uneventfully. On deck, the HAC transferred the controls to the copilot who took off and established a downwind pattern 400 feet above the ground at 80 knots.

The copilot then began a descending, decelerating turn onto the final approach to the site at 60 knots. All was normal until the final portion of the approach when the helo seemed to lose lift just prior to commencing a hover on short final.

The aircraft settled and the rotor blades struck the trees, damaging the CH-53D. The tail rotor drive system was severed between the #4 and #5 drive shafts, producing uncontrolled right yaw as the helo landed.

Although the Sea Stallion had been on a southerly heading, when it struck the ground it had come around to 300 degrees. There were no injuries.

Grampaw Pettibone says:

Methinks the copilot was placed in a situation beyond his experience and abilities. Me also thinks the HAC failed to keep pace with what was goin' on. The HAC may have looked danger in the face on his approach to the landing zone and survived, but he failed to recognize a repeat occurrence. Remember the old, simple and enduring axiom: stay ahead of the aircraft, not the other way around.

Flightbag

Astronauts L. Gordon Cooper Jr. (right) and Charles Conrad Jr. walk across the deck of USS Lake Champlain (CVS 39) after their 29 August 1965 ocean splashdown and recovery following the Gemini 5 mission. (Photo courtesy of NASA)

A Zero-Gravity Mulligan

I received the Spring 2014 [*Naval Aviation News*] today and enjoyed the Thomas Momiyama article [see "The Making of a Patuxent River Engineer – '50s Style" *Vol. 96, No. 2, Spring 2014* – Ed.]. However, it misidentifies Pete "If You Can't Be Good, Be Colorful" Conrad as the astronaut who hit the golf ball on the moon. That was another colorful naval aviator, Al Shepard. As both were instructors at the U.S. Naval Test Pilot School (USNTPS) in the '50s, I suppose the error could go either way, but will assume he meant Conrad. Conrad may not have hit a golf ball on the moon, but was the first person to win a bet there by heralding the all-Navy crew's arrival with, "Whoopee! Man, that may have been a small one for Neil, but that's a long one for me." He flew four times; commanding a Gemini, Apollo and the Skylab repair mission. Conrad, who was among those tested for the Mercury 7, was the source of many of the more colorful accounts in Tom Wolfe's *The Right Stuff*. As it says on his gravestone, Pete Conrad was "An Original." Accept no substitutes.

– Dave Nilsen, via the *Naval Aviation News* Facebook page.

Thomas Momiyama responds:

I appreciate Mr. Nilsen's keen eyes in noting my erroneous statement about my USNTPS instructor Pete Conrad. The golfer was indeed Alan Shepard, whom I met at the Carrier Suitability Branch as Alan was leaving for NASA astronaut training (later to be the first American in space), and I was just reporting into the [branch]. I may have even inherited Alan Shepard's desk, because that was the only empty desk left in the flight gear and slide-rule cluttered branch office.

Please excuse my earth-bound flight tester's narrow focus on history.

Deadlines

Submission deadlines for articles, photos and comments to *Naval Aviation News* are listed in each edition on Page 3 under "Submission Guidelines." We cannot guarantee publication of submissions, and all content is subject to editorial and security policy review.

Naval Aviation Vision *Now Online*

The biennial *Naval Aviation Vision 2014-2025* has been released! This publication details the current status of Naval Aviation, the systems, weapons and ships that support it, and the plan for how these programs will evolve through 2025. Be sure to check out the message from Commander, Naval Air Forces, Vice Adm. David Buss, on the vision of Naval Aviation's future. Visit http://navylive.dodlive.mil/2014/04/16/naval-aviation-vision-a-preeminent-warfighting-force-today-and-in-the-future/ to read his message and download a copy of the document.

Subscription Announcement

Naval Aviation News will discontinue courtesy mailings to private, non-government addresses following this Summer 2014 edition. However, government offices, schools and military units will continue to receive this service. This decision will not affect individuals with paid subscriptions. For any questions or concerns regarding this policy, please contact us at nannews@navy.mil or call 301-342-6024.

War Eagles Take Reins of POSEIDON

By Lt. Christi E. Morrissey

Members of the VP-16 War Eagles fuel up a P-8A Poseidon on the flight line at Perth Airport, Australia, to assist with the international effort to locate Malaysia Airlines flight MH370 on 2 April. (Photo by MCC Keith DeVinney)

The P-8A Poseidon program achieved initial operational capability 29 November 2013, launching the inaugural P-8A squadron deployment.

That day, two of six P-8A Poseidon aircraft assigned to the VP-16 War Eagles departed NAS Jacksonville, Fla., and arrived at Kadena Air Base in Okinawa, Japan, 1 December. The four additional aircraft arrived a few days later. The U.S. Navy's maritime patrol and reconnaissance community last witnessed a milestone of this caliber in October 1962, when the VP-8 Fighting Tigers first deployed with the P-3A Orion.

"The decision to send the Poseidon on its maiden deployment to the 7th Fleet area of operations signifies the U.S. Navy's commitment to maintain a continued presence of its most capable assets in the Western Pacific, bolstering the United States' rebalance to the Indo-Asia-Pacific region," said Cmdr. William C. Pennington, Jr., VP-16's commanding officer during the deployment.

In Okinawa, VP-16 participated in missions and exercises ranging from search and rescue efforts for Malaysian Airlines Flight MH370 to traditional theater anti-submarine warfare (ASW), intelligence, surveillance and reconnaissance (ISR) and anti-surface warfare (ASuW) exercises with regional allies. The War Eagles maintenance team and air crew tirelessly worked to keep the squadron's aircraft flying and maintained operational readiness throughout the Western Pacific.

According to Cmdr. Daniel Papp, VP-16's current commanding officer and executive officer during the deployment, the aircraft's Pacific operations proved that the P-8A is ideal for such a vast operational area. The Poseidon's range and speed allows crews to patrol large expanses of ocean that would take surface vessels days to reach.

"When it came to operating away from home for long periods of time, we started out more conservatively, sending small detachments to NAF Atsugi, Japan," said Lt. Cmdr. Erik Thomas, a VP-16 naval flight officer and the squadron operations officer during the deployment. "This permitted us to test our procedures working in a detachment environment, launching flights and executing tasking without the aid of home base."

Building on its success and capabilities, VP-16 quickly transitioned to operating at full speed.

"At one point, we had only a single aircraft on the ramp here in Okinawa because all of our other aircraft were participating in exercises and missions in other countries," said Thomas. "During one of our busiest days, we flew 66 flight hours. For a squadron with only six aircraft, that's unheard of."

SNAPDRAGON EXERCISE

Snapdragon exercises took place from 30 December 2013 to 1 January 2014 in the Philippine Sea and offered a joint training opportunity between maritime patrol reconnaissance aircraft (MPRA) and U.S. submarine forces.

"We've been maintaining planes airborne around the clock for the last few days," said Lt. Timothy Bierbach, a senior tactical coordinator (TACCO) and VP-16's maritime weapons and tactics instructor. "With half of our aircraft currently on detachment to other countries for exercises and other missions, this has been a test of the P-8A and VP-16's ability to maintain flight operations with limited assets. The P-8A is a transformational ASW aircraft and has reached or exceeded our current expectations in all mission sets."

During the exercise, Lt. j.g. Joel Gillquist, a naval flight officer and co-TACCO, examined his screen using the Poseidon's

AE1 Nathan Williams performs scheduled maintenance on a P-8A Poseidon aircraft 25 February. (Photo by MC2 Eric A. Pastor)

A P-3C Orion, left, assigned to the VP-46 Grey Knights taxis by a P-8A Poseidon assigned to the VP-16 War Eagles before its 17 March mission to assist in search and rescue operations for Malaysia Airlines flight MH370. (Photo by MC2 Eric A. Pastor)

AWO2 Karl Shinn, assigned to the VP-16 War Eagles, unloads a sonobuoy from the rack aboard a P-8A Poseidon to prepare it for use during the early April search of the missing Malaysia Airline Flight MH370. (Photo by MCC Keith DeVinney)

21st century battle space management capabilities and notified the TACCO, Lt. John Bailey, that their relief was off deck early. The TACCOs coordinated with the other aircraft and provided their relief with increased situational awareness.

"Network integration has given us a superior ability to conduct command and control, and pass mission critical information," said Gillquist. "We are able to use systems such as Link-11, Link-16 and international marine/maritime satellite communication systems (INMARSAT) to coordinate with U.S. and international partners and allies. The ability to share information and data off the aircraft increases our operational effectiveness and allows our commanders to make better informed decisions."

The Poseidon crew tracked its target for several hours during the exercise, adjusting their tactics to the submarine's changes in course and speed. Minute shifts in the sub's frequencies were quickly picked up by the P-8A's sensors and recognized by crew members.

"The Poseidon's Maritime Acoustic Suite is significantly more interactive than the legacy systems we had in the P-3C," said AWO2 Aaron Deremiah. "We are able to manipulate our system to exploit the acoustic returns, allowing us to detect a wider range of frequencies than the Orion could."

"The P-8A was designed to detect and track any subsurface target in the world, and it does that very effectively," said Deremiah. "In addition, the flexibility of the mission crew workstations allows us to become more tactically involved in missions other than ASW."

AD2 Tyler Dorsey, a Sailor attached to the VP-16 War Eagles, performs scheduled maintenance on a P-8A Poseidon aircraft 25 February. (Photo by MC2 Eric A. Pastor)

Lt. Michael Glynn, assigned to the VP-16 War Eagles, pilots a P-8A Poseidon over the Indian Ocean in support of the international effort to locate Malaysia Airlines flight MH370 on 15 April. (Photo by MCC Keith DeVinney)

The aircraft's local area network enables the crew to access all systems and sensors to exploit the full capacity of the air crew and aircraft, and ultimately find the moving target.

"From my station, I can use INMARSAT, make radio calls and even insert a buoy pattern, if needed," said Deremiah. "Workload sharing has enabled the acoustic operator to play a more active role on the squadron's flights, helping prevent task saturation of the TACCO and electronic warfare operators (EWO) on ISR and ASuW missions."

AWOCS Patrick Biddinger, a senior EWO in the squadron and the original EWO fleet NATOPS evaluator on the Poseidon, agreed with Deremiah.

"There is more fluidity between the sensor operators than there ever was in the P-3C," he said. "While we still have our areas of expertise, you are starting to see operators use and experiment with the capabilities of the other sensors allowing them to step outside of their traditional roles."

During this exercise, air and submarine crews practiced ASW tactics. For P-8 air crews, the exercise provided training and flight hours for certification.

NEW CAPABILITIES

The P-8A carries sonobuoys and is armed with MK-54 torpedoes and the AGM-84D Harpoon anti-surface missile. Combined with state-of-the-art sensor suites and a flexible crew layout, the Poseidon is the most advanced maritime patrol aircraft in the world. The flight deck is nearly identical to a commercial 737 Next Generation, with 87 percent of the panels and switches matching those found in its cousin aircraft. Only a few added panels hint at the plane's military capabilities.

"The increased situational awareness the Poseidon brings to the flight station compared to the P-3C is night and day," said Lt. Shawn Khan, a P-8A patrol plane commander and former P-3C pilot. "In the P-3, we only had [a tactical air

navigation system] and radio communications to coordinate altitude swaps with our relief aircraft."

Khan also noted that increased automation, including autopilot and auto throttle features, decreases the manual workload on the aircraft's pilots, so they are able to pay more attention to the tactical situation. In poor weather, the heads-up display for the pilot in the left seat allows a smooth transition from instrument to visual flying.

Although the Poseidon has fewer windows than a commercial 737, two large observer windows situated toward the front of the aircraft allow crew members to conduct visual searches and monitor for conflicting air traffic.

The heart of "the tube" consists of five interchangeable mission crew workstations, arranged along a rail, allowing for any combination of seating arrangements.

"These arrangements enable the TACCO to maximize efficiency and take advantage of previously unrecognized capacity," said Bierbach. "This capability has exponentially increased our crew resource management and productivity."

The acoustic sensors consist of the Maritime Acoustic System Processor and Maritime Acoustic System Data Recorder, which enables operators to analyze up to 64 sonobuoys at a time: twice the capacity of the P-3C. The P-8A uses a sonobuoy positioning system, which provides a more accurate geo-location of buoy patterns and reduces the need to constantly mark on top of deployed sonobuoys.

Sailors attached to the VP-16 War Eagles perform scheduled maintenance on a P-8A Poseidon aircraft 25 February. (Photo by MC2 Eric A. Pastor)

"The P-3 is a reliable and capable aircraft that has proven itself over the years, but the P-8 is a game changer, allowing operators to collect and process greater amounts of tactical data," said Biddinger.

Perhaps the greatest change for the aircraft's EWO has been the addition of the ALQ-240 Electronic Support Measures (ESM) system. According to Biddinger, the new ESM system enables operators to manipulate portions of the frequency spectrum they are examining, letting them tailor searches based on their operating area. The system is also able to automatically geo-locate a target, reducing the need to manually fix a track, and gives both the TACCO and flight station greater control over the aircraft's flight path.

Sailors attached to the VP-16 War Eagles monitor their workstations during a 1 April mission. (Photo by MC2 Eric A. Pastor)

JOINT MISSIONS

The War Eagles spent more than nine hours a day in March joining the search and rescue effort for missing Malaysian Airlines flight MH370.

"VP-16 contributed two aircraft for daily flights in the search and rotated crews through Australia for several weeks," said Lt. j.g. Kyle Atakturk, a VP-16 pilot who was part of the first crew to respond. "It was an emotional mission. Our air crew and aircraft went out nearly every day, flying in both inclement weather and optimum conditions, to cover huge expanses of the ocean. We just wanted to help bring closure to the families of the missing."

The War Eagles also brought the P-8A to South Korea in March for Exercise Foal Eagle, designed to enhance South Korea's security and readiness. VP-16 supported U.S. Marines on the ground through ISR missions and executed ASW targets. The Poseidon's performance exceeded expectations by providing a superior ISR product to the Marines and the South Korean naval assets.

"VP-16 has been investigating ways to collaborate with our sister services in a joint environment," said Lt. Michael Glynn, a P-8A instructor pilot and P-3C aircraft commander. "As the U.S. supports the rebalance to the Pacific, we're focusing on projecting power in an area with anti-access and area denial systems. To operate effectively, you need to seamlessly link sensor platforms like the P-8A with commanders and shooters. We are just now tapping into some of the capabilities in the systems aboard the Poseidon."

During a seven-month deployment, the War Eagles completed maritime strike exercises with U.S. aircraft including: Marine Corps AV-8B Harriers, U.S. Air Force E-3 Sentry, F-15 Strike Eagles and F-22 Raptors. Glynn noted these types of joint exercises, practicing and simulating high-end tactics, techniques and procedures with U.S allies, let the forces learn together and improve interoperability.

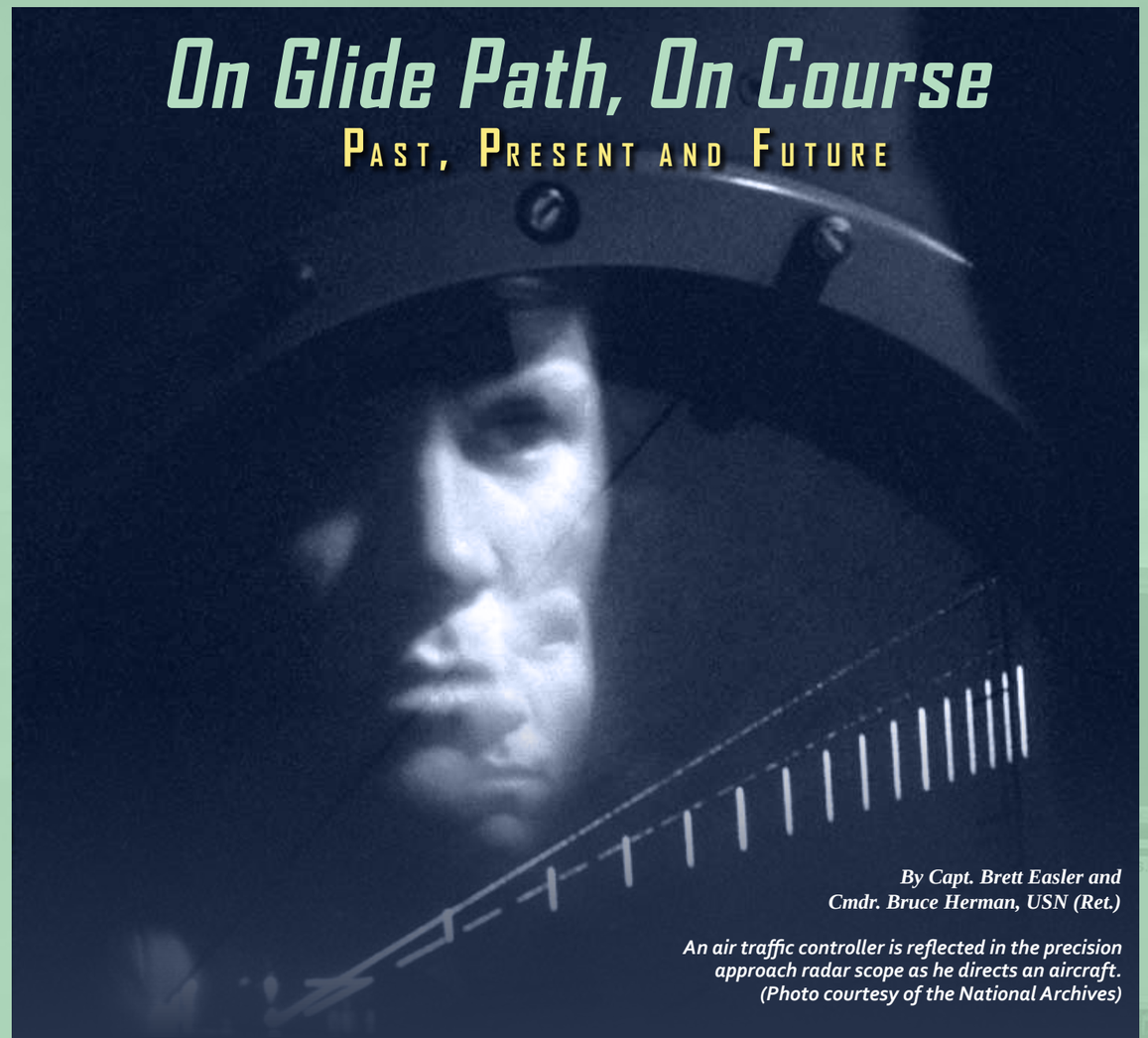
"Those missions are the bread and butter of the MPRA community," said Pennington. "During my time in command, I challenged our Sailors to become the most proficient ASW squadron in the Navy, asking them to embody our motto: 'Anytime, Anywhere, Any Task … Nothing but Excellence.' I can proudly say that our Sailors and air crew stepped up to the plate and exceeded all expectations."

Lt. Morrissey is a VP-16 pilot and the squadron's public affairs officer. A Harvard graduate, she was a member of the first class of CAT I students to train on the P-8A.

LaToya T. Graddy, the Maritime Patrol and Reconnaissance Aircrafat program office (PMA-290) public affairs officer, contributed to this article.

On Glide Path, On Course

Past, Present and Future



By Capt. Brett Easler and Cmdr. Bruce Herman, USN (Ret.)

An air traffic controller is reflected in the precision approach radar scope as he directs an aircraft. (Photo courtesy of the National Archives)

"On glide path, on course" is a phrase from apprentice and journeyman controllers alike that most Naval Aviators hear time and time again. In many cases, those were reassuring words when the weather was obscured with zero visibility and fog, no other precision approach landing (PAL) aids were available, fuel was low or no suitable divert fields were within range.

Cutting a path through fog, rain and snow, the ground controlled approach (GCA) has long been the Navy and Marine Corps' PAL system. Whether ashore, afloat or in the Marine's austere expeditionary environment, the talk-down approach has been the standard by which we train, man and equip our controllers to meet the warfighter mission.

PAST

The naval air traffic control (ATC) community serves with great pride and a rich history. Since Naval Aviation's earliest days, ATC has functioned as a critical element of the Naval Aviation mission. Invariably, the evolution of ATC parallels the evolution of the aircraft.

On 22 December 1942, Ens. Bruce Griffin soaped over the windshield of an SNJ Texan Navy trainer so he was unable to see forward out of the windscreen. Griffin took off from NAS Quonset Point, R.I., and made the first blind landing using GCA MK-1. Lt. Evan Aurand was in the tower and brought Griffin in, making him the first true GCA controller. Nine days later on 1 January 1943, GCA was called into emergency use for the first time when a snowstorm closed Quonset Point approximately 30 minutes before the arrival of a flight of PBY Catalinas.

In May 1943, Navy operational personnel successfully field tested the laboratory model of the GCA system developed at the Massachusetts Institute of Technology's Radiation Laboratory. Shortly thereafter, the Chief of Naval Operations (CNO) approved GCA as the Navy's standard talk-down approach control system and field training of GCA crews commenced at NAS Gainesville, Ga.

Specialist yeoman, quartermaster and radarman ratings were trained in an eight-week course where each student controlled approximately 150 live approaches using the AN/MPN-1 radar and SNB aircraft. The specialist yeoman rating represented control tower operators and was used from 1943 through 1948.

When initially commissioned, GCA was a mobile system capable of deploying to support tactical operations, as well as remaining at fixed locations. Advantages of the system included its accuracy and the absence of a requirement for a dedicated avionics package in the aircraft. A trained pilot equipped with a functioning radio was able to make an approach and landing in adverse weather conditions. A number of locations had published GCA weather minimums of 100 foot ceiling and one-quarter mile visibility, with terrain and runway/approach lighting systems effecting published minimums. Disadvantages of the GCA system included its size and weight, which affected its transportation via airlift/sealift, and the increased number of personnel required to operate and maintain the system.

In March 1962, the Navy's ATC schools and its 11 courses moved from Naval Air Technical Training Unit Olathe, Kan., to form the Air Traffic Control Schools Division of Naval Aviation Technical Training Center (NATTC) at NAS Glynco, Ga. The initial GCA course lasted 10 weeks and allowed each student to make 150 live runs using the AN/MPN-5 radar for synthetic training and the AN/CPN-4 radar for live training. The training was further refined to only six weeks, during which students made

AN/MPN-1 mobile ground-controlled approach radar systems were integral precision landing equipment for air traffic controllers during World War II and into the 1950s. (Photo courtesy of Cmdr. Bruce Herman, USN (Ret.))

approximately 200 synthetic runs and 55 live runs using S-2 Tracker aircraft.

Students also received flight skins and flew in the right seat of the S-2 while listening and watching the pilot conduct GCA approaches. This approach to training provided the student controller with an appreciation of the pilot workload during a GCA. On 30 April 1974, the last S-2 live-run flights for GCA training took place in Glynco, ending a practice started in 1944. More than 290,000 approaches were made since training began at NATTC in 1962. ATC schools have resided at NATTC Pensacola, Fla., since April 1996 after a 20-year layover at NATTC Millington, Tenn.

In the early 1970s, GCA units merged with the air station ATC division into a single organization. The result of this transition was the air traffic control facility (ATCF). Before adoption of the ATCF concept, the staffing level for a GCA unit consisted of 15 controllers, three technicians, one engineman and two officers: an officer-in-charge and an approach controller.

Sailors operate a ground controlled approach unit on Guam in 1946.
(Photo courtesy of Cmdr. Bruce Herman, USN (Ret.))

PRESENT

Navy and Marine Corps air traffic controllers now provide talk-down services at 31 air stations using the AN/FPN-63 precision approach radar (PAR); carriers use the AN/SPN-46 automatic carrier landing system for mode III approaches; and LHDs or LHAs use the AN/SPN-35 PAR. The nine Marine Corps ATC detachments also deploy the AN/TPN-31A air traffic navigation, integration and coordination system in support of humanitarian, disaster and contingency operations in every clime and place. Up to 160,000 talk-down approaches are conducted annually across the DoN. The number of GCAs have declined during the last 20 years, however, as a result of instrument landing system (ILS) installations, reduced flight operations and increased simulator time for the aircrew.

The DoN has installed 14 ILS (MK-1F and MK-20A) systems as site-specific operational requirements to support aircraft with ILS avionics. The first four systems went to NAS Adak, Alaska, (installed September 1989); NSF Diego Garcia, British Indian Ocean Territory (installed in August 1992); NAS Kingsville, Texas, (installed in September 1993); and Amchitka Island, Alaska. The ILS provides a PAL system compatible with shore-based multi-engine aircraft and a means to accomplish proficiency training at home stations and bases.

During the summer of 1994, both the CNO and the Chief of Staff of the Air Force approved a joint Mission Need Statement, which identified the requirement for a rapidly deployable, adverse weather and terrain, day/night, survivable and interoperable precision approach landing capability (PALC) system. The subsequent analysis of alternatives, updated in November 2005, recommended differential global positioning system technology as the preferred solution, which is now known as the Joint Precision Approach and Landing System (JPALS).

Until March 2013, JPALS was envisioned as the single solution for meeting the PALC requirement for all service branches in any operating environment, eliminating the requirement for multiple and/or varying PAL systems. JPALS Increment 1 was developed for sea-based application, and has completed initial sea-based testing while successfully conducting more than 70 auto-land approaches with pin-point accuracy using a modified F/A-18C Hornet. JPALS will become part of the ATC suite on aircraft carriers and amphibious assault ships in support of the F-35B/C Lightning II by the end of the decade.

Given the current fiscal environment, the Director, Air Warfare (OPNAV N98), ordered an extensive evaluation of the DoN PALC roadmap. The evaluation, performed by OPNAV N980A and the Naval Air Traffic Management Systems program office, reviewed multiple courses of action to ensure all-weather landing capability continues in support of Naval Aviation, while closing the interoperability gaps experienced under the current family of systems used to satisfy the DoN PALC requirement.

An air traffic controller communicates with an aircraft at NAS Joint Reserve Base Willow Grove, Pa., 21 May 2004.
(Photo by Journalist Third Class David P. Coleman.)

In June 2013, the Navy Resources and Requirements Review Board directed the continuing development of JPALS for aircraft carriers, amphibious assault ships and installation of ILS ashore through sundown of PAR by 2030, when ILS aircraft integration is scheduled for completion. As a part of the roadmap, existing AN/FPN-63 PAR systems ashore will receive upgrades to ensure service life until transition to the ILS is complete. A landing system upgrade program was also initiated to enhance the availability and sustainment of both the AN/SPN-46 and AN/SPN-35 sea-based precision radars.

Air traffic controllers operate field lighting systems, communicate with aircraft, furnish pilots with information regarding traffic, navigation and weather conditions, as well as operate and adjust ground controlled approach systems, interpret targets on radar screens and plot aircraft positions.
(Photo by Journalist Third Class David P. Coleman.)

FUTURE

We are at decision height and the PALC roadmap for Naval Aviation is "on glide path, on course" to replace PAR ashore with instrumented capability in the cockpit. The long-standing tradition of “Airman Timmy and Lance Corporal Jimmy” in the pilot's headset giving course corrections and trend information will cross landing threshold one last time in the next decade.

So what’s the bottom line? Carriers will have AN/SPN-46 for currently configured aircraft and JPALS for the F-35C, while amphibious assault ships will have AN/SPN-35 for currently configured aircraft and JPALS for the F-35B. Both aircraft carriers and amphibious assault ships will continue to use AN/SPN-41 (Bullseye) as a backup and have the talk-down approach available if all else fails. Ashore, the AN/FPN-63 will sunset when the fielding plans for ILS air station installations and the aircraft avionics upgrades are complete. The introduction of JPALS and establishing ILS as the primary PALC will be the foundation for future aircraft avionics development and integration.

Until the PALC roadmap meets full operational capability, the GCA will be available until all aircraft within the Navy and Marine Corps inventory are capable of an unassisted instrument approach using a cockpit needles display.

This is an age of instant history when the startling innovations of yesterday become the anachronisms of today. Perhaps no place is this more apparent than in Naval Aviation. After more than 70 years of service with thousands of saves recorded in both civil and military records alike, it is time to bid farewell to a legend: a landing system that safely brought home Panthers, Banshees, Skyraiders, Cougars, Furies, Phantoms, Corsairs, Traders, Trackers, Tracers, Tomcats, Neptunes, Orions, Aries, Hawkeyes, Hornets, Seahawks, Vikings, Prowlers and Growlers in zero-zero conditions. As the era of GCA ashore concludes and the comforting phrases “approaching glidepath, begin descent” or “over landing threshold, on course” are no longer heard in headsets, the next-generation PALC systems will continue the Navy and Marine Corps ATC tradition of bringing our aircrew back safely.

Capt. Easler is retiring this fall after 36 years of active duty, serving his final tour on the staff of Director, Air Warfare (N98) as the Director, Naval Airspace and Air Traffic Control Standards and Evaluation Agency. Cmdr. Herman is also an air traffic control limited duty officer who retired in 2003 after 33 years of service.

2013 Year in Review

By Dale J. Gordon, Christopher J. Martin, Nicole Michur and Josh Phillips

The budget sequestration and a continuing resolution challenged DoD throughout 2013 and forced all services to make necessary cuts to meet fiscal demands. In February, the Navy requested to delay the deployment of the *Harry S. Truman* Carrier Strike Group (CSG) to the Arabian Gulf, reducing U.S. naval presence there for the first time in two years. The fiscal constraints also grounded Naval Aviation's well-known recruitment and demonstration team, the Blue Angels, in April for more than six months. Additional tactics to reduce the Navy's budget included cutting flying hours to more than half of normal monthly levels for several air wings. In May, East Coast-based CVW-7 was the first to feel these effects when flying hours were cut from 25 to 11 hours per month.

Despite budget challenges, it was a banner year for aviation milestones. In May, the X-47B Unmanned Combat Air System (UCAS) launched from USS *George H. W. Bush* (CVN 77) off the coast of Virginia and landed at NAS Patuxent River, Md., marking the first sea-to-land unmanned flight. The P-8A Poseidon reached initial operational capability in November, and left for Kadena Air Base in Okinawa, Japan, marking its first operational deployment. The Navy celebrated the F/A-18 Hornet's 35th anniversary; the Hornet first took flight 18 November 1978 followed by the F/A-18E/F Super Hornet 29 November 1995.

The Navy also proved its operational readiness in November when Super Typhoon Haiyan made landfall in the Eastern Samar province of the Philippines. It brought with it historic devastation with more than 6,000 casualties reported. In response, the *George Washington* CSG arrived to boost emergency relief operations and provide humanitarian assistance to the storm-ravaged island nation.

The following information captures some of Naval Aviation's milestones, highlights and events in 2013.

January

7: Three Marines with the VMM-266 Fighting Griffins were awarded the Air Medal with Combat Distinguishing Devices for their part in the rescue of a downed U.S. Air Force pilot during Operation Odyssey Dawn in 2011. Capt. Erik Kolle, Staff Sgt. David Potter and Sgt. Daniel Howington flew their MV-22B Osprey, attached to the 26th Marine Expeditionary Unit (MEU) and USS *Kearsarge* (LHD 3), off the Libyan coast to rescue the crew of a downed U.S. Air Force F-15E Strike Eagle that crashed outside of Benghazi.

9: A Marine CH-46E Sea Knight sustained damage during a confined area landing in Twentynine Palms, Calif. No fatalities were reported.

12: The HMM-764 Moonlight transitioned into the first reserve medium tilt-rotor squadron (VMM-764) at Edwards AFB, Calif. The unit then completed its move to MCAS Miramar, Calif., 18 January 2013.

23: An F/A-18E Super Hornet from NAS Lemoore, Calif., suffered an in-flight engine fire. The aircraft was recovered and no injuries were reported.

31: Boeing delivered the sixth production P-8A Poseidon aircraft to the U.S. Navy, completing the first group of low-rate initial production aircraft.

February

2: The VAQ-132 Scorpions completed a six-month deployment to NAF Misawa, Japan, and returned to NAS Whidbey Island, Wash. This was the first expeditionary deployment of the EA-18G Growler to the U.S. Pacific Command theater of operations.

6: SECDEF Leon Panetta canceled the 8 February 2013 deployment of the *Harry S. Truman* CSG because of budgetary restrictions caused by sequestration and the continuing resolution.

20: A Marine CH-46E sustained a hard landing and subsequent fire in Thailand. No fatalities were reported.

March

1: DoD lifted the 21 February 2013 grounding of the F-35 Lightning II after analysis concluded a cracked turbine blade in an engine on a single plane resulted from overuse in test operations.

7: The HSL-51 Warlords were redesignated as HSM-51 at NAF Atsugi, Japan.

11: A Navy EA-6B, assigned to the VAQ-129 Vikings at NAS Whidbey Island, crashed during a routine training flight in an unpopulated area about 50 miles east of Spokane, Wash., killing all three crew members.

USS George Washington *(CVN 73) steams toward USNS* Charles Drew *(T-AKE 10) prior to a replenishment-at-sea 24 November 2013. (Photo by MC3 Brian H. Abel)*

12: The VAQ-136 Gauntlets were certified safe for flight after completing an 11-month transition from the EA-6B Prowler to the EA-18G Growler.

21: An F-35B Lightning II, attached to the VMFA-121 Green Knights, made its first vertical landing outside of testing at MCAS Yuma, Ariz.

31: The VAW-77 Nightwolves were decommissioned at NAS Joint Reserve Base New Orleans, La. The Nightwolves were formed in 1995 as the only Navy squadron dedicated to stemming the flow of illegal narcotics into the United States.

April

8: An F/A-18F Super Hornet, assigned to the VFA-103 Jolly Rogers aboard USS *Dwight D. Eisenhower* (CVN 69), crashed in the North Arabian Sea. The two crewmembers were rescued shortly after the crash.

16: A Marine CH-53E Super Stallion suffered a hard landing near the North Korean border in Cherwon, South Korea. All 21 crew members were treated for non-serious injuries at a local hospital.

16: Aircraft aboard *Dwight D. Eisenhower* flew two stranded Afghan mariners from the North Arabian Sea to Kandahar, Afghanistan. The two men were rescued at sea after USS *Hué City* (CG 66) found them adrift in the Gulf of Oman, 7 April.

9: The Navy announced the cancellation of the Blue Angels' remaining 2013 flying schedule. This included at least 32 shows through the beginning of November.

27: Six MV-22B Ospreys and two KC-130J Super Hercules aircraft flew from MCAS New River, N.C., to Moron De La Frontera, Spain, completing the longest and largest transatlantic flight of an Osprey squadron to date.

30: The DoD Prisoner of War/Missing Personnel Office announced that a Navy pilot missing from the Vietnam War had been accounted for and will be buried with full military honors along side his crew. Navy Lt. Dennis W. Peterson was the pilot of an SH-3A Sea King helicopter that crashed in Ha Nam Province, Vietnam, in 1967.

May

3: The HSM-35 Magicians became the first composite expeditionary helicopter squadron to include both the MH-60R Seahawk and the MQ-8B Fire Scout at NAS North Island, Calif.

4: HMX-1 hosted an MV-22B introduction ceremony marking the beginning of HMX-1's transition from CH-46E Sea Knights to MV-22B Ospreys for green-side and presidential support flights.

A U.S. Navy P-8A Poseidon aircraft assigned to the VP-16 War Eagles takes off from NAS Jacksonville, Fla., 1 December 2013. (Photo by MC2 Eric A. Pastor)

14: The X-47B UCAS became the first aircraft to be launched from a carrier at sea without a human at the controls. After months of preliminary catapult tests ashore and taxiing tests at sea, the X-47B launched from *George H. W. Bush* off the coast of Virginia and landed at NAS Patuxent River after a flight of just over an hour.

22: The MQ-4C Triton Unmanned Aircraft System completed its first flight from Palmdale, Calif., marking the start of tests to validate the system for future fleet operations.

June

1: The VT-4 Warbucks were reactivated at NAS Pensacola, Fla., joining the VT-10 Wildcats in providing training to undergraduate naval flight officers.

An X-47B Unmanned Combat Air System demonstrator conducts a touch-and-go landing on the flight deck of USS George H.W. Bush *(CVN 77) 17 May 2013. (Photo by Alan Radecki, courtesy of Northrop Grumman)*

3: Five Marines were awarded the Navy and Marine Corps Medal for their actions after one of the 24th MEU's aircraft crashed during a bilateral training event in Morocco 11 April 2012.

14: Four MV-22 Osprey tilt-rotor aircraft from the VMM-263 Thunder Eagles boarded USS *Bonhomme Richard* (LHD 6) for a naval forces deployment.

14: The VMAQ-1 Banshees were redesignated VMAQT-1, marking the transition of training duties of the EA-6B Prowler from the Navy to the Marine Corps.

An F-35C Lightning II from the VFA-101 Grim Reapers undergoes pre-flight avionics diagnostics at Eglin AFB, Fla., 19 September 2013. (Photo by MC2 Juan Pinalez)

Four MQ-8B Fire Scouts attached to HSM-46 Det. 9, operated from USS *Samuel B. Roberts* (FFG 58) and flew 333 flight hours in June, exceeding the unmanned helicopter's previous operational flight time by more than 110 hours.

July

1: The P-8A Poseidon was declared operationally suitable and ready for fleet introduction.

10: An AV-8B Harrier attached to the VMA-311 Tomcats was damaged after it veered off the runway and caught fire at Camp Bastion, Afghanistan. The pilot safely exited the aircraft.

12: After nearly seven decades, the VMA-513 Flying Nightmares were decommissioned.

August

8: The X-47B returned to NAS Patuxent River from NASA's Wallops Flight Facility in Virginia after completing testing aboard *George H.W. Bush*.

September

22: An MH-60S Seahawk assigned to the HSC-6 Indians crashed in the central Red Sea while operating aboard USS *William P. Lawrence* (DDG 110).

25: USS *George Washington* (CVN 73) and CVW-5 completed a joint services exercise including air-to-air combat training with the U.S. Air Force's 18th Wing located at Kadena Air Base, Japan.

30: CH-46E Sea Knight helicopters assigned to the VMM-262 Flying Tigers made their final flight from MCAS Futenma, Japan, to await their disposition at Camp Kinser in Okinawa, Japan. The flight followed the redesignation of HMM-262 to VMM-262 on 20 August 2013 at Futenma, signifying the squadron's transition to the MV-22B Osprey.

October

1: The VFA-101 Grim Reapers hosted a rollout ceremony for their new F-35C Lightning II aircraft at Eglin AFB, Fla. VFA-101 received the Navy's first F-35C from Lockheed Martin 22 June 2013, and completed its first check-flight 14 August 2013. As the F-35C Fleet Replacement Squadron, the Grim Reapers train Navy aircrew and maintenance personnel to fly and repair the F-35C.

1: The Naval Safety Center Detachment was established at the Naval School of Aviation Safety stationed at NAS Pensacola, Fla.

6: Sailors from the HSC-25 Island Knights aided in the rescue of four people whose plane went missing on a flight from Tinian Island to Saipan in the Commonwealth of the Northern Mariana Islands.

7: The VMAQT-1 Banshees began training their first class of seven replacement pilots at MCAS Cherry Point, N.C. The squadron was redesignated from VMAQ-1 to VMAQT-1 on 14 June 2013.

18: The Navy's Blue Angels flying team resumed community and public outreach duties after budget cuts caused by sequestration grounded a majority of its 2013 shows.

31: The U.S. Navy completed the first flight of the next-generation MQ-8C Fire Scout at NB Ventura County, Point Mugu, Calif.

November

4: The Navy began E-2 Hawkeye and C-2 Greyhound field carrier landing practice operations at Wallops Flight Facility.

4: A Navy T-45C Goshawk from the VT-86 Sabrehawks crashed at NAS Pensacola. Both pilots were taken to a local hospital and released.

5: USS *America* (LHA 6) took to the sea for the first time during five days of sea trials in the Gulf of Mexico.

10: The X-47B conducted flight operations aboard USS *Theodore Roosevelt* (CVN 71). The Navy concluded another round of carrier testing – including deck handling, carrier approaches and landings in off-nominal wind conditions, and digitized ship system interfaces 19 November 2013 to further demonstrate and evaluate the X-47B's integration within the aircraft carrier environment.

13: *George Washington* arrived in the Philippines to boost emergency relief operations in the typhoon-devastated Leyte and Samar provinces.

17: USS *Gerald R. Ford* (CVN 78) was launched into the James River in Virginia for the first time.

29: The VP-16 War Eagles became the Navy's first operational P-8A Poseidon squadron to deploy overseas when the first two of its six aircraft took off from NAS Jacksonville for Kadena Air Base.

December

4: The VP-62 Broadarrows returned to NAS Jacksonville following a six-month deployment to Kadena Air Base with Commander, Task Group 72.2, as part of the Navy's first mobilization of a Reserve P-3C Orion squadron.

During December, the Navy's unmanned RQ-4A Broad Area Maritime Surveillance Demonstrator surpassed 10,000 flight hours in support of operations in the U.S. Central Command area of responsibility.

Below: Service members, crew, their families and distinguished guests bow their heads as Navy Capt. Jerome Hinson gives the benediction during the christening ceremony of USS Gerald R. Ford *(CVN 68) at Newport News, Va., 9 November 2013. (Photo by MC1 Patrick Grieco)*

Amphibious Assault Carrier and Embarked Squadron Deployments

Boxer Amphibious Ready Group (ARG)
Western Pacific and Arabian Gulf

23 Aug 13 - 24 Apr 14

Boxer (LHD 4)
Harpers Ferry (LSD 49)
New Orleans (LPD 18)

Squadron	Aircraft
VMM-166 Rein. (YX)	MV-22B
VMA-214 Det. (WE)	AV-8B
HSC-21 Det. 3 (VR)	MH-60S

Bonhomme Richard ARG
Western Pacific

24 Jan - 30 Mar 13 and 13 Jun - 30 Sep 13

Bonhomme Richard (LHD 6)
Germantown (LSD 42)
Denver (LPD 9)
31st MEU

Squadron	Aircraft
VMM-265 (EP)	MV-22B

Kearsarge ARG
Arabian Gulf

11 Mar - 7 Nov 13

Kearsarge (LHD 3)
Carter Hall (LSD 50)
San Antonio (LPD 17)
26th Marine Expeditionary Unit (MEU)

Ships of the Kearsarge *Amphibious Ready Group sail in formation in the Red Sea 16 June 2013. (Photo by MC2 Corbin J. Shea)*

Major Aviation Command Changes

Activated/Established

VUP-19 Big Red ..... 1 Oct 13

Reactivated

VT-4 Warbucks ..... 1 Jun 13

Deactivated/Disestablished

VAW-77 Nightwolves ..... 31 Mar 13
VMA-513 Flying Nightmares ..... 12 Jul 13

Redesignated

HMM-764 Moonlight to VMM-764 ..... 12 Jan 13
HSL-72 Proud Warriors to HSM-72 ..... 15 Jan 13
HSL-51 Warlords to HSM-51 ..... 11 Feb 13
HS-14 Chargers to HSC-14 ..... 1 Mar 13
HS-5 Nightdippers to HSC-5 ..... 5 Apr 13
VMAQ-1 Banshee to VMAQT-1 ..... 4 Jun 13
HMM-262 Flying Tigers to VMM-262 ..... 30 Aug 13
HSL-37 Easy Riders to HSM-37 ..... 1 Oct 13

Sailors from USS Mustin *(DDG 89) and soldiers of the Philippine Army unload aid from an MH-60S Seahawk belonging to the HSC-25 Island Knights during relief efforts in response to Super Typhoon Haiyan in the Republic of the Philippines 16 November 2013. (Photo by Lt. j.g. Timothy Tran)*

Major Land-Based Deployments

Al Udeid AB, Qatar
VAQ-138 ..... 15 Apr - 18 Jun 13
VP-1 ..... Jun - Dec 13
VP-40 ..... Nov 12 - Jun 13

NAS Atsugi, Japan
VR-54 ..... 10 Feb - 5 Apr 13
VR-56 ..... 26 Feb - 6 Oct 13
VR-57 ..... 5 Jan - 13 Jun 13
VR-64 ..... 22 Mar - 23 Jun 13

Bagram AB, Afghanistan
VAQ-138 ..... 19 Jun - 9 Sep 13

NSA Bahrain
VP-1 Det. ..... Jun - Dec 13
VP-40 Det. ..... Nov 12 - Dec 13
VR-56 ..... 15 Oct - 24 Nov 13
VR-57 ..... 22 Jun - 14 Aug 13
VR-57 ..... 20 Nov - 31 Dec 13
VR-64 ..... 12 Aug - 11 Dec 13

Cooperative Security Location Comalapa, El Salvador
VP-10 ..... Nov 12 - Jun 13
VP-47 ..... Jun - Dec 13

NAF Misawa, Japan
VAQ-132 ..... 2 Jul 12 - Jan 13
VP-10 ..... Nov 12 - Jun 13
VP-16 ..... 1 Dec 13 - 16 Jul 14
VP-26 ..... Jun - Dec 13
VP-46 ..... Dec 13 - Jul 14
VP-62 Det. ..... Jun - Dec 13
VP-69 Det. ..... Jun - Dec 13

Camp Lemonnier, Djibouti
VP-4 ..... Nov 12 - Jun 13
VP-47 Det. ..... Jun - Dec 13

Fifth Fleet Area of Resposibility (AOR)
VAQ-133 ..... 1 Sep 12 - 29 Apr 13

Kabul, Afghanistan
VR-1 ..... 28 Sep - 3 Dec 13

Kadena AFB Okinawa, Japan
VP-16 ..... 2 Dec 13 - 16 Jul 14
VP-26 ..... Jun - Dec 13
VP-45 ..... Nov 12 - Jun 13
VP-46 ..... Dec 13 - Jul 14
VP-62 Det. ..... Jun - Dec 13
VP-69 Det. ..... Jun - Dec 13
VR-62 ..... Jun - 4 Dec 13

NS Rota, Spain
VP-4 ..... Nov 12 - Jun 13
VP-9 ..... Nov 13 - 29 Jun 14
VP-47 Det. ..... Jun - Dec 13

Seventh Fleet AOR
VAQ-133 ..... 1 Sep 12 - 29 Apr 13
VP-26 ..... 1 May - 18 Dec 13

NAS Sigonella
VP-4 ..... Nov 12 - Jun 13
VP-9 ..... Nov 13 - 29 Jun 14
VP-47 ..... Jun - Dec 13
VR-51 ..... 4 Jan - 12 Apr 13
VR-54 ..... 10 Jun - 15 Nov 13
VR-57 ..... 29 Aug - 6 Oct 13
VR-64 ..... 13 Nov 12 - 24 Feb 13

Other
VAQ-130 South America, Mediterranean, Middle East ..... Jul 13 - Apr 14
VAQ-142 Western Pacific, Arabian Gulf, Mediterranean ..... 30 Mar - 16 Dec 13

A plane captain assigned to the VAQ 132 Scorpions communicates via hand signals to the pilot of an EA-18G Growler at NAF Misawa, Japan, 7 January 2013. (Photo by MC1 Alfredo Rosado)

Major Independent Helicopter Deployments

Squadron	Aircraft	Ship	Area of Deployment	Date
HSC-5	SH/HH-60F/H	*Dwight D. Eisenhower* (CVN 69)	5th/6th Fleet	22 Feb - 3 Jul 13
HSC-6 Det. 1	MH-60S	*Nimitz* (CVN 68)	5th/6th/7th Fleet	2 Apr - 12 Dec 13
HSC-6 Det. 2	MH-60S	*Rainier* (T-AOE-7)	5th/6th/7th Fleet	11 Jan - 9 Nov 13
HSC-7	MH-60S	*Harry S Truman* (CVN 75)	5th/6th Fleet	22 Jul 13 - Apr 14
HSC-8	MH-60S	*John C. Stennis* (CVN 74)	5th/7th Fleet	27 Aug 12 - 29 Apr 13
HSC-25 Det. 1	MH-60	*Charles Drew* (T-AKE-10)	Southeast Asia	5 Jun - 8 Dec 13
HSC-25 Det. 6	MH-60	*Bonhomme Richard* (LHD 6)	7th Fleet	23 Jan - 28 Mar 13; 13 Jun - 27 Sep 13
HSL-48 Det. 1	SH-60B	*Forrest Sherman* (DDG 98)	6th Fleet	3 Jul 12 - 26 Feb 13
HSL-48 Det. 4	SH-60B	*Nicholas* (FFG 47)	5th/6th Fleet	20 Jan - 21 Jul 13
HSL-48 Det. 5	SH-60B	*Monterey* (CG 61)	5th/6th Fleet	8 Apr 13 - 5 Jan 14
HSL-48 Det. 7	SH-60B	*Farragut* (DDG 99)	5th/6th Fleet	20 Jun 12 - 29 Mar 13
HSL-60 Det. 3	SH-60B	*Elrod* (FFG 55)	Western Atlantic	28 Jan - 26 Mar 13
HSM-46 Det. 2	MH-60R, MQ-8B	*Bulkeley* (DDG 84)	5th/6th Fleet	19 Jul 13 - 18 Apr 14
HSM-46 Det. 3	MH-60R, MQ-8B	*De Wert* (FFG 45)	5th/6th Fleet	12 Jul - 23 Dec 13
HSM-46 Det. 8	MH-60R, MQ-8B	*Simpson* (FFG 56)	6th Fleet	18 Sep 13 - 20 Mar 14
HSM-46 Det. 9	MH-60R, MQ-8B	*Samuel B. Roberts* (FFG 58)	Central Mediterranean	28 Apr - 23 Oct 13
HSM-51 Det. 1	MH-60R	*McCampbell* (DDG 85)	Western Pacific	15 Oct - 1 Dec 13
HSM-51 Det. 2	SH-60B, MH-60R	*Mustin* (DDG 89)	Western Pacific	19 Jan - 4 Dec 13
HSM-51 Det. 3	SH-60B, MH-60R	*Lassen* (DDG 82)	Western Pacific	19 Jan - 6 Dec 13
HSM-51 Det. 4	MH-60R	*Shiloh* (CG 67)	Western Pacific	14 Jun - 15 Dec 13
HSM-51 Det. 11	SH-60F	*Blue Ridge* (LCC 19)	Western Pacific	22 Feb - 21 Mar 13
HSM-70 Det. 2	MH-60R	*Halyburton* (FFG 40)	Middle East	10 Aug 12 - 9 Feb 13
HSM-70 Det.	MH-60R	*Ramage* (DDG 61)	Mediterranean	7 Aug 13 - 4 May 14
HSM-72 Det. 7	MH-60R	*Jason Dunham* (DDG 109)	Middle East	20 Jun 12 - 4 Apr 13
HSM-72 Det. 8	MH-60R	*Winston S Churchill* (DDG 81)	5th/6th Fleet	20 Jun 12 - 28 Mar 13
HSM-73 Det.	MH-60R	*Freedom* (LCS 1)	Western Pacific	1 Mar - 23 Dec 13
HSM-74 Det. 1	MH-60R	*Gravely* (DDG 107)	Mediterranean	11 Feb - 18 Nov 13
HSM-74 Det. 2	MH-60R	*Mason* (DDG 87)	Mediterranean/Middle East	22 Jul 13 - 18 Apr 14
HSM-74 Det.	MH-60R	*Stout* (DDG 55)	6th Fleet	18 Aug 13 - 4 Apr 14
HSM-75	MH-60R	*Nimitz* (CVN 68)	5th/6th/7th Fleet	30 Mar - 11 Dec 13
HSM-77 Det. 2	MH-60R	*Antietam* (CG 54)	Western Pacific	25 Jun - 5 Dec 13

An MH-60R Seahawk helicopter assigned to the HSM-75 Wolf Pack prepares to land on USS Nimitz *(CVN 68) 21 June 2013. (Photo by MCSN Kelly M. Agee)*

Two MH-60S Seahawk helicopters assigned to the HSC-6 Indians land on the flight deck of USS Nimitz *(CVN 68) 20 November 2013. (Photo by MCSN Siobhana R. McEwen)*

Carrier Strike Group Major Deployments

Dwight D. Eisenhower Carrier Strike Group (CSG)

Mediterranean and Arabian Gulf

21 Feb - 3 Jul 13

Dwight D. Eisenhower (CVN 69)
Hué City (CG 66)
CVW-7 (Tail Code: AG)

Squadron	Aircraft
VFA-143	F/A-18E
VFA-103	F/A-18F
VFA-83	F/A-18C
VFA-131	F/A-18C
VAQ-140	EA-6B
VAW-121	E-2C
HS-5	SH/HH-60F/H
VRC-40 Det. 3 (JK)	C-2A

George Washington CSG

Western Pacific

26 Jun - 25 Aug 13
13 Sep - 5 Dec 13

George Washington (CVN 73)
Antietam (CG 54)
Cowpens (CG 63)
McCampbell (DDG 85)
Lassen (DDG 82)
Mustin (DDG 89)
CVW-5 (Tail Code: NF)

Squadron	Aircraft
VFA-27	F/A-18E
VFA-102	F/A-18F
VFA-115	F/A-18E
VFA-195	F/A-18E
VAQ-141	EA-18G
VAW-115	E-2C
HSC-12	MH-60S
HSM-77	MH-60R
VRC-30 Det. 5 (RW)	C-2A

John C. Stennis CSG

Western Pacific and Arabian Gulf

27 Aug 12 - 3 May 13

John C. Stennis (CVN 74)
Mobile Bay (CG 53)
CVW-9 (Tail Code: NG)

Squadron	Aircraft
VFA-41	F/A-18F
VFA-14	F/A-18E
VFA-97	F/A-18C
VFA-192	F/A-18C
VAQ-133	EA-6B
VAW-112	E-2C
HSC-8	MH-60S
HSM-71	MH-60R
VRC-30 Det. 4 (RW)	C-2A

USS Dwight D. Eisenhower *(CVN 69) transits the Atlantic Ocean during CVW-7's fly-off 2 July 2013. (Photo by MC2 Ryan D. McLearnon)*

Nimitz CSG*

Western Pacific, Mediterranean and North Arabian Sea

Nimitz (CVN 68) **(30 Mar - 16 Dec 13)**
Princeton (CG 59) **(3 Apr - 29 Oct 13)**
William P. Lawrence (DDG 110) **(14 Jan - 7 Nov 13)**
Higgins (DDG 76) **(14 Jan - 7 Oct 13)**
Shoup (DDG 86) **(9 Jan - 18 Nov 13)**
Stockdale (DDG 106) **(14 Jan - 7 Nov 13)**
Preble (DDG 88) **(19 Apr - 18 Nov 13)**
Momsen (DDG 92) **(22 Apr - 22 Aug 13)**
CVW-11 (Tail Code: NH)

Squadron	Aircraft
VFA-154	F/A-18F
VFA-147	F/A-18E
VFA-146	F/A-18C
VAQ-142	EA-6B
VMFA-323	F/A-18C
VAW-117	E-2C
HSC-6	MH-60S
HSM-75	MH-60R
VRC-30 Det. 3 (RW)	C-2A

*Ships deployed without *Nimitz* during the carrier's reactor pump replacement.

Harry S Truman CSG

Mediterranean, North Arabian Sea and Arabian Gulf

22 Jul 13 - 18 Apr 14

Harry S Truman (CVN 75)
Bulkeley (DDG 84)
Gettysburg (CG 64)
Mason (DDG 87)
San Jacinto (CG 56)
Arctic (T-AOE 8)
CVW-3 (Tail Code: AC)

Squadron	Aircraft
VFA-32	F/A-18F
VFA-37	F/A-18C
VFA-105	F/A-18E
VMFA-312	F/A-18C
VAW-126	E-2C
VAQ-130	EA-18G
HSC-7	MH-60S
HSM-74	MH-60R
VRC-40 Det. 4 (JK)	C-2A

The 2013 Year in Review was compiled by Naval History and Heritage Command Archives Branch personnel Dale J. Gordon, Christopher J. Martin, Nicole Michur and Naval Aviation News *senior editor Josh Phillips.*

Professional Reading

By Cmdr. Peter Mersky, USNR (Ret.)

Alexander P. de Seversky and the Quest for Air Power

Libbey, James K. Potomac Books, Inc. Dulles, VA. 2013. 349 pp. Ill. $39.95.

Anyone familiar with American military aircraft between World War I and World War II knows the de Seversky name. Indeed, if you only know the P-47 Thunderbolt and its two main predecessors, the P-35 and P-43, you'd recognize this Russian émigré. This book is the first major biography of this important personality who came to the U.S. after flying in World War I as a Russian Naval Aviator that achieved 13 aerial kills while losing part of his right leg to combat injuries.

It's a well-researched account that occasionally slows down in writing style. I would also have liked to have seen more details of de Seversky's World War I engagements. He flew a little-known Russian fighter, the Shchetinin M-9 two-seater, as well as a Nieuport 21 while leading a fighter detachment. (I recommend Jon Guttman's *Naval Aces of World War I, Part 2*, Osprey, 2012, for more information on the subject.)

There are fascinating glimpses of aeronautical society before World War II, and especially the company he began that eventually became Republic of Farmingdale, Long Island, N.Y. Republic made use of the Russian-born engineers who joined de Seversky and designed the P-47, then the first-generation jet fighter F-84 that flew in the Korean War, followed by the F-105 Thunderchief of Vietnam War fame. But before all that, there was the Seversky Aircraft Corporation that produced several pre-war designs like the SEV-3 floatplane that set a few performance records and the P-35: the U.S. Air Corps' first all-metal monoplane fighter with retractable landing gear and an enclosed cockpit. The excellent cover photo shows a smiling de Seversky on the float of an SEV-3. The picture gives a great candid view of the usually smiling Russian aviator in his period saddle shoes, helmet and goggles. It also shows the construction details of the SEV floatplane.

The single photo folio is adequate. Many of the photos give good ideas of the look and design of a few aircraft that de Seversky either designed or flew. Many of the people in his life are also featured. I do take issue with the author's apparent lack of aeronautical understanding, even when he describes de Seversky's SEV-3. He notes the SEV-3's "smooth performance," but it actually was a short-coupled, clunky and somewhat underpowered amphibian with massive drag-inducing floats as long as the fuselage. Its metalwork made it look like something from Flash Gordon's garage of retro-designed machinery. The design did develop into the BT-8, a basic trainer for the Army, 30 of which were built. The BT-8 did set a standard for the first specifically designed basic trainers of the time when biplane trainers were being phased out for fighter training.

It is plain that while he might have been an excellent aviator and something of an advanced thinker, de Seversky was no businessman. Though possessed of the best intentions, he could not keep his company together and he soon lost control of it. Seversky Aircraft Corporation eventually reconstituted itself into Republic.

Yet, the 1930s were good years. De Seversky and his wife Evelyn — herself a pilot who gained extensive flight time in many of her husband's aircraft — were part of the period's jet set, living the good life in a mansion on Long Island and rubbing elbows with the elite of the time.

As I mentioned earlier, de Seversky's most successful and historically important design was the P-35: a stubby little fighter that struggled for acceptance and ultimately equipped a few Air Corps squadrons as it competed with Curtiss's P-36. Although both fighters had their problems, both were in Hawaii and the Philippines when the Japanese attacked Pearl Harbor and the Philippine Islands on 7 and 8 December 1941, respectively. While both aircraft experienced varying degrees of success, they never found their place in the U.S. Army Air Forces. The P-35 was never really a contender to the P-36, which looked better then the hunch-backed Seversky fighter. But the P-35 did have its innovations which give it a place in Air Force history.

De Seversky leans against the wing of his SEV-3 amphibian, his first production aircraft, in 1934.

As World War II began, de Seversky became something of a prophet predicting events, connecting them to growing air power around the world. He wrote a popular book, *Victory through Air Power*, which Walt Disney cleverly turned into an animated feature movie. (You can see this unusual film in its entirety on the web. It is an excellent example of 1940s animation. Keep in mind that it was all accomplished using individually hand-drawn frames, not like the computer-generated animation we take for granted today.) The movie had mixed reviews, but it certainly got its point across about the value of developing air power, a theme that people like de Seversky and his friend and occasional mentor, Army Brig. Gen. Billy Mitchell, ardently espoused. In fact, he dedicated the film in part to Mitchell. De Seversky enjoys a featured role, one of the few human characters, in the film as he "lectures" about various points and historical events involving aviation.

Coincidentally, a biography of Billy Mitchell by Thomas Wildenberg has just been published by the Naval Institute Press. Together, these new biographies provide a very strong picture of the formative years of the U.S. Air Force and how they affected the other services that not only competed for public and government attention, but for money for development and operations.

An odd note is a point made by Libbey that Billy Mitchell was both friend and mentor to Alexander de Seversky, and to the future five-star general of the Army, then Air Force, Hap Arnold. Arnold reportedly despised de Seversky and did his best to keep him from achieving any degree of success in industry or the Air Force.

De Seversky and world-renowned aviatrix Jackie Cochran chat beside an SEV-S2, a modified Bendix racer developed from the P-35 Army fighter. In addition to Amelia Earhart, Cochran was considered the most famous woman aviator of the pre-war period. Using the SEV-S2, she won the 1938 Bendix Trophy race 3 September 1938. (All photos courtesy of James K. Libbey via Potomac Books)

People—Places—Planes

Edited by Josh Phillips

A U.S. Marine Corps CH-53E Super Stallion helicopter with VMM- 263 Rein, 22nd Marine Expeditionary Unit, prepares to land aboard USS Mesa Verde *(LPD 19) 4 August. (Photo by Cpl. Manuel A. Estrada)*

On the Move

The VMA-223 Bulldogs returned to MCAS Cherry Point, N.C., 30 April from Okinawa, Japan, and South Korea after supporting the 31st Marine Expeditionary Unit (MEU).

USS *Ronald Reagan* (CVN 76) and CVW-2 deployed NB San Diego, Calif., 18 June to participate in the Rim of the Pacific (RIMPAC) 2014 exercise from 26 June to 1 August around Hawaii. USS *Anchorage* (LPD 23) left NB San Diego 10 July to also participate in RIMPAC 2014.

The VP-8 Fighting Tigers returned to NAS Jacksonville, Fla., 8 July after a seven-month deployment to the 4th and 5th Fleet areas of responsibility (AOR).

The VMFAT-501 Warlords returned to MCAS Beaufort, S.C., 11 July after spending several years at Eglin AFB, Fla.

The VMGR-152 Sumos began transferring to MCAS Iwakuni, Japan, from MCAS Futenma, Japan, 15 July.

The VP-16 War Eagles returned to NAS Jacksonville 16 July following their historic seven-month deployment with the P-8A Poseidon.

Milestones

Capt. William Koyama, commander, CVW-5, flying an F/A-18E Super Hornet from the VFA-195 Dambusters, caught the number two arresting wire on USS *George Washington*'s (CVN 73) flight deck 14 June for his 1,000th trap.

The last C-9B Skytrain II was retired after 41 years to Davis-Monthan AFB, Ariz., 28 June.

USS *Independence* (LCS 2) conducted near-simultaneous helicopter and small boat launches for the first time during maritime interdiction operations with two Chinese warships during July's RIMPAC 2014 exercise.

The U.S. Navy delivered the 15th P-8A Poseidon aircraft 5 August to Fleet Replacement Squadron, VP-30, at NAS Jacksonville.

The X-47B UCAS Navy Unmanned Combat Air System returned to carrier operations aboard USS *Theodore Roosevelt* (CVN 71) 17 August and completed a series of tests, operating safely and seamlessly with manned aircraft.

USS Ronald Reagan *(CVN 76) leads a formation of 42 ships and submarines from 15 international partner nations during the Rim of the Pacific 2014 exercise 25 July. (Photo by MC2 Jacob Estes)*

Awards

Commander, Naval Air Forces presented the Cmdr. Theodore G. Ellyson Aviator Production Excellence Award to the HSM-41 Seahawks 1 July.

Lance Cpl. John M. Johnson Jr., left, and Lance Cpl. Jaleel Porter start the engine of a RQ-7B Shadow unmanned aerial vehicle during night flight training at Avon Park Air Force Range, Fla., 4 August. (USMC photo)

Change of Command

Cmdr. Robert G. Sinram relieved Cmdr. Matthew J. Bowen as commanding officer of the HT-8 Eightballers at NAS Whiting Field, Fla., 9 May.

Lt. Col. Shawn M. Basco relieved Lt. Col. Bruce D. Gordon as commanding officer of the VMFA(AW) Bats at MCAS Iwakuni, Japan, 23 May.

Lt. Col. Jamey Federico relieved Lt. Col. Tres Smith as commanding officer of the HMLA-369 Gunfighters at Camp Pendleton, Calif., 6 June.

Cmdr. Christopher C. Jason relieved Cmdr. Aron F. Buckles as commanding officer of the VAQ-134 Garudas at NAS Whidbey Island, Wash., 9 June.

Lt. Col. Kolter R. Miller relieved Lt. Col. Michael D. Gonzalez as commanding officer of the MALS-12 Marauders at MCAS Iwakuni 9 June.

Cmdr. Darren B. Wilkins relieved Cmdr. Michael A. Bisbee as commanding officer of the VAQ-133 Wizards at NAS Whidbey Island 17 June.

Maj. Gen. Michael Rocco relieved Maj. Gen. Steven Busby as commanding officer of the 3rd Marine Aircraft Wing at MCAS Miramar, Calif., 17 June.

Lt. Col. Alvin Bryant relieved Lt. Col. Kevin T. O'Rourke as commanding officer of the VMFA(AW)-533 Hawks at MCAS Beaufort, S.C., 19 June.

Cmdr. William Thames relieved Cmdr. Michael G. Hritz as commanding officer of the VT-7 Eagles at NAS Meridian, Miss., 20 June.

Cmdr. David Cooper relieved Cmdr. Michael Brandhuber as commanding officer of Coast Guard Air Station New Orleans, La., 26 June.

Cmdr. Daniel C. Stone relieved Cmdr. Daniel E. Harwood as commanding officer of the VAW-116 Sun Kings at NAS Point Mugu, Calif., 2 July.

Capt. John Ring relieved Capt. Jeff Ruth as commanding officer of USS *Nimitz* (CVN 68) 8 July.

Cmdr. David Pollard relieved Cmdr. David Baird as commanding officer of the VFA-195 Dambusters aboard *George Washington* 9 July.

Rear Adm. Richard W. Butler relieved Rear. Adm. Scott A. Stearney as commander of Carrier Strike Group 4 at NS Norfolk, Va., 31 July.

Capt. Michael J. McClintock relieved Capt. Gregory T. Eaton as commanding officer of the Naval Reserve Officers Training Corps at University of Idaho/Washington State University in Moscow, Idaho, 7 August.

Cmdr. Grahame A. Dicks relieved Cmdr. Michael J. Weaver as commanding officer of the HSM-46 Grandmasters at NS Mayport, Fla., 14 August.

Cmdr. Nathan Ballou relieved Cmdr. Jesse Hilliker as commanding officer of the VFA-83 Rampagers at NAS Oceana, Va., 25 September.

Scan Pattern

The HMLA-369 Gunfighters transferred authority to the HMLA-467 Sabers aboard Camp Bastion, Afghanistan, 24 May following the completion of their final missions in support of Operation Enduring Freedom.

An MH-60S Sea Hawk helicopter assigned to the HSC-4 Black Knights participates in a Rim of the Pacific 2014 exercise off the coast of the Hawaiian island of Molokai 3 July. (Photo by Ens. Joseph Pfaff)

Sailors aboard USS George Washington *(CVN 73) prepare to launch an EA-18G Growler from the VAQ-141 Shadowhawks 31 July. (Photo by MC3 Paolo Bayas)*

A U.S. Coast Guard MH-65 Dolphin helicopter rescued the pilot of a plane crash south of Corpus Christi, Texas, 3 June.

The keel laying and authentication ceremony for USS *Tripoli* (LHA 7) was held at the Huntington Ingalls Industries Pascagoula, Miss., shipyard 20 June.

The F-35 Lightning II fleet was cleared to resume limited flight 14 July, following the 3 July grounding due to an aircraft engine fire on the runway at Eglin AFB.

The VMFA-312 Checkerboards joined the VMA-223 Bulldogs over MCAS Beaufort 7 August to conduct the first AIM-120 missile exercise for a Harrier platform across the East Coast. Checkerboard pilots dropped ADM-141 tactical air-launched decoys for the Harriers to target.

Transitions

Four CH-46E Sea Knight helicopters from HMX-1 took to the air for the final time from Quantico, Va., 16 July. The aircraft were flown to Florida where they will be transferred to the U.S. State Department.

Mishaps

A VFA-81 Sunliners' F/A-18E Super Hornet impacted the water during an approach to USS *Carl Vinson* (CVN 70) 4 June while operating off the coast of Southern California. The pilot ejected from the aircraft and was recovered safely.

A Marine Corps flight instructor and a Navy ensign sustained minor injuries after their TH-57 Sea Ranger helicopter crashed during a training flight at NAS Whiting Field 5 June.

ABEAN Donovan Dunn signals to raise a jet blast deflector aboard USS Ronald Reagan *(CVN 76) 15 June. (Photo by MC2 Jacob Estes)*

Squadron Spotlight

GROUP/SQUADRON NAME: Carrier Airborne Early Warning Squadron (VAW) 116 Sun Kings

DATE FOUNDED: 20 April 1967

BASED OUT OF: NB Ventura County, NAS Point Mugu, Calif.

CURRENT COMMANDING OFFICER: Cmdr. Daniel C. Stone

MISSION: To execute the Commander's Intent by providing on-scene, carrier airborne command and control of joint and combined forces in the battlefield through the employment of four E-2C Hawkeye Communication Navigation Surveillance/Air Traffic Management (CNS/ATM) aircraft.

BRIEF HISTORY: The Sun Kings were initially assigned to CVW-15 and transitioned to CVW-9 after completing operations in the Far East. In July 1975, VAW-116 transferred to CVW-8 and moved from NAS North Island, Calif., to NAS Miramar, Calif., where the squadron saw duty in the North Atlantic. The Sun Kings transferred to CVW-17 and embarked aboard USS *Forrestal* (CV 59) in 1977, and deployed to the Mediterranean and North Atlantic in March 1978.

The 1980s and 1990s saw VAW-116 transition from the E-2C Group 0 to the E-2C Group II aircraft that brought with it advancements in avionics, communications, propulsion, airframe and navigation systems. The Sun Kings then completed cruises aboard USS *Constellation* (CV 64), USS *Ranger* (CV 61) and USS *Kitty Hawk* (CV 63) in support of Iranian contingency operations, re-flagged Kuwaiti tanker missions, and training operations with the Omani and Royal Thai Air Forces.

During Operation Desert Storm, the squadron flew 1,364 total flight hours and spent 93 days in the Arabian Gulf. The Sun Kings returned in 1993 from a Western Pacific deployment in support of Operation Southern Watch in Iraq and Operation Restore Hope in Somalia, winning the coveted Battle "E" for the third time. Other deployments included support of Joint Task Force special operations in Panama, airborne early warning (AEW) and battle group coverage off the coast of North Korea, and missions supporting Operation Southern Watch over Iraq.

Upon returning, the Sun Kings were awarded the 1992 AEW Excellence Award. In 1998, the squadron deployed to NS Roosevelt Roads, Puerto Rico, to conduct counter-narcotics surveillance operations in support of Joint Inter-Agency Task Force East special operations.

From 2000 through 2004, VAW-116 provided surveillance of Iraq in support of the Operation Southern Watch no-fly zone and was awarded the coveted Safety "S." VAW-116 also embarked *Constellation* in 2002 for "*Connie*'s" last cruise. In 2011, the Sun Kings deployed to Virginia in support of Operation Noble Eagle, where they assisted in providing continuous East Coast AEW coverage as a result of the 9/11 terrorist attacks.

AIRCRAFT FLOWN: Four E-2C Hawkeye 2000 CNS/ATM

NUMBER OF PEOPLE IN UNIT: 154 Sailors

SIGNIFICANT MOMENTS/ACCOMPLISHMENTS:

Transitioned to the E-2C Hawkeye 2000 airframe in 2003.

Executed an emergency surge to the Western Pacific (WESTPAC) aboard USS *Abraham Lincoln* (CVN 72) in 2004. The cruise was extended when the *Abraham Lincoln* Carrier Strike Group (CSG) was called to assist in Operation Unified Assistance in Banda Aceh, Indonesia as a result of earthquakes and tsunamis that struck the area.

Transitioned to the NP2000 eight-blade propeller during their 2006 WESTPAC deployment.

Embarked with CVW-2 aboard *Abraham Lincoln* in 2008 for a seven-month deployment in support of Operations Iraqi Freedom and Enduring Freedom (OEF). During the deployment, the squadron earned the CVW-2 Top Hook award.

Transitioned to the CNS/ATM all-glass cockpit variant of the E-2C in March 2011.

Embarked with CVW-2 for an eight month deployment aboard *Abraham Lincoln* in support of OEF in December 2011.

Joined CVW-17 in October 2012 as a member of CSG-1 aboard USS *Carl Vinson* (CVN 70).

Completed a pre-deployment work-up cycle comprised of three detachments to NAS Fallon, Nev., and three detachments aboard *Carl Vinson* in 2014.

(Photo by Jason A. Penny)

If you are interested in being featured in an upcoming Squadron Spotlight, *please contact us at nannews@navy.mil.*

NAVAL AVIATION NEWS