

THE NAVY AND MARINE CORPS AVIATION SAFETY MAGAZINE

Approach

VOL. 66, NO. 2

RIMPAC
2024

**REDEFINE YOUR
PINNACLE EVENT**

Set a new standard for safety

.....✈
+ MORE

Aviation Safety Team



NAVAL SAFETY COMMAND

Rear Adm Daniel P. Martin
Commander

CMDCM (AW/SW) Dean Sonnenberg
Command Master Chief

CONTACT US

NAVSAFECOM Report a Mishap
(757) 444-3520 | DSN 564 (757) 444-2929 | DSN 564

AVIATION SAFETY

Navy Capt. Michael Hoskins
Director | michael.w.hoskins2.mil@us.navy.mil | ext. 7225

Adam Hyams
Deputy Director | adam.e.hyams.civ@us.navy.mil | ext. 7226

ANALYSIS

NAVSAFECOM_Code11_Aircraft_OPS@navy.mil | ext. 7811

Navy Capt. John Ciganovich
Aircraft Operations Division Head /Analyst T-45/E-2/C-2A
john.h.ciganovich.mil@us.navy.mil | ext. 7272

Cmdr. Eli Rosenberger
Fixed Wing Branch Head/Analyst TACAIR/FA-18 A-F/EA-18G/F-35C/F-16/F-5/C-130/
Various Transport | eli.j.rosenberger.mil@us.navy.mil | ext. 7217

Lt. Cmdr. Nick Murray
Analyst TACAIR/FA-18A/B/C/D/F-35B/C | nicholas.p.murray4.mil@us.navy.mil | ext. 7303

Cmdr. Brady O'Neal
Analyst TACAIR/FA-18A/B/C/D/F-35B/C/AV-8B
brady.d.oneal.mil@us.navy.mil | ext. 7248

Lt. Cmdr. Chris Elliott
Analyst P-3/P-8/E-6/FW UAS | christopher.h.elliott.mil@us.navy.mil | ext. 7028

Cmdr. Christopher Van Allen
Rotary Wing Branch Head/Analyst H-53/MCM
christopher.b.vanallen.mil@us.navy.mil | ext. 7236

Cmdr. Robert Harrell
Analyst TH-57/73/MH-60/RW UAS | robert.a.harrell.mil@us.navy.mil | ext. 7263

Lt. Cmdr. Joseph Luna
Analyst TH-57/73/MH-60/RW UAS | joseph.r.luna1.mil@us.navy.mil | ext. 7248

Maj. Matthew Hammond
Analyst H-1/V-22/NVG | matthew.d.hammond8.mil@us.navy.mil | ext. 7206

Lt. Jonathan Polanco
Aviation Flight Deck Analyst | jonathan.polanco.mil@us.navy.mil | ext. 7281

Senior Chief Air Traffic Controller Matthew Cuppernoll
Analyst ATC/Facilities | matthew.c.cuppernoll.mil@us.navy.mil | ext. 7035

Chief Air Traffic Controller Chris Robbins
Analyst ATC | christopher.n.robbins2.mil@us.navy.mil | ext. 7279

Navy Capt. Jonathan Erpenbach
Aeromedical Division Head | jonathan.d.erpenbach.mil@us.navy.mil | ext. 7268

Navy Capt. Merrill Rice
Aeromedical Analyst | george.m.rice10.mil@us.navy.mil | ext. 7203

Lt. Cmdr. Nicola Robinson
Aerospace and Operational Physiology Branch Head/Analyst
nicola.m.robinson.mil@us.navy.mil | ext. 7210

Lt. Cmdr. Jarrett Moore
Aerospace and Operational Physiology/Analyst
jarrett.g.moore.mil@us.navy.mil | ext. 7216

SAFETY PROMOTIONS-PUBLIC AFFAIRS

Jeffrey Jones Priscilla Kirsh
Department Head Supervisory Editor

Ani Pendergast Rebecca Coleman
Editor, Layout and Design Editor, Writer and Production

Approach content

The content in Approach Magazine is written 'by aviators for aviators' across the Navy and Marine Corps. Articles, columns and supporting information is often written in conversation style to facilitate discussions across ready rooms in support of risk management across the Department of the Navy.

IN THIS ISSUE

VOL. 66, NO. 2

- 5 REDEFINING OUR PINNACLE EVENT
Lt. Cmdr. Phillip Rogers, VAW-117
- 6 THE ORIGIN OF SLAM STICKS & HhART
Lt. Cmdr. Nicola Robinson, NAVSAFECOM
- 9 WHEN IN DOUBT, THERE IS NO DOUBT
Lt. Forest Barnedt, VQ-1
- 10 TRUST THE GAUGES
Lt. Gavin S. Sanchez, HSC-4
- 12 POLAR PROFESSIONALS
Lt. Nicholas Payne, VP-9
- 14 FOUL LINE VIGILANCE
Lt. Cmdr. Ryan Garcia, VFA-151
- 15 SMOKE CHECK
Lt. Matthew Measer, VQ-1
- 16 RIMPAC 2024
Lt. Gabrielle Bonowski and
Lt. Chuck Dimer, HSC-6
- 18 HYPER-EXTENDED WING
Lt. Jeff Nadela, VFA-27
- 20 SLIDING INTO MY DMs
ALTERNATIVE CRM
Lt. Cmdr. Kevin Farley, VFA-195
- 24 CHANGING THE WAY WE DO BUSINESS
Lt. Cmdr. Paul Shen, VFA-22
- 26 READY TO GO...IN THE WRONG PLANE
Lt. Cmdr. Mike Toft, VT-31
- 30 OKINAWA WEATHER RISKS
Lt. Seth Crean, VP-10



Stay Connected





Commander, Naval Safety Command

Fellow Aviators,

During the 2024 Aviation Safety Summit, VADM Cheever, our AIRBOSS, set an aggressive goal to reduce aviation mishaps by 50%. We achieved a 25% mishap reduction in the second half of the fiscal year. This was largely driven by active engagement with the AIRBOSS, CAGs, Commodores, and squadron CO's.

Across the Naval Aviation Enterprise, we aim to achieve that 50% goal. Aviation Ground Mishaps (AGMs) made up 63% of the 2024 mishap rate. In 2025, we will pursue this initiative even further. One such effort is directly focused on reducing aircraft handling mishaps while embarked. Although we have seen a downward trend in reducing ground mishaps which is a success story, we must maintain the fortitude to go further by focusing on deckplate leadership and procedural compliance. Mishaps, while deployed, take players (aircraft and aviators) off the field when 'fighting the fleet' is a requirement.

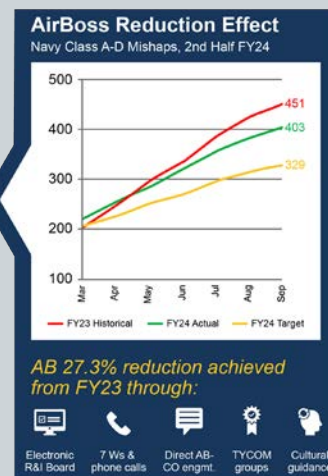
To succeed, we must overcome the easy way out of cutting corners and recognize the hidden dangers in what we consider well-performing operations. This practice requires leadership from the Chief's Mess to the CO, to ensure airborne and maintenance procedures are executed properly. Everyone is a safety officer.

Motorcycle mishaps: we need your help in driving home the dangers of riding to our Sailors & Marines. We have already lost 8 Sailors and 6 Marines to motorcycle crashes since October 1st and numerous non-fatal mishaps which takes the form of lost work days by our trained professionals, which directly affects our readiness. This trend hurts the Fleet. Poor decision-making, reckless behavior and excessive speed dominate the underlying factors that lead to these mishaps. Our riders, while qualified, desperately need mentorship from our NCOs.

At the Naval Safety Command, we focus our efforts to preserve lives and enhance the well-being of our USN/USMC members by protecting the equipment they need to accomplish their mission. Ultimately, safe operations equal effective operations which preserves combat readiness. Our expensive equipment is useless without our qualified Sailors and Marines that operate it.

Take Off Checks Complete,

RADM Dan "Dino" Martin, USN
CO, NAVAL SAFETY COMMAND



REDEFINE YOUR PINNACLE EVENT

By LT. CMDR.
PHILLIP ROGERS

AIRBORNE
COMMAND
& CONTROL
SQUADRON
(VAW) 117
WALLBANGERS

Safety isn't just a priority — it's a culture.

Every near miss, every lesson learned and every safety procedure is integral to ensuring the well-being of our personnel and the success of our missions.

Recently, our squadron faced what we have redefined as our "Pinnacle event," a near miss that served as a catalyst for shifting how we view our safety culture. This article isn't a discussion of the near miss itself. Instead, it delves into how we leveraged the event to elevate our safety culture, emphasizing the importance of "doing the right thing" and treating safety as a non-negotiable standard.

Our squadron has long recognized the significance of near misses in shaping our safety protocols. However, it was time to reaffirm our understanding. The Pinnacle Event wasn't just a change in terminology; it was a shift in mindset. By elevating the significance of this event, we emphasized every near miss as an opportunity for improvement, not just a close call. The idea was to ensure we not only called this our Pinnacle Event, but make a conscious effort we treat it as such.

Leadership took charge and organized safety pauses that brought the entire command together. These pauses weren't just about acknowledging the event; they were about dissecting it, learning

from it and taking steps to ensure it never happened again. Every member of our squadron was involved, from junior personnel to seasoned leaders. Debrief forms from these safety pauses were collected to solicit feedback from all hands on how our policies and procedures can be improved from a safety perspective. The safety department read every response and compiled a list of actionable items to address the concerns. The list was forwarded to the front office to ensure a high level of visibility and highlight the importance of safety within the squadron. Additionally, the quality assurance section conducted a full investigation into the near miss incident. These efforts helped to treat the near miss as if an actual mishap had occurred. Leadership also made personnel changes to address the serious issues we were redefining.

At the core of our safety culture lies leadership commitment. We emphasized "doing the right thing" isn't a suggestion; it's an expectation. Our leaders set the example, demonstrating safety protocols and procedures are non-negotiable. Cutting corners isn't tolerated and ethical decision-making is paramount. The commitment filtered down and was reinforced at every level, creating a cohesive approach to safety throughout the command.

One of our key strategies was integrating safety culture into our daily operations. Safety isn't something reserved for specific days or events. It's a part of who we are. By "baking in" safety into everything we do, from routine tasks to high-risk evolutions, we ensure safety is always at the forefront of our minds. The integration ensures safety isn't an afterthought but a natural part of our operations. The importance of briefing and debriefing maintenance evolutions has been stressed. We've

implemented a plan, brief, execute, debrief process into every evolution exactly how we would operate tactically. Leadership has explored ways to improve the process to best capture any lessons learned to reduce the number of safety incidents moving forward. Rather than filling out brief and debrief forms with "standard" information, we emphasized looking for things that are different each day.

We also accentuated the importance of a proactive reporting culture. Every member of our squadron is encouraged to report near misses and potential hazards promptly, whether anonymously or in person. Rather than waiting for an incident to occur, we're proactive in identifying and addressing potential risks. The shift in mindset has empowered our personnel to take ownership of safety, knowing their reports aren't only welcomed but essential for our collective well-being. When every member of the squadron checks into the command, they're told safety has no rank and the safety department has an open door policy for discussing any safety concerns.

Our squadron's journey to elevate our safety culture began with redefining our Pinnacle Event. By treating this near miss with the gravity it deserved, we set a new standard for safety within our command. Emphasizing "doing the right thing" and integrating safety into our daily operations were key steps in the transformation. We aren't just a squadron that prioritizes safety; our squadron embodies it. Our commitment to safety is unwavering and we continue to learn, adapt and improve with every flight and maintenance evolution. As we move forward, we carry this new standard with us, ensuring safety isn't just a culture but a way of life. ✈



An E-2D Hawkeye attached to Airborne Command and Control Squadron (VAW-120) on the flight deck of Nimitz-class aircraft carrier USS George Washington (CVN 73) in the Atlantic Ocean, Jan. 14, 2024. (U.S. Navy photo by Mass Communication Specialist 3rd Class August Clawson)

By LT. CMDR. NICOLA ROBINSON

PHYSIOLOGICAL EPISODES ACTION TEAM (PEAT)

STEADY UNDER PRESSURE

THE ORIGIN OF SLAM STICKS & HhART

Have you ever wondered how Slam Sticks came about and why they're so important in helping reduce your chance for a physiological event (PE)?

In the 2015-2016 time frame, Strike Fighter Squadron (VFA) 37 experienced an abnormal increase in environmental control system (ECS) PEs. The ECS Fleet Support Team (FST), located in North Island, California, traveled to Naval Air Station Oceana, Virginia, to assist the squadron in troubleshooting the aircraft issues.

PMA-265, the F/A-18 and EA-18G program office, offered the FST a box of Slam Sticks (recordable pressure and vibration sensors) to help build a better picture of what was occurring from a pressurization standpoint in the cockpit.

SLAM STICK BZ

Top performing Navy and Marine Corps squadrons for Slam Stick matching from recent months. The ongoing use of Slam Sticks is key for enabling a healthy aircraft and aviator. **Bravo Zulu to the winners.**

Oct: 1) TPS: 100%
2) VFA-103: 98.27%
3) VAQ-136: 95.89%

Sep: 1) VX-23: 96.3%
2) VAQ-136: 95.12%
3) VAQ-142: 95.08%

Aug: 1) VAQ-134: 97.3%
2) VFA-37: 96.43%
3) VAQ-137: 92.81%

July: 1) VAQ-131: 100%
2) VAQ-135: 97.96%
3) VFA-105: 94.87%

June: 1) VAQ-131: 100%
2) VAQ-134: 100%
3) VFA-32: 100%




Figure 1. Naval Safety Command's Slam Stick Bravo Zulus.

Before the onset of ECS issues, Slam Sticks were primarily used for aircraft vibration testing. The Slam Stick gave the engineers the first definitive information as to what cabin pressures the aircrew was experiencing inside the cockpit. Initially, the FST had to manually match the data from the Slam Stick and Memory Unit (MU) data via computer programming. Despite this tedious work, the value was seen in the information obtained.

Naval Air Systems Command, in conjunction with Commander, Naval Air Forces (CNAF), decided to purchase 1,000 Slam Sticks which were distributed to the Navy and Marine Corps F/A-18 and EA-18G squadrons. This purchase was followed up by a request for Boeing to incorporate, match and display the data produced from the Slam Stick and MU into the F/A-18 Automated Maintenance Environment (FAME).

At first, squadrons were hesitant to use the Slam Sticks due to limited knowledge on downloading the data correctly after each flight. This changed after PE roadshows and the publication of the tri-wing Slam Stick instruction and subsequent CNAF endorsement. The Marine Corps received its own instruction via Headquarters Marine Corps and Marine Aircraft Groups.

With thousands of data files continuously being collected for each aircraft, data scientists came together to develop a system that sifts through the data, evaluates signals received and recognizes the parts not performing within expected values. Next the engineering and data science teams created features to run the data automatically, forming the backbone of the system known as the Hornet Health Assessment and Readiness Tool (HhART).

The HhART system is a preventative maintenance tool minimizing the risk of fly-to-fail maintenance parts, which were identified in the Root Cause Corrective Action team report as a contributor to PEs. The program has since expanded to cover fuels, flight controls, hydraulics, avionics and mission systems and power and propulsion with varying levels of maturity.

Some HhART features have been incorporated into FAME so the squadron may see a maintenance action immediately upon download (figure 5). Other reports may come from engineering teams or as HhART Alerts sent to the squadron directing maintenance and incorporation timeline. An example of the data HhART produces (figure 3 and 4), shows individual aircraft health and how it recommends a maintenance action.

In part, due to the roll out of HhART in 2019, PE rates dropped dramatically (figure 6), especially for ECS-related PEs. The development of programs like HhART, where the preconditions for a PE can be engineered out, are a significant achievement stemming from the overall PE effort.

The key takeaway is that the Slam Stick data enables HhART to effectively monitor cabin pressurization health, which ultimately helps protect the aircrew from PEs. To keep HhART monitoring at a high confidence level, your unit needs to be above 80% for file matching (figure 2). This means > 80% of your total flights have a matching Slam Stick and MU file. A monthly Slam Stick Matching Report is e-mailed to the fleet from the PMA-265 Military Class Desk showing the Slam Stick matching rates for each Navy and Marine Corps squadron and wing which is color coded. Green is > 80%, yellow is 60-80% and red is < 60%.

Slam Stick Matching Report							
SQUADRON	APR 24	MAY 24	JUN 24	JUL 24	AUG 24	SEP 24	Six Month Rolling Avg
VFA-XX	74.85%	87.79%	88.33%	84.54%	59.85%	76.92%	78.03%
VFA-XX	89.61%	90.22%	90.30%	94.87%	89.47%	16.67%	86.65%
VFA-XX	72.11%	69.08%	65.27%	70.10%	72.46%	75.72%	70.90%
VFA-XX	83.89%	88.36%	81.38%	77.84%	91.45%	65.25%	82.67%
VFA-XX	86.81%	81.32%	87.27%	65.22%	50.00%	44.79%	74.42%
VFA-XX	86.77%	85.63%	86.78%	84.58%	80.60%	69.15%	82.40%
VMFA-XX	76.47%	75.00%	72.73%	65.52%	75.41%	59.46%	71.78%
VMFA-XX	60.94%	70.80%	75.18%	70.54%	74.43%	35.24%	67.41%

Legend:

- Below 60% matching of MU & IDE files
- Between 60% & 80% matching of MU & IDE files
- 80% or greater matching rate of MU & IDE files

Figure 2. Example of a PMA-265 Military Class Desk matching report for September 2024 Slam Sticks.

There are still known problems for squadrons deployed on carriers. The FAME FST located in North Island, California, checks any aircraft carrier (CVN) before deployment for firewall issues that may block the data transfer. However, the data transfer is still limited to ship bandwidth and any restrictions on electronic emissions. Any squadrons having difficulty getting files off the CVN should coordinate with CAG IT and FAME FST. In every *Approach* edition, the Naval Safety Command recognizes the top Slam Stick matching units in recent months (figure 1).

The F/A-18 fleet is gradually being outfitted with the Cabin Pressure and OBOGS Monitoring System (CPOMS) which has a digital Cabin Pressure Altimeter (CPA) readout for cabin pressure, high or low cabin pressure fluctuation warnings, O₂ concentration warning and an On-Board Oxygen Generation System outlet pressure warning. However, to get the cabin pressure data from CPOMS, there are certain requirements. The aircraft has to have power applied, the maintainer requires a Portable Electronic Maintenance Aide and a download cable must plug into the CPA to begin the download process. The process is quite burdensome and, until the capability is funded where the data automatically flows from the CPA to the maintenance card, Slam Sticks will remain the primary source for ECS monitoring in HhART.

Bottom line: Fly with your Slam Sticks so HhART can keep the aircraft healthy and you safe! ✈

Slam Stick point of contact:
Brian Donovan at brian.m.donovan.ctr@us.navy.mil.

NAVAIR Public Release 2024-0375 Distribution Statement A. Approved for public release: distribution is unlimited.



The size of a Slam Stick. (Photo courtesy of enDAQ)

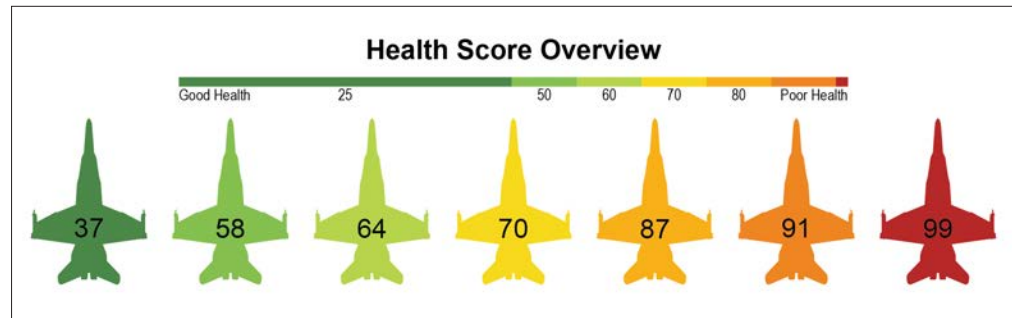


Figure 3. Example of a Health Score Overview.

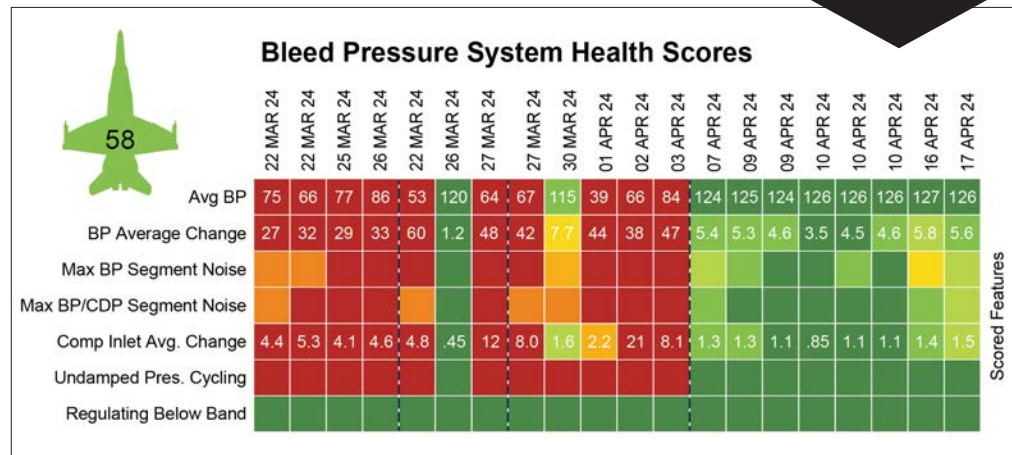


Figure 4. Example of Bleed Pressure System Health Scores.

Maintenance Shop Alert

HhART Alert: F/A-18E Undamped Bleed Pressure Cycling 03/16

Notification: On 03/04, HhART confirmed that squadron VFA-XX, satisfied the logic condition for Undamped Bleed Pressure Cycling.

Remedy Action: If Item 2 hasn't already been R&Red since this flight, perform the following:

- 1) Check Item 2 sensing line, correct any issues found (loose b-nut/leaks/blockage, etc).
- 2) If no sensing line issues found, R&R Item 2.
- 3) If the flight hours on the Item 2 are below 40 hours, PQDR the Item 2.

Compliance Time: Prior to next flight.

Figure 5. Example of a Maintenance Shop Alert.

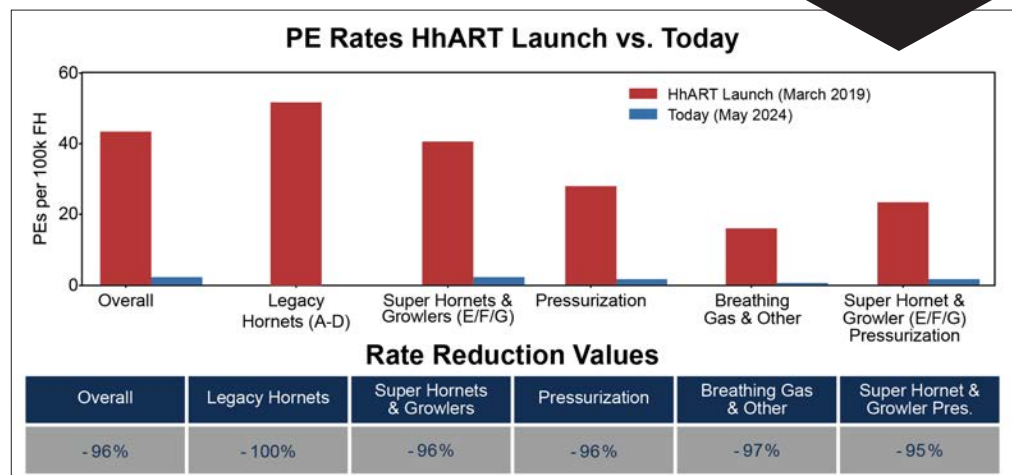


Figure 6. Example of a PE Rates HhART Launch vs Today (May 2024) report.

BRAVO ZULU

★ SAILORS AND MARINES
PREVENTING MISHAPS ★



CAPT. MAX LAROCHE
MARINE CORPS
TRAINING SQUADRON (VT) 21

In July 2024, Capt. Laroche was conducting a ferry flight to return a jet to NAS Kingsville, Texas after a hurricane evacuation, when he experienced a severe engine malfunction.

Shortly after takeoff, while climbing through the Dallas Class B, Laroche heard a loud bang and immediately observed cockpit indications of engine failure. Laroche accurately assessed the malfunction of the engine and immediately declared an emergency.

Unable to maintain level flight, Laroche calmly and professionally coordinated with air traffic control to navigate to the nearest suitable field for a successful precautionary approach.

Thanks to Laroche's outstanding headwork, excellent piloting skill and superior decision making, the aircraft was recovered in a safe manner. Bravo Zulu Capt. Laroche!



By **LT. FOREST
BARNEDT**

**FLEET AIR
RECONNAISSANCE
SQUADRON (VQ) 1
WORLD WATCHERS**

I don't remember when I first heard that saying, "When in doubt, there is no doubt" or when in the ongoing process of learning to fly, it stuck.

More importantly, what it means to me is to leave no stone unturned. Leave nothing to chance. Use assertiveness to bring up anything of note to make sure the crews' situational awareness is as high fidelity as possible, to make the best decision possible, as a team.

Sounds a lot like crew resource management, right? The tricky part is how and when to bring things up that flirt with the edge of "Is this an issue?" – especially

in an aging platform, where the remaining aircraft have their own quirks and repeat gripes and unusual malfunctions are becoming more common. While many degradations are manageable and allow us to remain on mission, it's a constant battle to make good decisions for what we can remain on mission with versus when it's best to take the "off ramp" and end the day safely. It's most difficult when a situation develops slowly and insidiously, while other tasks and concerns outcompete the little issues for bandwidth.

On the morning in question, I found myself acting as aircraft commander with a more senior and experienced pilot acting as copilot and an experienced flight engineer (FE) rounding out the flight station. We were scheduled for a relatively simple EP-3E "green trainer" flight, mostly for the mission crewmembers' training and proficiency. My focus was mostly on getting the three-, then four-, then five-hour preflight wrapped up to get off deck quickly and back on deck on time. The control cables, which would become the day's ultimate issue, posed no concern during preflight and the daily coordinated flight control checks. Although firm (compared to some of the other 50-plus year-old aircraft), the rudders were like another aircraft I was familiar with. The aircraft this day, and the one I had previous knowledge of, had rudder control cable parts replaced months before after a cable had snapped on deck during preflight and the other aircraft's cable showed fraying.

During the preflight checks and inspections, we had other gripes across a few unrelated systems that extended the time on deck. After a few cycles and a couple hours discovering issues then coordinating solutions with maintenance, we were ready to continue and started up. At the point where the checklist called for it, one more check of the flight controls was done, with all aircraft systems online. It was then I first noticed the firmer throw of the rudders, but no different than an hour before. This time I took note of it, moved the control again, but decided it seemed fine. Due to experience with more firm controls after they were repaired, I had become complacent and accepting of the condition, chalking it up to being "normal" because of the new parts.

WHEN IN DOUBT, THERE IS NO DOUBT

Once cleared for takeoff, power was set and the roll began. Transitioning from nose wheel steering (NWS) to controlling yaw with the rudders as airflow made them effective, the muscle memory I've come to rely on told me something was different. The rudders typically have flutter and feedback from the prop wash (airflow) moving over the aircraft and the relative wind developing with speed.

The feedback was absent and made obvious how firm the pressure required to move the control surface really was. I asked the copilot, "Mac, are you on the rudders?" thinking the copilot's feet could be dampening the pedals. He replied he wasn't. Not knowing why the takeoff roll I've done hundreds of time was different, I elected to abort before any more speed built up and deal with whatever was happening on the ground. The rudders were still free enough to control the plane during reversal without difficulty, until the aircraft slowed sufficiently to use NWS. After exiting the active runway, the flight station crew had time to discuss what the situation was, in a safe location with no time pressure. The copilot tested the controls from the right seat and confirmed they were seemingly tighter than normal, but no binding or clicking was present nor excessive force required. We taxied back to the spot and shut down allowing the FE to also test the controls. He noticed an almost imperceptible tightening of the control over successive tests, but none of the usual signs of control malfunctions, per the Naval Air Training and Operating Procedures Standardization manual.

After we all agreed the controls felt unusual, we decided to cancel the mission and bring maintenance into the process. We weren't sure what the issue could be, since all the hydraulic systems showed nominal outputs and none of the troubleshooting we had done revealed any clues or changes, but we still had lingering doubts about it. Was this something? Or had our fixation and subjective analysis caused us to make a mountain out of a molehill? All doubt was removed an hour later when the air framers came back with a picture of the pilot's side (left seat) braided steel rudder control cable off its pulley, sawing through the bracket that holds it with each motion of the control.

I give all the credit to my fellow flight station crew members whose judgment helped prevent the situation from progressing any further and the maintainers who diagnosed what was really going on that day. I am thankful we fly together as a crew, to lean on each other's experience to handle malfunctions, perspective to situations and ways to make better decisions. As a team we can handle the increasingly difficult and diverse set of challenges the last of the P-3 fleet is faced with. The right time and place to handle doubts is early and before ever getting airborne.

If there is any doubt, there is no doubt. ✈



Eyes in the sky. An EP-3 Aries from the "World Watchers" of Fleet Air Reconnaissance Squadron (VQ) 1 fly by the aircraft carrier USS Nimitz (CVN 68) in the Arabian Gulf, Oct. 22, 2020. (U.S. Navy photo by Mass Communication Specialist 3rd Class Charles DeParlier, cropped to highlight aircraft)

TRUST THE GAUGES

By LT. GAVIN S. SANCHEZ

HELICOPTER
SEA COMBAT
SQUADRON
FOUR (HSC) 4
BLACK KNIGHTS

A common piece of advice given to new pilots starting flight school is, "trust the gauges".

As professional naval aviators, we undergo extensive training in spatial disorientation, aviation physiology, night imaging, threat evaluation and helicopter instruments.

We are also trained to fly in instrument meteorological conditions and visual meteorological conditions, both during day and night. The training isn't a formality or a waste of time, despite how inconvenient it may seem. The training is designed to prepare us for the inevitable moment when we'll experience that gut-wrenching feeling of vertigo and need to rely on what we've been taught.

My most memorable experience with vertigo occurred in March 2023 during one of my first night flights off USS Carl Vinson (CVN 70) during our work-up tailored ship's training availability exercise. True to San Diego's typical weather, the evening's overcast layer created a zero percent illumination environment. By this time, I'd probably had only a handful of flights off the carrier. Although I wasn't highly experienced, I'd learned the sequence for takeoffs on the ship: make the "Redlight" call, take off, perform the power pull to check power availability and continue with radio check-ins. I'd seen it all before. What I hadn't experienced was the transition on night vision devices from the well-lit deck of the carrier to the pitch-black sky over the Pacific.

I took off as I'd seen demonstrated during the day. Above the landing area, I increased the collective until I saw the yellow precautionary torque indications, climbed with the cyclic to keep our speed below 80 KIAS (knots indicated air speed) and turned left to establish ourselves in the port delta. While attempting to make all these control inputs simultaneously as a brand-new pilot qualified in model (PQM), all lights and visual references disappeared and I was suddenly in space. The dreaded feeling of not knowing whether I was climbing or descending, turning or leveling out, hit me and my body froze. "Trust the gauges" was all I could think as I shifted my focus from the void outside to the instruments on my screen.

First, I noticed the torque as the 10-second precautionary countdown flashed, warning me I was about to over-torque the engines. Next, I saw the turbine gas temperature gauges turning from yellow to red, indicating this much power was about to damage my engines. Then, as I subconsciously pulled the cyclic

closer to my chest, the airspeed began to bleed off rapidly as we entered an unusual attitude left climb. "I have controls!" yelled the helicopter aircraft commander (HAC) as he quickly reduced power and pushed the nose forward to regain airspeed. The engine gauges returned to their continuous ranges and our wings leveled out, but the speed only increased slowly despite our vertical speed indicator showing a significant descent rate. Power was brought back in to stop the descent, but the nose remained five degrees below the horizon and our airspeed refused to increase as expected.

"Why is our speed showing zero?!" said our HAC, as frustrated as I was at how quickly a routine takeoff had turned into what felt like an emergency. That's when I remembered our Unusual Attitudes emergency procedures: Level the wings, nose on the horizon, center the ball. "THE BALL!" I responded. We both looked down to see the ball was all the way to the left, indicating we were still in unbalanced flight and the nose of the aircraft was likely blocking airflow through the pitot tubes, preventing accurate airspeed readings. Once the ball was centered, both airspeed indicators shot up to our actual airspeed and we finally recovered to a stable aircraft state.

Eight seconds. That's about how long our incredibly uncomfortable takeoff lasted due to my vertigo. Those eight seconds taught me valuable lessons and have made me a safer pilot.

First, trust the gauges. As humans, we derive 90% of the information we gather from our eyes and it can be disorienting to suddenly lose all of that input. That's why the gauges are so comforting. The chances of both air data computers malfunctioning are low, so they are reliable and will keep you safe, despite how your other senses might mislead you.

Second, slow down. I was a new PQM in the squadron and tried to emulate the takeoffs I'd seen without considering the need. With the lack of illumination and my inexperience flying off the ship, a takeoff broken down into its respective parts might have been slower but much safer. By climbing, then turning, then pulling power, I would've only been adjusting one axis of motion at a time and far less likely to enter an unusual attitude. I've since learned to slow down and will carry the lesson with me as I fly with copilots in the future.

Third, communicate. The HAC did the right thing by taking controls and applying his knowledge of attitude/airspeed relationships to put us in a safe aircraft state but he still made the simple mistake of not checking the ball. In his confusion, he voiced his concern, and despite my own confusion, I was able to back him up on the gauges. This example of assertiveness and communication demonstrated the crew mentality we need to bring to every flight to safely complete our mission. ✈

Lt. Robert Geiger, left, and Lt. Cullen Hanks, assigned to the "Pioneers" of Air Test and Evaluation Squadron (VX) One, pilot a MH-60S helicopter during a joint defense training exercise in Alpena, Michigan, Aug. 13, 2024. (U.S. Navy photo by Mass Communication Specialist 1st Class Juel Foster)

POLAR PROFESSIONALS

VP-9'S ARCTIC ADVENTURE

By **LT. NICHOLAS PAYNE**

PATROL SQUADRON (VP) 9
GOLDEN EAGLES

"Unable primary and secondary. Meet on five fingers." We heard the tanker reaching out to us, but we found ourselves unable to reply. We needed two-way comms with the tanker before we could rendezvous and head west, but equipment was not cooperating. My crew was crawling across the North Pacific, headed over the Aleutians almost a thousand miles from our departure airport and half empty on gas. Our VHF radio squawked as the tanker reached out again, the first chatter we heard on VHF since we left air traffic control two hours earlier.

With comms re-established, we met our tanker and snuggled into contact while they refilled us with a little over 44,000 pounds. For a plane bagged out around 67, this refuel was a big onload. As the fuel flowed in, I chatted with my tanker – the third such Stratotanker crew I had met in as many nights. I felt confident and asked them how the weather was in Eielson, Alaska, the base only 200 miles north that had supported our operations in Alaska so far. The boom operator seemed eager to reply, "I'm not sure, but it was nice in Hickam when we left."

My divert, if we couldn't get gas, was Cold Bay, Alaska – halfway down the Aleutian Island chain. Hickam Air Force Base, Hawaii was over 2,000 miles to my south. The tanker crew had taken off from paradise five hours previously on Memorial Day weekend and slogged North to meet me in the stygian darkness over the ocean to fill my aircraft. Only 45 minutes after we met on five fingers, they turned south and started their long pilgrimage home. When we had briefed on the ground, we understood the mission was important. When the boom operator told me how far they had come just to support my flight, I felt important.

We left the tanker behind and continued out over the Aleutians. We stood on the shoulders of maritime giants – in 1978, our VP-9 predecessors had taken off out of the Aleutians and found themselves in the water, recovered from a ditched Orion by a Russian fishing trawler. There were no fishing trawlers out today. The ocean belonged to us, and us alone, as we left the island chain. We were at the absolute western end of the United States chasing adversary targets. It was textbook; we were executing the maritime anti-submarine warfare mission exactly as we trained. We were flying all night with joint support through tankers; we were alone on station and passing reports intermittently due to high latitude communication struggles. Every night we flew farther and tracked longer. It is the peacetime mission we aspire to.

Nine hours later, we finished the longest flight of the detachment and landed in Elmendorf Air Force Base in Eielson, Alaska. We were the last Golden Eagle crew to fly on the target; we had closed out Alaska operations. Back on the ground, we had two tasks. First,

to get some sleep. Second, to move out of our hotel rooms for the fourth time and into a new hotel. In the air, we felt like the rock stars of our mission – no one was more important. We flew alone, we held contact alone; we had tankers flying 10 hours from Hawaii just to support our operations. But on deck, due to unfortunate timing and overlaps, we were far from priority and it showed every day.

When the Golden Eagles had arrived in Alaska, we were late party crashers. Northern Command already had a party going. Exercise Northern Edge was in full swing with assets from many communities and across multiple branches, even partner nations, already entrenched. Elmendorf's ramp was crowded with a who's who of U.S. military equipment and more assets out of our sight, operating out of Eielson and across the Joint Pacific Alaska Range Complex. Ramp space was at a premium, boarding on base was already booked solid with exercise troops and space was scarce.

Our hosts were phenomenal. Elmendorf Air Force Base was incredibly accommodating to our detachment – but we felt unique struggles as we penciled ourselves in around the exercise. Our sleek warbirds found homes on the Elmendorf ramp but there wasn't enough open space for us to nest together. A handful of our P-8s shared a ramp with C-130s south of the runway near the passenger terminal and our maintenance spaces. On rotation, other birds roosted north of the runway squeezed between the towering C-17s.

Our maintenance spaces were a semi-abandoned building on the flight line. The building was perfect for our needs but clearly showed signs of disuse. Maintenance quickly made the space our own – a 17-inch hole in the plaster wall sported a duct tape strip labeled "LIGHT SURFACE CORROSION" and a collateral duty inspector signoff. Our tactical spaces were crisp, clean offices – borrowed from active owners. We worked in empty rooms, conference rooms after hours or an office whose occupant was on leave at the time. We squeezed in, but only just. The real reminder of our tenuous infiltration, however, came from lodging and the runways.

Elmendorf Air Force Base, one of the primary hosting bases of Northern Edge, was filled with participants. The aircraft filling in the ramp around us came with crews of maintainers and pilots of their own. These Sailors and Airmen were already established in Elmendorf for an exercise scheduled long in advance. As a result, there was no room at the inn. Our squadron was split between hotels in town, even aircrews divided and needing to form up before commuting in. With last-minute bookings, established bookings from the Alaskan tourist season shunted us repeatedly. Every few days, word would pass and a group of us would shift rooms or switch hotels. We flowed from one hotel to another, but every night we filled our crew cars and headed on base and on station.

We encountered the second hurdle after the close of Northern Edge. We stayed – our operations hadn't concluded yet – and watched the ramp empty almost overnight. It turned out the base had planned to repair the main runway once all the guests flew



home, using the shadow of the exercise for repair. It was great for the base, but crippling to our mission when we found ourselves suddenly unable to take off with mission fuel loads due to the short runway in use. Our missions were getting longer, both time and distance and the secondary runway at Elmendorf was too short to support that performance. Our hosts were cleaning up after their party, but we weren't ready to leave.

A two-fold solution rolled out for the new challenge. The first, a pilot's favorite, was the introduction of Air Force tanker support. Stratotankers gave us the ability to take off light, easily climbing out of our restricted runways and restart the fuel ladder an hour later with a full bag. Again, a panacea in the air came with new challenges on the ground. Our tanker support was launching from Eielson, supporting our crews out of Elmendorf (plus a cameo from Hickam), scheduled and coordinated by the task force back home at Naval Air Station Whidbey Island, Washington. It was a dance every day getting lines scheduled, and every night getting those lines communicated, across multiple bases and branches. Frequencies, locations and times found themselves needing correction one night or another as we coordinated.

The second solution, less thrilling for the pilots but a straight forward fix, was to introduce a two-leg mission. Our crews would take off from Elmendorf and tower-to-tower to Anchorage International. We snuck between commercial traffic and topped off from a local fixed base operator before taking advantage of the Anchorage runways to take our full aircraft downrange. It was the most exact solution – our runway was suddenly too short, so we used a longer runway. However, added complexity always carries new threats. Now every mission ran longer and every night began with a repositioning flight – six minutes long – before the mission flight. With a new step in our established process, this maneuver was a great time to watch lessons flow through the pilots on detachment. We learned quickly, dialing in the easiest route and sharing common mistakes before silence gave them the opportunity to become too common.

When I landed that morning after a 12-hour flight, my crew had seen all these adjustments in play. From small adjustments, like switching tanking frequencies in air, to large adjustments, like moving rooms between mission flights for a third time or borrowing another airport's runway, we had experienced them all. Our detachment stood up rapidly, finding room on- and off-base to make our mission work. Our path to on-station changed every flight, but it is what our Maritime Patrol and Reconnaissance Forces train for.

Between and after the mission flights, we also found time to explore Alaska. Anchorage hosted us; the mountains, wildlife and the terrific people we met every day reminded us about what we defend with our mission. On the ground by day, we walked among the moose. In the sky each night, we hunted the Great Bear, Ursa Major. ➡



BRAVO ZULU

★ SAILORS AND MARINES PREVENTING MISHAPS ★



BRYTT ST. LOUIS

AVIATION ELECTRICIAN'S MATE AIRMAN
HELICOPTER SEA COMBAT SQUADRON (HSC) 25

During routine flight schedule operations at HSC-25 in Yigo, Guam, Helicopter Instrument Training (HIT) checks on deck were being performed.

Aviation Electrician's Mate Airman Brytt St. Louis noticed the tail wheel was turned and not locked. He notified the pilots and the aircraft came down from the HIT check, causing the chocks to shoot out and the aircraft to enter a temporary uncommanded yaw.

St. Louis initiated an emergency shutdown, maintaining composure and ensuring personnel moved to a safe distance within the pilots' sight line. His timely actions and experienced plane captain skills prevented potential catastrophic damage or injury.

Bravo Zulu to St. Louis for flawless plane captain execution, knowledge of emergency procedures and superb airmanship, resulting in the safe recovery of the aircraft.



FOUL LINE VIGILANCE

By LT. CMDR.
RYAN GARCIA

STRIKE
FIGHTER
SQUADRON
(VFA) 151
VIGILANTES

Shipboard flight operations are dynamic and more dangerous when compared to their land-based counterpart. One could easily argue night flights, coupled with bad weather at an unfamiliar field, are significantly less hazardous than a day visual flight rule launch on the ship. At an airport, it's considerably less likely someone will walk on the runway while you're taking off. However, when afloat, personnel are near the "runway" at all times. Personnel working 12-hour days in the heat, all meticulously executing their individual mission. At any given time, one mistake, one low moment of inattention can mean the difference between life and death.

Carrier aviation has been successfully implemented in our nation's defense/offense for more than a century and as with most successful missions, it comes with years of learning points written in blood. Safety is paramount. The rapid pace of the flight deck has an extremely narrow margin for error.

During a strenuous work-up cycle, Carrier Air Wing (CVW) 9, assigned to USS Abraham Lincoln (CVN-72), rose to the

challenge, executing the multifaceted mission to become one of the most lethal air wings in the Navy. However, there were instances where personnel attached to the air wing crossed the foul line at the most inopportune time: during an active recovery. Luckily, no mishaps occurred, but the time it took for aircraft to land was extended significantly, causing a disruption in the flow of operations. In "Blue Water Ops," every minute and every drop of gas matters. Any delay in recovery can severely impact the entire event, potentially causing subsequent problems.

An air wing Sailor under instruction (UI) was working on the flight deck with her immediate supervisor when an aircraft being towed, accompanied by several ship-based Sailors, separated them. Amid the commotion, the UI Sailor walked across the foul line to locate her supervisor as aircraft were actively landing. The deck was fouled and the landing aircraft was waved off in a timely manner, possibly avoiding disaster. As we peeled back the onion of events that transpired leading to the incursion, we found the Sailor hadn't completed the required trainings to even be on the flight deck during flight operations in the first place. Though the fault was partly on the Sailor, the real failure was on leadership for not ensuring proper procedural compliance. The issue was remedied and thankfully nothing catastrophic happened.

On a separate occasion, a pilot stepped across the foul line during night operations on an active recovery. An E-2 Hawkeye was within a mile on approach for landing,

the wave-off lights illuminated and the E-2 went around. Further investigation revealed the pilot experienced a diminished depth perception event transitioning from the well-lit passageways of the ship to the pitch-black darkness of the flight deck. The pilot misperceived the position of an F-35 Lightning plane captain (PC) as in front of the aircraft across the foul line. However, the PC's actual position was next to the aircraft behind the foul line. The pilot incorrectly assumed the final aircraft (the Hawkeye) of the recovery had already landed and the landing area was open to transit. In search of their assigned aircraft, the pilot stepped across the foul line to peer at the adjacent aircraft. They were immediately pulled back across by a different plane captain but it was too late, the deck had been fouled and the Hawkeye waved off. On the second approach, the E-2 bolted and had to come back around for a third attempt, significantly wasting time and gas on what would have potentially been a single approach to land.

There are many visual aids on the flight deck that reveal an active recovery. The green floodlights illuminating the flight deck are a prominent indicator but there are also other clear signs. The Improved Fresnel Lens Optical Landing System being on, the Landing Signals Officers (LSOs) standing on the LSO platform and the landing area being clear of personnel are just a few examples. Using all these visual aids can assist Sailors in building their situational awareness and potentially avoiding hazardous situations.



By LT. MATTHEW
MEASER

FLEET AIR
RECONNAISSANCE
SQUADRON (VQ) 1
WORLD WATCHERS

Reconnaissance Crew 7 (CRC-7) was coming up on our halfway point of deployment with an already checkered history with our aircraft which included multiple chip lights and a broken weather radar, to say the least. But what happened next couldn't have been imagined in our wildest dreams.

An hour and a half into our transit, I got up to stretch my legs and wake up my 2P from the rack for his turn to fly. We might not be able to fly fast and pull G's but waking up from a nap in our rack to the smell of fresh cookies in the oven will do. I made my way back to the flight station and took a seat on the radar cabinet just behind the pilot seat. I threw my headset on so I could listen to the radios and back up my 3P until the other pilot was able to fully relieve me. It was at this moment everything changed. Over the internal communication system I heard, "Do you smell that?" "Yeah I do." "What is that?" "Smells like burning wires."

My heart skipped a beat as I jumped off the radar cabinet and slid into the pilot seat while directing my 3P to activate the fire bill and execute the fire of unknown origin

The sun was just beginning to rise over the Mediterranean Sea as my crew departed the beautiful island of Crete for what we thought was going to be a standard mission in the mighty EP-3E Aries. Combat

checklist. I directed my flight station to don their oxygen masks as the faint smell of fumes slowly entered the cockpit.

The fire of unknown origin procedure on an EP-3 with a crew of 24 boils down to an intensive crew resource management drill. Every aircrew has their assigned area and equipment to check, firefighters standing by with extinguishers, supervisors taking call ups and passing it to the senior evaluator and all of the information is relayed to the flight station to maintain situational awareness. All in all, what I like to call organized chaos.

With every sweep of the plane, call ups continued to come in one after the other as I assessed where we were and where to go if the fire wasn't found. What seemed like an eternity was only a few minutes as I finally heard the words, "Smoke coming from the C rack." With the source of the fire finally localized to a rack, I gave a sigh of relief until I heard what was on fire: the Nav-J Box.

In simple terms, the Nav-J Box, or Navigation Interconnection Box, converts incoming signals from our navigation equipment into analog signals which are then displayed on our equipment. The box converts our tactical air navigation, high frequency omnidirectional range, inertial navigation system (INS)-1 and INS-2, which provide the primary inertial heading and attitude information. After a quick discussion in the flight station, the circuit breakers were pulled and we were left with our next challenge.

Looking across the flight station, we assessed how much equipment was lost. With the pull of a few circuit breakers, our capabilities were diminished down to the equivalent of the simplest Cessna 172. Our two digital displays previously showing our

attitude and navigation equipment were now blank with no usable information. Our only attitude indicator was the standby gyro which is an old school vacuum type gyro. Our only reliable heading source was the magnetic compass only viewable from the flight engineer's seat. Our control display unit showed distance to points but we had no way of displaying the information to navigate off. We were navigationally impaired, but all things considered, at least not on fire.

Once our situation was stabilized, we declared an emergency and requested vectors for our long transit home. It was then I could finally address the issue sitting in the back of my mind: our home field was a non-radar environment, meaning if it wasn't completely visual flight rules, we would need to divert. Using my 3P and team of naval flight officers, we gathered all weather products for our home field and diverts along our route so we could decide how to get our crew safely on deck. Our home field had a ceiling of 2,500 feet with a line of rain, towering cumulus clouds and thunderstorms starting around the time we would be arriving. We also saw a line of thunderstorms forming off in the distance towards home field. We decided due to the nature of our emergency and weather conditions, we were going to divert.

Once we knew we weren't going to our home field, Athens was the next best option for us with a ceiling of 6,000 feet, long and wide runways and an extensive radar environment. Once we were up with Athens control, we told them of our intention to land at Athens International Airport. We received no-gyro vectors to get us below the clouds and visually acquired the field. Once on deck, I could finally breathe knowing my crew was safe.

In our profession, we practice procedures and drills repeatedly for the unlikely event we find ourselves in these situations. I never thought I'd be using these skills with a full crew on a mission flight. I commend my crew for their swift and skillful execution of their procedures and teamwork which led to our overall success in handling our time-critical emergency. ✈



An EP-3E Aries II assigned to the "World Watchers" of Fleet Air Reconnaissance Squadron (VQ) 1. (U.S. Navy photo by Mass Communication Specialist 2nd Class Brandon Parker)

RIMPAC

By **LT. GABRIELLE BONOWSKI & LT. CHUCK DIMER**

HELICOPTER SEA COMBAT SQUADRON (HSC) 6 INDIANS

Helicopter Sea Combat Squadron 6 (HSC-6) Indians recently participated in a truly unforgettable experience during the 2024 Rim of the Pacific Exercise (RIMPAC) in Oahu, Hawaii, this summer. According to Vice Adm. John Wade, commander, U.S. 3rd Fleet and RIMPAC 2024 Combined Task Force Commander, the purpose of RIMPAC 2024 was to “build relationships, to enhance interoperability and proficiency and ultimately, contribute to the peace and stability in the vitally important Indo-Pacific region.”

HSC-6 provided an overland logistics support mission, medical evacuation support and transportation flights for

distinguished visitors, including the chief of naval operations (CNO), master chief petty officer of the Navy and other top allied leaders. Flying these esteemed guests highlighted the unity, cooperation and dedication driving the success of RIMPAC.

Navigating the skies above Hawaii, we had the unique opportunity to work with various allied ships from 29 partner nations participating in the exercise. It was a thrilling experience to showcase our expertise in aerial and shipboard operations while providing our distinguished guests with a bird's-eye view of the ongoing naval exercise below. One of the many guests we flew was CNO, Adm. Lisa Franchetti. We flew her and a large media team to a New Zealand ship, where she interviewed with 60 Minutes Australia, followed by a visit to a ship from the Republic of Korea.

Hopping between foreign ships, we leaned heavily on the skill of allied air controllers, plane captains and deck handlers for safe execution. Standardization of voice reports and hand signals helped reinforce trust in coalition units.

Wade also flew with the Indians to move between participating ships to speak to the crews and oversee the exercise from a deck-plate level. Captains and admirals from various allied nations entrusted us with their transportation from shore to sea at a moment's notice. These high-ranking officials symbolized the strong partnerships between nations and emphasized the value of

RIMPAC as a platform for building trust, fostering interoperability and strengthening relationships among maritime forces.

In addition to flying distinguished visitors, the squadron integrated with the RIMPAC Combined Air Operations Center, facilitating communication, coordination and cooperation between participating units and nations. This integration ultimately enhanced our ability to work effectively by serving as the central hub for planning and executing air operations. The collaboration and camaraderie among the nations involved was on full display. The ability to seamlessly coordinate flights and showcase the operational capabilities of the participating countries underscored the shared commitment to upholding maritime security and stability in the Indo-Pacific region.

One of the most challenging yet rewarding aspects of our involvement in RIMPAC was participating in the SINKEX (Sinking Exercise). As a tow boat dragged the skeleton of the decommissioned USS Tarawa (LHA-1) out to sea, we conducted a live hoist evolution to extract personnel before the SINKEX kicked off. The ship was no longer rated for aircraft to land, so the last people to step on board were hoisted one by one from a 20-foot hover. Some of them had never been in a helicopter, let alone dangled above the flight deck of a soon-to-be artificial reef. The teamwork, planning and risk mitigation under these unique circumstances underscored the readiness and proficiency of HSC-6 in handling dynamic scenarios.

HSC-6 also worked closely with joint forces on personnel recovery (PR) missions. Our MH-60S squadron collaborated with U.S. Marine Corps V-22s, as well as Air Force A-10's and an AC-130, on a joint force PR mission. The coordination required in these exercises reinforced the importance of communication within our squadron and across military branches.

Overall, the squadron gained a deeper understanding of the exercise's strategic significance by witnessing firsthand the complexity and scale of RIMPAC and experiencing the professionalism and expertise of the participating countries. The distinguished visitor flights were a powerful reminder of the participating nations' shared values, capabilities and commitment. Through teamwork, communication and mutual respect, participants demonstrated working together is essential for achieving common goals and a reflection of the unwavering dedication to promoting peace, security and prosperity across all nations. ✈

Vice Adm. John Wade, commander, U.S. 3rd Fleet, and Exercise Rim of the Pacific (RIMPAC) 2024 Combined Task Force Commander, waves at an MH-60S Sea Hawk Helicopter, assigned to Helicopter Sea Combat Squadron (HSC) 6, as it departs from Ford Island, Hawaii, July 20, 2024. (U.S. Navy photo by Mass Communication Specialist 2nd Class Madison Cassidy) Page 3 table of contents image, center right: MH-60S Sea Hawk Helicopter on the flight line of Marine Corps Air Station Kaneohe Bay, Hawaii, July 2024. (Photo courtesy of Cmdr. Robert Dalton)



Chief of Naval Operations Adm. Lisa Franchetti is welcomed aboard Japan Maritime Self-Defense Force (JMSDF) tank landing ship, JS Kunisaki (LST-4003) transferred by an MH-60S Seahawk helicopter assigned to the Helicopter Sea Combat Squadron (HSC) 6 during Exercise Rim of the Pacific (RIMPAC) 2024, July 11. (Japan Maritime Self-Defense Force Photo by Petty Officer 3rd Class Keigo Sugiura)

By LT JEFF
NADELA

STRIKE
FIGHTER
SQUADRON
(VFA) 27
ROYAL MACES

On a mid-summer Western Pacific patrol in 2022, I recovered in aircraft 203 via Case I recovery following an uneventful flight. Upon landing, via a standard Mace OK 2-wire, I was directed to fold my wings as I was taxiing into the de-arm area.

I placed the Wing Fold switch into the "FOLD" position and immediately saw confusion from the director. I then looked at the actual wing positions and recognized the port wing folded without issue but the starboard wing remained in the spread position – the classic stiff wing. I was taxied to park near the Nav Pole, got chocked, chained and began troubleshooting.

Circuit breakers were checked first and troubleshooters verified they weren't tripped and were in the proper position. It was then noted the stiff wing's Lock and Flag Assembly, colloquially known as the "beer cans," were popped indicating the wings did indeed receive the command to fold but something mechanical was preventing it from doing so.

After deliberation, the decision was made to move the Wing Fold switch in the cockpit back to "SPREAD" to have both wings match positions for additional troubleshooting. As soon as the switch happened, the starboard wing began to fold in the wrong direction – it essentially hyper-extended. Immediately, ground crew communicated with hand signals to stop the wing spreading evolution and after a few seconds of interpretation, I placed the Wing Fold switch to "HOLD" to prevent further movement.

Unfortunately, the damage had been done.

After shutting down and investigating further, four screws holding a part known as the angle gearbox assembly were found to be missing, two of which were found loose inside the panel.

Back in the ready room, the team did research in our FA-18 NATOPS Flight Manual (NFM) regarding the Super Hornet wing-fold mechanism. Interestingly, nothing in the publication addressed what to do in a situation where an asymmetric wing configuration occurs due to component failure. Additional research was conducted on the maintenance side, referencing the FA-18 Interactive Electronic Technical Manual (IETMS), and the following warning was found:

"WARNING - Personal injury and major damage to the aircraft may occur if the left and right outboard wings are moving asymmetrically during wing fold or spreading. The left and right outboard wings should always move symmetrically during wing folding and spreading. Non-symmetric movement indicates a serious failure within wing-fold transmission components which could allow the wing to move outside of its normal range. If wings are observed to be moving non-symmetrically, immediately stop all action and contact FST [fleet support team] engineering for further instruction." A1-F18EF-IETMS

Based on the warning, there appears to be a disconnect between the flight and maintenance manual.

A NATOPS change has been routed to include a procedure for when a single wing fails to spread or fold. This procedure will instruct aircrews to not reposition the Wing Fold switch and speak to maintenance. Additionally, it will include the A1-F18EF-IETMS warning.

Anecdotally, within the FA-18 community, stiff wings occur relatively frequently and directing an asymmetric wing configuration back to the previous "SPREAD" or "FOLD" configuration is also a common habit pattern amongst maintainers and pilots. In fact, during our current underway, we had another instance of a wing failing to spread on the catapult and the flight deck crew repeatedly attempting to re-fold the wings to spin off and troubleshoot. Luckily, our pilots were tracking and informed the air boss of the issue.

With this specific wing-fold experience to reference, it's vital for aircrew, who are typically under

pressure due to the time-sensitive nature of recoveries aboard a carrier, to understand the limitations of the wing-fold system.

Understanding these limitations should ensure quick and concise communications with the flight deck and tower to mitigate any delays during the recovery and proper selection of parking to facilitate timely maintenance.



HYPER-EXTENDED WING



Sliding into my DMs

Alternative CRM

**By LT. CMDR.
KEVIN FARLEY**

**STRIKE FIGHTER
SQUADRON
(VFA) 195
DAMBUSTERS**

Upon setting the record for the longest Carrier Air Wing port call in history (in the United States no less), the time had come for the air wing to fly onto USS George Washington (CVN 73) for carrier qualification (CQ).

To set the scene, CVW-5 had come off the 24-1 patrol on USS Ronald Reagan (CVN 76) and executed a hull swap in San Diego to CVN 73. Following the hull swap evolution, the air wing spent five weeks on Naval Air Station (NAS) Fallon, Nevada, while executing a full air wing Fallon syllabus, a first for CVW-5 in almost a decade. After completing

the syllabus, the various squadrons redeployed to their respective fleet concentration areas for unit level training, field carrier landing practice and preparation for the second half of the 2024 patrol.

While a Fly-on and CQ evolution in the Southern California (SOCAL) Operations Area is a routine occurrence for air wings based on the West Coast, the circumstances were new to CVW-5 aircrew. The differences include an unfamiliar airfield, unfamiliar local area operations and a lack of consistent connectivity. Successfully completing the Fly-on and CQ evolution aboard USS George Washington would rely on the sound application of Risk Management (RM) and Crew Resource Management (CRM) principles ingrained within the aircrew and maintenance professionals of CVW-5.

The CVW-5 beach detachment was operating out of Hangar 525, formerly the home of VRC-30, on NAS North Island (NASNI). While this hangar was still sporting the large American flag where Maverick delivered his “throw NATOPS in the trash!” speech in “Top Gun: Maverick”, it lacked some of the basic equipment to run flight operations for an entire air wing. Initially, our base radio didn’t function at all. Fortunately, a direct phone call from the Air Boss got us a working radio but transmission was weak and only readable out to about 40 nautical miles. Non-Secure Internet Protocol Router Network (NIPRNet) connectivity was dependent on a handful of working drops, making mobile hot spots from cell phones the most reliable internet connection.

In addition to our struggles on land with network access, the embarked air wing personnel on USS George Washington (CVN 73) were still getting their footing, especially with Consolidated Afloat Networks and Enterprise Services access and port activation. The

key line of communications between the ship and shore consisted solely of plain old telephone service (POTS) calls placed to or from the beach detachment squadron duty officer’s (SDO) cell phone.

The plan was straightforward for the initial wave of fly-on jets and was satisfactory as long as the plan didn’t devolve. Unfortunately, as per Naval Aviation, the plan began to change almost immediately as degrading weather, ship’s schedule and location changes forced the air plan to slide. CVN 73 deployed with Wi-Fi capability, which coupled with messaging applications, provided an expeditious communications pathway for time-critical information to and from the ship. By using squadron chats, SDOs could rapidly pass information from ship-to-shore and vice versa about aircrew changes, aircraft flows and weather updates. Using non-standard ship-to-shore communication, the air wing disseminated truth data to all aircrew, building their situational awareness of events and conditions on the ship before departure, which enabled sound risk management decisions.

While technology isn’t a tenant of CRM in the traditional sense, it is an enabler for critical communication. In this scenario, the transition from limited traditional communications pathways to a widely accessible and near real-time communication stream led to a safer and more efficient decision-making process. The tool became invaluable as a significant Pacific Ocean marine layer affected the fly-on and CQ game plan.

The SOCAL operations area is notorious for its marine layer and fog, especially in early fall. Units operating out of NASNI, Miramar and Point Mugu are familiar with the prevailing local weather pattern of early morning fog that burns off around noon, only to rapidly push back on shore as the sun goes down. The fog is thick and murky, resembling low-lying clouds rather than your traditional misty visual obscuration. As anyone who’s attempted to qualify in the W-291 airspace knows, this marine layer presents a challenge for CQ due to both the weather minimums and the number of arrestments required. A persistent marine layer during the day drives Case 3 operations for day CQ, which further compounds the challenge.

On day one of CQ, the ship was operating in Case 1 conditions with a thin scattered layer around 1,200 feet which allowed the initial wave of fly-on jets to recover via the Case 1 stack without incident. CQ operations continued for a few hours into the afternoon to make “night players.” Weather conditions at NASNI were clear with westerly winds, just as it’d been the entire two weeks preceding the fly-on. As the ship wrapped its first day, the night players flew from the ship back to NASNI to provide a deck break before the commencement of night CQ.

(Continued on page 22)

At the 1700 launch time, the weather over the ship had transitioned to solid case 2 conditions with a dense layer that was 300 feet thick from 1,000 to 700 feet mean sea level. However, the Meteorological Aerodrome Report (METAR) at NASNI was calling for the same clear skies and westerly winds that had been present all day. Unbeknownst to the aircrew aboard the ship, a dense marine layer was moving in quickly over Point Loma and engulfing the entire airfield faster than forecasted by the Terminal Aerodrome Forecast (TAF) and faster than the METAR could update.

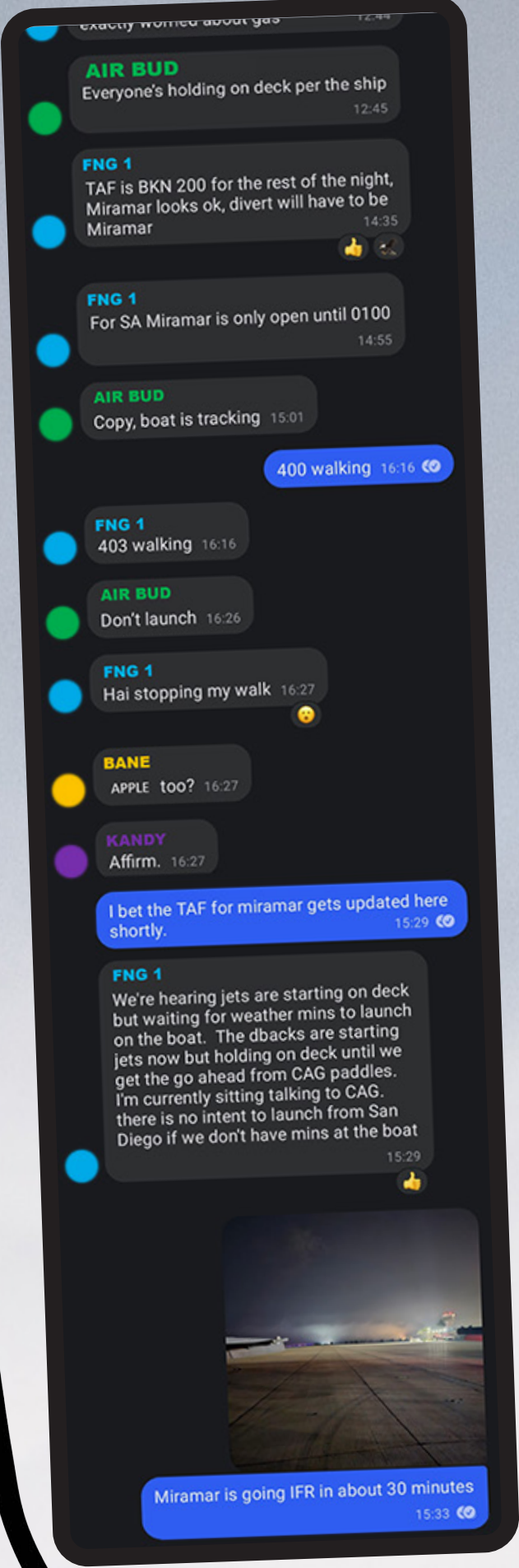
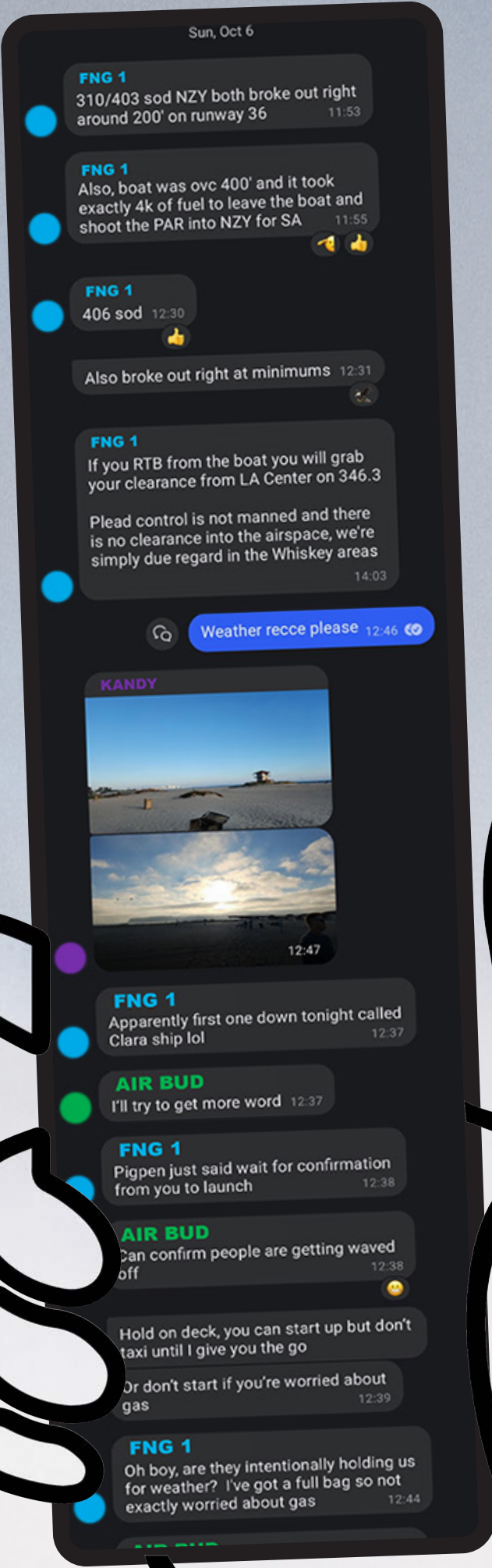
The rapidly changing weather forced six aircraft to divert to Marine Corps Air Station Miramar where they would remain overnight. The first aircraft returning from the ship attempted to shoot Precision Approach Radar (PAR) approaches into NASNI, but were unable to break out at the decision height due to the marine layer and fog. Once the aircrew decided to divert, effective CRM between the aircrew and SOCAL approach controllers ensured the first wave of aircraft landed on deck at Miramar with acceptable fuel states. Additionally, their assertive communications with SOCAL approach ensured SOCAL approach relayed the actual weather conditions at NASNI and vectored the subsequent wave of CVW-5 aircraft to Miramar. The communication prevented them from wasting fuel on an approach to a field with below minimums, despite Automatic Terminal Information Service (ATIS) and METAR indicating otherwise.

Once on deck in Miramar, the free-flowing communication between the ship, the SDO and the divert aircrew expedited the decision-making for the next day's schedule. Additionally, the honest assessment of the deteriorating weather at ground level from the crews at Miramar curtailed the push to get aircraft back to NASNI that same night. While getting the jets back to NASNI would've enabled easy access to CVW-5 maintenance support, it risked stranding jets even further away given Naval Air Facility El Centro was the only suitable field in the local area unaffected by the marine layer.

Not fully appreciating the state of the weather, the decision communicated by air operations via traditional means was to launch from Miramar. A pilot in Miramar sent a picture of a wall of fog rolling over the departure end of the runway with the caption, "Miramar is going Instrument Flight Rules in about 30 minutes." With nothing heard via traditional means, the pilots began making their hotel reservations in El Centro and sent "walking" messages to the group chat. Upon receipt of both messages, squadron, air wing and carrier air operations leadership conferred and used complete information to inform a better decision, ultimately aborting the launch.

Due to the time of day, there were limited personnel at base operations in Miramar and the nearest SDO was sitting at NASNI, well outside of radio range to relay the abort decision to the aircrew. The disaggregated nature of the situation made it nearly impossible to communicate the abort decision, and forced a final attempt by messaging application. If it weren't for the ability to communicate via messaging application from the ship, it's unlikely the aircrew in Miramar would have received the abort message in time to abort their launch. This situation underscores the availability of non-traditional means of communications as it ultimately prevented an unnecessary divert to El Centro.

Throughout the process, aircrew used excellent airborne CRM procedures to pass relevant information on weather, game plan and local procedures. Once on the ground, aircrew and their respective operational chains used sound RM analysis to curb the desire to get



aircraft back to NASNI or the ship in the face of bad weather. Over the following week of operations, real-time assessment of weather with clear and open communications to and from the ship enabled safe decision-making and effective RM with requisite situational awareness. Had the air wing not leveraged these non-standard communication pathways, we'd have diverted multiple aircraft to locations farther away than the greater San Diego area, further complicating the CQ evolution and potentially putting aircraft in unnecessary fuel risk situations.

While the weather was a direct challenge for the aircrew of CVW-5, a second order effect of the weather was the alteration of local traffic patterns of Lindberg Field (KSAN), the adjacent international airfield. After SOCAL approach denied a CVW-5 aircraft's request for a PAR to runway 36 at NASNI, to avoid future conflict, the SDO took initiative and made phone calls to Fleet Area Control and Surveillance Facility (FASFAC) and SOCAL Terminal Radar Approach Control (TRACON) to get the reasons for the approach denial. FASFAC and TRACON were both helpful and explained when the weather at KSAN deteriorates below area navigation minimums for the traditional landing runway of 29, the landing direction reverses to runway 7, which only has Instrument Landing System for precision approach capability.

Aircraft attempting to shoot approaches into runway 36 at NASNI (which has lower minimums than NASNI runway 29) are in direct conflict for vectoring airspace. Additionally, in the event of a missed approach into NASNI, those aircraft would be inside of the safe separation minimums for SOCAL TRACON. Through effective, professional communication, CVW-5 aircrew reached an agreement with SOCAL TRACON that aircraft desiring to land at NASNI during KSAN runway 7 flow could expect holding instructions in the warning area while FASFAC and SOCAL TRACON coordinated an arrival window.

The result of this simple conversation was a greater understanding of the local traffic flow patterns and their impact on divert operations. Thereafter, CVW-5 aircraft successfully sequenced in with arrival traffic, precluding the need to divert to less desirable alternate fields. In this scenario, the SDOs exercised outstanding CRM by going outside the air wing for resources and information not normally referenced. Their open communication with SOCAL TRACON and FASFAC led to smooth operations for the remainder of the air wing's time in the SOCAL op area.

CVW-5 was able to execute safe and efficient flight operations while overcoming unfamiliar airfields, deteriorating weather and adverse traffic patterns by executing key principles of CRM, specifically communication and decision-making. Alternate means of communication facilitated by the availability of Wi-Fi on the carrier increased situational awareness of the rapidly changing weather conditions at the field and overhead the ship. The information enabled fully informed decisions and the thorough application of RM in the face of adverse conditions. While the usage of Wi-Fi onboard the ship for communications is still new, it proved to be an invaluable tool enabling aviators to overcome rapidly changing and challenging circumstances by ensuring access to time-critical information.

Furthermore, taking the initiative to reach out to external agencies served to improve aircrew understanding of the operational environment, which facilitated better decision-making and more proactive planning. Overall, this success story highlights the benefits of time-critical RM combined with sound CRM inside and outside of the cockpit, which ultimately kept aircrew and aircraft out of many undesirable situations. ✈️

CHANGING THE WAY WE DO BUSINESS

By LT. CMDR.
PAUL SHEN

STRIKE FIGHTER SQUADRON (VFA) 22 FIGHTING REDCOCKS

institute or how many local operating procedures or controls we implement. However, underlying root causes that lead to mishaps can be corrected to prevent future mishaps. Far too often, we discover the root cause of a mishap was adhering to bad processes, which, with foresight, could have been identified and corrected.

VFA-22 has embarked on an ambitious effort to identify either insufficient processes or those that must be corrected to prevent mishaps. One of these correctable deficiencies was a specific type of report commonplace in the naval aviation enterprise (NAE) and has unintentionally circumvented current reporting chains. I refer to the "CODR" or Conventional Ordnance Deficiency Report.

Over time, squadron ordnance departments have used the CODR correctly to report and turn in damaged ordnance equipment. Unfortunately, individual squadron safety officers' lack of familiarity with CODRs could make them unaware of the squadron-level reporting of damage to ordnance equipment. These corrections aren't limited to reporting chains; however, in one of the Class C AGM's VFA-22 investigated, we identified an exceptionally rarely performed maintenance action that was vague in

its guidance and resulted in damage to an aircraft component. Even more seriously as old reports from Web-Enabled Safety System are uploaded into the Risk Management Information (RMI) system, we found an identical mishap three years before which noted the discrepancy but did nothing to change it. As a result, VFA-22 has begun identifying rarely executed work orders (WO) and reviewing the steps in the integrated electronic technical manual for corrections or rewrites. Furthermore, once these have been identified, these WOs will be treated as high-risk evolutions and briefed appropriately.

Most squadron safety officers are familiar with deficiency reports, especially if a safety officer has a quality assurance (QA) background. Even if they don't have a QA background, they'll file a deficiency report in almost any investigation, where they send in a part for engineering analysis to determine why it failed. Furthermore, these deficiency reports often trigger investigations by the squadron's QA department which will then loop in the safety officer to determine if a reportable mishap has occurred. Naturally, the communication results in a close relationship between the squadron's QA division and safety department.

The CODRs are simply another type of deficiency report. However, it's exclusive to a squadron's ordnance department and was designed to quickly and efficiently deal with the stringent requirements set forth for ordnance. These deficiency reports are independent of a squadron's QA division and run through a squadron's ordnance department or 'Gunner.' Most of these reports don't rise to the level of a mishap. They often deal with component failures or worn-out consumables needing replacement. However, a few CODRs do rise to the level of a reportable mishap. Depending on the level of interaction between a squadron's safety department

and ordnance department, the latter may need to be made aware that the damaged component they're submitting for a CODR warrants a mishap report.

Squadron ordnance and maintenance departments aren't maliciously under-reporting mishaps. The safety culture in the NAE today clearly emphasizes the benefits of thorough reporting and making us all better collectively. However, a communication breakdown did occur due to a simple misunderstanding and reporting requirements between two separate departments. VFA-22's way forward was to develop a closer relationship between the safety and ordnance departments, like what already exists between QA and safety. We accomplished the familiarity by training on reporting requirements and increasing face-to-face interactions. VFA-22 has always had the policy of routing CODRs through the safety officer for review. Reporting would increase if other squadrons adopted the same policy, which could flag the CODRs for further investigation and possible elevation into reportable mishaps. Additionally, VFA-22 has reviewed its CODRs from last year to determine if any other mishap investigations were missed, to which none were found.

During the initial investigation of a Class C AGM in which an M61A2 gun system was damaged, VFA-22 discovered they weren't the only squadron to have damaged a gun during either removal or installation. In the previous calendar year, reportedly three other squadrons had dropped guns across the Lemoore flight line. Finally, between publishing the final mishap report and writing this article, another squadron damaged a gun in an almost identical fashion.

Using RMI's search engine for similar mishaps, I found several similar reports closely matching VFA-22's mishap after

initial difficulties. These searches required many specific search inputs to appear in search results, including "Object" searches, specific keyword searches and, in some cases, specific accounting organizations with particular dates. The keyword and phrase searches were essential as legacy WESS reports didn't consistently yield results.

I needed to learn how to pull CODRs during my initial investigation. Once I reviewed CODRs with the assistance of VFA-22's gunner, I discovered several guns had been damaged due to drops during removal or installation. The damage was only reported through the CODR system; no corresponding report was made in RMI. Digging deeper into other CODRs and sorting for damaged components resulted in numerous other reports showing the potential to have been investigated and reported as mishaps. However, no corresponding mishap report could be found in RMI, even with a specific command, date, object and cost-based classification.

It's essential to point out not all of these CODRs were reportable mishaps; the amount of detail they contain is limited and their existence doesn't imply a mishap was unreported. However, what is evident is a significant number of hazard reports (HAZREPs) could've been written about these incidents, serving as a 'canary in the coal mine' to existing safety hazards. VFA-22's final report on their Class C AGM includes the recommendation that the HAZREP process be revamped to increase the speed at which hazards are reported to the fleet.

Following the HAZREP process (as it currently exists in RMI) highlighted the second problem with getting timely hazard

information to the fleet. The HAZREP process still needs to be fixed, as it is too cumbersome to promote fleet reporting of near misses and hazards that luckily did not manifest or have not yet manifested as a mishap. Prior to the USN adopting RMI as its safety reporting medium, HAZREP publication was considerably easier to write and release, leading to more being written and quickly disseminated. However, as it's set up now, the system places unnecessary administrative and investigative burdens on the publishing unit, which is a severe barrier to hazard reporting.

While it doesn't mean an IO will need to conduct two separate investigations, the necessity of entering almost all the same information again into RMI is a severe barrier to hazard reporting. Currently, RMI cannot spin off a HAZREP from a mishap report in progress. If such a system were in place, it'd significantly reduce the workload and likely result in more HAZREPs being published before mishap investigations are complete.

Finally, the last Class C AGM VFA-22 investigated during the period bore many of the same hallmarks the previous two AGMs had. The exhaust of a taxiing aircraft blew an improperly secured piece of ground support equipment (GSE) into a parked aircraft, damaging it. The mishap investigation found an unidentified hazard that would likely have been identified and mitigated if a more questioning and process improvement mindset had been applied. NAS Lemoore has recently installed aircraft protective enclosures (APE) for its flight line parking areas. Unfortunately, the installation of these APEs has resulted in enough loss of separation between parked aircraft to set up the conditions for the mishap to occur.

When interviewed, many of the maintainers stated they'd noticed an increase in apparent wind forces after the APEs were installed but hadn't reported it up the chain of command. We also identified the mishap maintainer hadn't been required to requalify on the particular GSE in almost three years. The maintainers were required to recall the proper securing requirements from their memory of a publication they hadn't read in over two years. The GSE didn't have the most basic securing requirements anywhere on its structure, though the spot they had previously been affixed to was quickly identified. They only missed a single step, which, combined with the new closeness of the parking spots, resulted in the mishap occurring. These factors, the lack of aid to our maintainer in ensuring the GSE was correctly secured and the "normalization of deviance" with the new parking spaces was another area we identified as a correctable situation before the mishap.

The current high ops tempo realities force squadrons to shift focus quickly from the just-completed event to the next one. The fast pace naturally results in events of the past ending up in the rear-view mirror. However, that doesn't mean squadrons shouldn't look back to see where they can find lessons to share, making us all better. Additionally, commands must be accountable for all their mistakes. CODRs aren't intended to block the reporting and investigation of mishaps. Sometimes, they unintentionally end up that way. Ultimately, the safety department's job is all-encompassing and no single department can be relied on as the single point of information for a safety officer to act on. Safety officers must be leaders who put their noses into a squadron's functions to ensure they take advantage of chances to improve the entire NAE. ✈

An F/A-18F Super Hornet from the "Fighting Redcocks" of Strike Fighter Squadron (VFA) 22 makes an arrested landing on the aircraft carrier USS Nimitz (CVN 68) in the Philippine Sea, April 22, 2023. (U.S. Navy photo by Mass Communication Specialist 2nd Class Joseph Calabrese)

READY TO GO... IN THE WRONG PLANE

By LT. CMDR.
MIKE TOFT

TRAINING
SQUADRON
(VT) 31
WISE OWLS

So there I was...walking briskly back to Maintenance Control under the sweltering Texas sun, my mind still replaying the maneuvers and inevitable student tendencies of the day. It was a day that started with triumph in the skies over Naval Air Station Corpus Christi, the kind seasoned aviators relish after favorable weather and successful sorties. First, re-hacking currency for a fellow instructor and then completing two student chief of naval air training sorties; I felt satisfied with the day's efforts. As I submitted my naval aircraft flight records, relief washed over me. The flights had gone

smoothly, the students had performed well and I was looking forward to wrapping up the day without any hiccups.

But fate had other plans.

As the sun began its descent, the mood shifted abruptly for me, a veteran instructor with a spotless record — until now. As I approached the Aircraft Issue desk, ready to sign off on the day's operations, a voice interrupted my thoughts. "Excuse me, sir," the lady behind the desk said. "I think you took the wrong [aircraft] today."

The words hit me like a shockwave and disbelief washed over me. Surely this was a jest, a prank initiated by one of my fellow department heads. I froze, trying to process what she was saying. Wrong aircraft? That couldn't be right. We'd meticulously planned every detail of today's flights. The side number I'd been using all day as my call sign matched the one I had signed for — or so I thought.

As the Aircraft Discrepancy Book was thrust before me, reality hit hard. She showed me the A-sheet, the document that bore my signature releasing the aircraft to my custody. It was undeniable. The side number I'd signed for was one digit off from the aircraft I'd flown. My heart sank, sweat beaded on my forehead and panic seized me.

As a naval aviator, mistakes aren't just embarrassing — they could be career-altering. I prided myself on my situational awareness and attention to detail. How could I have missed such a fundamental error? I retraced the events of the day in my mind, searching for clues to unravel the mystery. The day had started with an unexpected task; re-hacking currency for a reservist who needed to get back in the saddle quickly, on top of my already scheduled student events. While I didn't feel rushed, there was an underlying pressure to maintain our schedule and ensure everyone got their required flight hours, yet accomplish the same land time.

In Maintenance Control, where I signed out the aircraft, the side number issued to me (471) matched the call sign I had used throughout the day. In the T-44 fleet, it's 50/50 whether the side numbers and tail numbers match each other, adding a layer of complexity to an already detailed pre-flight routine.

Compounding the confusion, the aircraft parking spots on the flight line weren't painted or clearly marked. Aircraft 971, parked adjacent to where I expected to find mine, further blurred the distinction. The other instructor and I, focused on getting airborne and misinterpreting side number 471 with tail number 971, boarded the wrong aircraft.

Further complicating matters, Maintenance Control hadn't updated T-SHARP with tail numbers for the assigned crew that day — a procedural oversight that usually didn't pose a problem, as crew members could verify their assigned aircraft at the Aircraft Issue desk. However, it created a gap in oversight during radio communications, where two separate calls were made without verifying the correct aircraft.

Additionally, when we called Maintenance Control to troubleshoot a minor issue before takeoff, the discrepancy went unnoticed. Even after we landed midway through the flight to drop off the reserve instructor where another call was made, again using the incorrect side number, another opportunity to catch the error went by. It ultimately was caught during the post flight paperwork review.

The incident weighed heavily on me in the following days as I reflected on the events leading to this embarrassing blunder. As the soon-to-be operations officer, I'd hoped to showcase my competence and leadership abilities — not become a cautionary tale about the perils of overconfidence. Rushing to accommodate a fellow instructor's currency re-hack, navigating the labyrinth of squadron protocols and the innocuous absence of painted parking spots — all these seemingly small factors converged into a perfect storm of oversight and complacency. The incident exposed the vulnerabilities of human error even in the most disciplined environments. For me, who prided myself on my meticulousness, it was a humbling reminder of the Swiss cheese model — illustrating even with multiple layers of defense, errors can align to create a breach.

In the aftermath, I faced the music with a mix of humility and relief. Fortunately, the mix-up hadn't resulted in any safety violations or even worse, a potentially fatal mishap due to unknown mechanical or engine issues had the aircraft been "down". My future role as operations officer suddenly felt uncertain, overshadowed by this unexpected stumble. The lessons learned that day were etched deeply into my psyche. The trifecta of over-confidence, complacency and rushing — a cocktail I had unwittingly imbibed — served as a poignant reminder of the ever-present need for vigilance, even in routine operations.

As I recounted the tale during Amnesty Hour in the wardroom, where aviators shared their most humbling mistakes, I found solace in the understanding nods and supportive camaraderie of my peers. Their stories of similar lapses reminded me even the best-trained pilots could fall victim to human error under the right circumstances.

It was a sobering experience, one that shaped not only future decisions but also my perspective on leadership and responsibility.

And so, amidst the balmy Texas skies of Corpus Christi, my career took an unexpected turn — a tale of a seasoned aviator humbled by a momentary lapse, yet strengthened by the lessons learned in the wake of a seemingly harmless mistake. ✈

BRAVO ZULU

★ SAILORS AND MARINES ★
PREVENTING MISHAPS



AVIATION MACHINIST'S MATE
THIRD CLASS PHILLIP WARNER
HELICOPTER SEA COMBAT SQUADRON (HSC) 25
ANDERSEN AIR FORCE BASE, GUAM

While performing collateral duty maintenance inspections, AM3 Warner noticed hydraulic fluid coming from the tail section of aircraft 08, an MH-60 Seahawk.

Upon further inspection, AM3 Warner discovered a pinhole leak on the tail rotor servo hydraulic line. With the assistance of the Aircraft Intermediate Maintenance Department airframe shop on the USS America (LHA 6), the repair was done expeditiously and on time.

The repair allowed the aircraft to undergo a functional check flight the next day and avoid possible failure of hydraulic power on the aircraft.



MENTAL HEALTH ROADMAP

Are you feeling stressed and need help, but don't know where to start?

START HERE

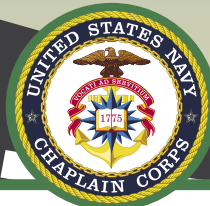


EXPANDED OPERATIONAL STRESS CONTROL

Navywide peer-to-peer stress control program that provides resilience education and training that promotes early recognition and mitigation of stress-related problems.

Contact your E-OSC Team Leader:

Command:



COMMAND CHAPLAINS

Chaplains provide more than spiritual counseling – talking to your Chaplain is 100% confidential, with no reporting requirements and no health record documentation.

Contact your Chaplain:



MILITARY & FAMILY LIFE COUNSELING

MFLC provides non-medical counseling with flexible locations, no referral needed, no health record documentation, and minimal reporting requirements.

Contact your MFLC:



INDEPENDENT DUTY CORPSMAN/ GENERAL MEDICAL OFFICER

IDCs and GMOs can place referrals to embedded mental health, MTFs, and network providers for serious conditions or duty determinations. They provide medical management for most mental health concerns and can communicate with CO and other providers.

Contact your IDC or GMO:



EMBEDDED MENTAL HEALTH

EMH can evaluate and treat mental health conditions with therapy and medication. EMH is authorized to determine fit for duty and to communicate diagnosis and plans with other providers and CO.

Contact your EMH:

EMERGENCY ROOM

ERs are for life-threatening conditions; ie. the patient is a danger to self or others, or has become gravely disabled.



MILITARY ONESOURCE

Counseling for family, financial, stress, and coping skills with no referral needed and no health record documentation.

Contact Mil OneSource:
800-342-9647 or live chat on
www.militaryonesource.mil



FLEET AND FAMILY SUPPORT CENTER

Offers individual and couples life skills counseling, with no referral needed and no health record documentation.

Contact your FFSC:



MILITARY TREATMENT FACILITIES

Provide inpatient psychiatry and emergency room services, group treatment, and comprehensive care; authorized to make military duty determinations and to communicate with other providers and CO.

Schedule an appointment:

BRAVO ZULU

SAILORS AND MARINES PREVENTING MISHAPS



LT. NICK BERGERT AND LT. JACK PERKINS

PATROL SQUADRON (VP) 26 "TRIDENTS"
MISAWA AIR BASE, JAPAN

While on deployment to Misawa Air Base, Japan, Lt. Nick Bergert and Lt. Jack Perkins acted swiftly upon overhearing a distressed conversation from the Air Force barracks. Upon further investigation of the distraught voice, they approached an Airman, who they quickly realized was exhibiting suicidal thoughts and behaviors and required immediate intervention.

Their compassionate engagement, coupled with prompt calls to an Air Force Chaplain and emergency medical services, ensured the Airman received the care they needed and defused a potentially life-threatening situation. Bergert and Perkins' timely actions epitomized their unwavering dedication to the welfare of their fellow service member.

ALL HANDS CALL: SUICIDE PREVENTION

By Ani Pendergast, Naval Safety Command

"Preventing suicide in the Navy is an all hands responsibility. Each life lost is one too many" starts the OPNAVINST 1720.4B discussion and continues "Navy values require that Sailors seek help when necessary, aid others who may need help and provide support to Sailors during and after treatment."

In 2023, 523 Service members died by suicide, which is more than the previous year (493). The DoD Annual Report on Suicide (ARSM) in the Military: Calendar Year (CY) 2023, also found a total force rate of suicide deaths per 100,000 Service members was 9 percent higher than in 2022.

You have a role to play in prevention. One resource is the Fleet and Family Support Center's program the Sailor Assistance and

Intercept for Life (SAIL) Program. The help is available to all Sailors and Marines.

Ideation, substance abuse, anxiety, purposelessness, trapped, hopelessness, withdrawal, anger, recklessness and mood changes. These signs may indicate that a person is at immediate risk of suicide. One sign is enough to start a conversation.

Early intervention can be simple: Ask directly: "Are you thinking about killing yourself?" Care about their words and listen without judgment in a private area. Treat the Sailor as one would a close friend or family member.

Stay present with the member, inform leadership, get them the immediate care needed, call 988 (option 1) or 911 to get them help. ➔



988 | SUICIDE & CRISIS LIFELINE

OKINAWA
WEATHER RISKS



P-8A departing from Naval Air Facility (NAF) Misawa, Japan. (Photo courtesy of Lt. Seth Crean)

By LT. SETH
CREAN

PATROL
SQUADRON
(VP) 10
RED LANCERS

As anyone who has deployed or operated out of Okinawa, Japan in the middle of the summer understands, there is heavy rainfall and thunderstorms every day. Two of our crews were detached to Kadena Air Base, Japan to participate in Valiant Shield 2024. We were familiar with operating out of Kadena from our last tour when it was our main deployment site.

On the day of the flight, we used weather.af.mil, received -1 briefs from our Hickam Navy Weather forecasters, as well as Naval Oceanography Anti-Submarine Warfare Detachment weather briefs. Based on those briefs, we knew departing the airfield and the on-station weather would not be an issue. Returning to the field was going to be a different story. The airfield forecast was calling for low ceilings, poor visibility and thunderstorms in the vicinity.

As a crew, we used the Risk Management process and developed mitigations that included multiple sources for weather briefs, getting real time updates during flight and leaving enough fuel to divert if required. As our scheduled off-station time approached, we received one more weather update from home to get the radar picture near the airfield. Our squadron duty officer said there was a large cell developing between our on-station point and Kadena Air Base.

As a crew, we decided we'd fly east around the cell while operating due regard. Eventually, we needed to pick up our Instrument Flight Rules clearance to get into the airfield. As we checked in with the controller,

they gave us a descent from FL240 down to FL150 to cross at a specific point. Almost immediately, we knew the current clearance would take us into the storm we'd been trying to avoid the entire time. After discussing with our radar operator in the back of the aircraft, we agreed we needed to request weather deviations right of course.

I asked for a right deviation with the Japanese controller, and they told us to standby. I gave it another minute before requesting again. They continued to tell us to standby. It came to the point where safety was the primary objective, as it should always be when flying. Continuing on the current course would place the aircraft in danger by flying directly into the heart of the storm cell. I took control of the aircraft and started a turn to the right. We were definitely in the storm, however with the actions we took as a crew, we went through the smallest portion possible given the circumstances. As we made our turn, we notified control what we were doing (ask for forgiveness, not permission sometimes).

There is a major difference when it comes to operating overseas vice in the U.S. Air traffic controllers in the U.S. are generally easier to communicate with and are aware of weather ahead of time. While overseas, some areas lack the radar coverage to help advise pilots of hazardous weather. There's also a language barrier in some areas of the world making it difficult to effectively communicate in time-sensitive situations. In this situation, we made a decision to keep our crew and the aircraft safe. The controller issued us a new clearance limit once we were around the storm cell and the remainder of the flight went without incident. At the end of the day, as pilots we must use all our resources, both before and during flight and take the necessary actions to keep our crew and aircraft safe. ➡

UNITED STATES
POSTAL SERVICE® (All Periodicals Publications Except Requester Publications)

1. Publication Title
APPROACH

4. Issue Frequency
QTRLY

7. Complete Mailing Address of Known Office of Publication (Not printer) (Street, city, county, state, and ZIP+4®)
NAVAL SAFETY COMMAND
375 A STREET
NORFOLK VA 23511

8. Complete Mailing Address of Headquarters or General Business Office of Publisher (Not printer)
NAVAL SAFETY COMMAND
ATTN JEFFREY JONES CODE 04
375 A ST NORFOLK VA 23511

9. Full Names and Complete Mailing Addresses of Publisher, Editor, and Managing Editor (Do not leave blank)
Publisher (Name and complete mailing address)
NAVAL SAFETY COMMAND
ATTN JEFFREY JONES CODE 04
375 A ST NORFOLK VA 23511
Editor (Name and complete mailing address)
NAVAL SAFETY COMMAND
ATTN REBECCA COLEMAN CODE 04
375 A ST NORFOLK VA 23511
Managing Editor (Name and complete mailing address)
NAVAL SAFETY COMMAND
ATTN PRISCILLA KIRSH CODE 04
375 A ST NORFOLK VA 23511

11. Known Bondholders, Mortgagees, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages, or Other Securities. If none, check box ☒ None

Full NameComplete Mailing Address
NAVAL SAFETY COMMANDCOMMANDER
375 A ST NORFOLK VA 23511

2. Publication Number
0

5. Number of Issues Published Annually
4

6. Annual Subscription Price
0

Contact Person
REBECCA COLEMAN
Telephone (include area code)
(757) 444-3520

3. Filing Date
11/06/2024

6. Annual Subscription Price
0

Contact Person
REBECCA COLEMAN
Telephone (include area code)
(757) 444-3520

12. Tax Status (For completion by nonprofit organizations authorized to mail at nonprofit rates) (Check one)
☒ Has Not Changed During Preceding 12 Months
☐ Has Changed During Preceding 12 Months (Publisher must submit explanation of change with this statement)

PS Form 3526, July 2014 (Page 1 of 4 (see instructions page 4)) PSN: 7530-01-000-9931 PRIVACY NOTICE: See our privacy policy on www.usps.com.

13. Publication Title
APPROACH

15. Extent and Nature of Circulation

17. Publication of Statement of Ownership
☐ If the publication is a general publication, publication of this statement is required. Will be printed in the _____ issue of this publication.
☐ Publication not required.

18. Signature and Title of Editor, Publisher, Business Manager, or Owner
Rebecca Coleman

14. Issue Date for Circulation Data Below
11/06/2024

16. Electronic Copy Circulation

19. Signature and Title of Editor, Publisher, Business Manager, or Owner
Date
11/06/2024

1. Total Number of Copies (Net press run)

2. Total Paid Distribution (Sum of 15b (1), (2), (3), and (4))

3. Total Free or Nominal Rate Distribution (Sum of 15d (1), (2), (3) and (4))

4. Total Distribution (Sum of 15c and 15e)

5. Copies not Distributed (See Instructions to Publishers #4 (page #3))

6. Total (Sum of 15f and g)

7. Percent Paid (15c divided by 15f times 100)

1. Mailed Outside-County Paid Subscriptions Stated on PS Form 3541 (Include paid distribution above nominal rate, advertiser's proof copies, and exchange copies)

2. Mailed In-County Paid Subscriptions Stated on PS Form 3541 (Include paid distribution above nominal rate, advertiser's proof copies, and exchange copies)

3. Paid Distribution Outside the Mails Including Sales Through Dealers and Carriers, Street Vendors, Counter Sales, and Other Paid Distribution Outside USPS®

4. Paid Distribution by Other Classes of Mail Through the USPS (e.g., First-Class Mail®)

1. Free or Nominal Rate Outside-County Copies included on PS Form 3541

2. Free or Nominal Rate In-County Copies Included on PS Form 3541

3. Free or Nominal Rate Copies Mailed at Other Classes Through the USPS (e.g., First-Class Mail)

4. Free or Nominal Rate Distribution Outside the Mail (Carriers or other means)

1. Known Bondholders, Mortgagees, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages, or Other Securities. If none, check box ☒ None

Full NameComplete Mailing Address
NAVAL SAFETY COMMANDCOMMANDER
375 A ST NORFOLK VA 23511

PS Form 3526, July 2014 (Page 2 of 4)

UNITED STATES
POSTAL SERVICE® (All Periodicals Publications Except Requester Publications)

1. Publication Title
APPROACH

4. Issue Frequency
QTRLY

7. Complete Mailing Address of Known Office of Publication (Not printer) (Street, city, county, state, and ZIP+4®)
NAVAL SAFETY COMMAND
375 A STREET
NORFOLK VA 23511

8. Complete Mailing Address of Headquarters or General Business Office of Publisher (Not printer)
NAVAL SAFETY COMMAND
ATTN JEFFREY JONES CODE 04
375 A ST NORFOLK VA 23511

9. Full Names and Complete Mailing Addresses of Publisher, Editor, and Managing Editor (Do not leave blank)
Publisher (Name and complete mailing address)
NAVAL SAFETY COMMAND
ATTN JEFFREY JONES CODE 04
375 A ST NORFOLK VA 23511
Editor (Name and complete mailing address)
NAVAL SAFETY COMMAND
ATTN REBECCA COLEMAN CODE 04
375 A ST NORFOLK VA 23511
Managing Editor (Name and complete mailing address)
NAVAL SAFETY COMMAND
ATTN PRISCILLA KIRSH CODE 04
375 A ST NORFOLK VA 23511

11. Known Bondholders, Mortgagees, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages, or Other Securities. If none, check box ☒ None

Full NameComplete Mailing Address
NAVAL SAFETY COMMANDCOMMANDER
375 A ST NORFOLK VA 23511

2. Publication Number
0

5. Number of Issues Published Annually
4

6. Annual Subscription Price
0

Contact Person
REBECCA COLEMAN
Telephone (include area code)
(757) 444-3520

3. Filing Date
11/06/2024

6. Annual Subscription Price
0

Contact Person
REBECCA COLEMAN
Telephone (include area code)
(757) 444-3520

12. Tax Status (For completion by nonprofit organizations authorized to mail at nonprofit rates) (Check one)
☒ Has Not Changed During Preceding 12 Months
☐ Has Changed During Preceding 12 Months (Publisher must submit explanation of change with this statement)

PS Form 3526, July 2014 (Page 3 of 4) PRIVACY NOTICE: See our privacy policy on www.usps.com.

Want to be featured in **Approach** magazine?

SUBMISSION GUIDELINES

When submitting articles and photos, please include:

Title: Proposed headline, though it is subject to change

Author info: Rank, first and last name, as well as unit or organization

Article: Authors should fact check and ensure statements are backed by references or sourced data. Spell out acronyms on first reference. Spell out all organizations and units, as well as city, state or country. Authors need to ask a team member and/or subject matter expert to review article before submitting. NAVSAFECOM and/or CMC SD may make additional changes for clarity and style during the review process.

Article length should be 450-1600 words. Bravo Zulu inputs should be 90-150 words and include a photo.

Photos: All submissions must be sent as separate files and approved for public release. Images should adhere to established safety and security policies. Images should be the original with minimum 1 MB file size. Include the photographer's full name, rank, unit and full description of the image and date taken.

Send to: navsafecom_approach@us.navy.mil

We look forward to including your submissions!

Stay Connected

f

ig

in

yt

whatsapp

Front cover: Lt. Cmdr. Tyler Boston, assigned to Helicopter Maritime Strike Squadron (HSM 79), briefs the Helicopter Aircraft Commander prior to flight operations aboard USS Roosevelt (DDG 80), April 13, 2024. (U.S. Navy photo by Mass Communication Specialist 3rd Class Alfredo Marron)

Bravo Zulu: Images provided by command, organization or unit.

Back cover: The U.S. Navy Flight Demonstration Team, the Blue Angels, perform in Wichita, Kansas Aug. 08, 2024.(U.S. Navy photo by Chief Mass Communication Specialist Michael Russell)

VOL. 66, NO. 2 31



Share the magazine



Approach