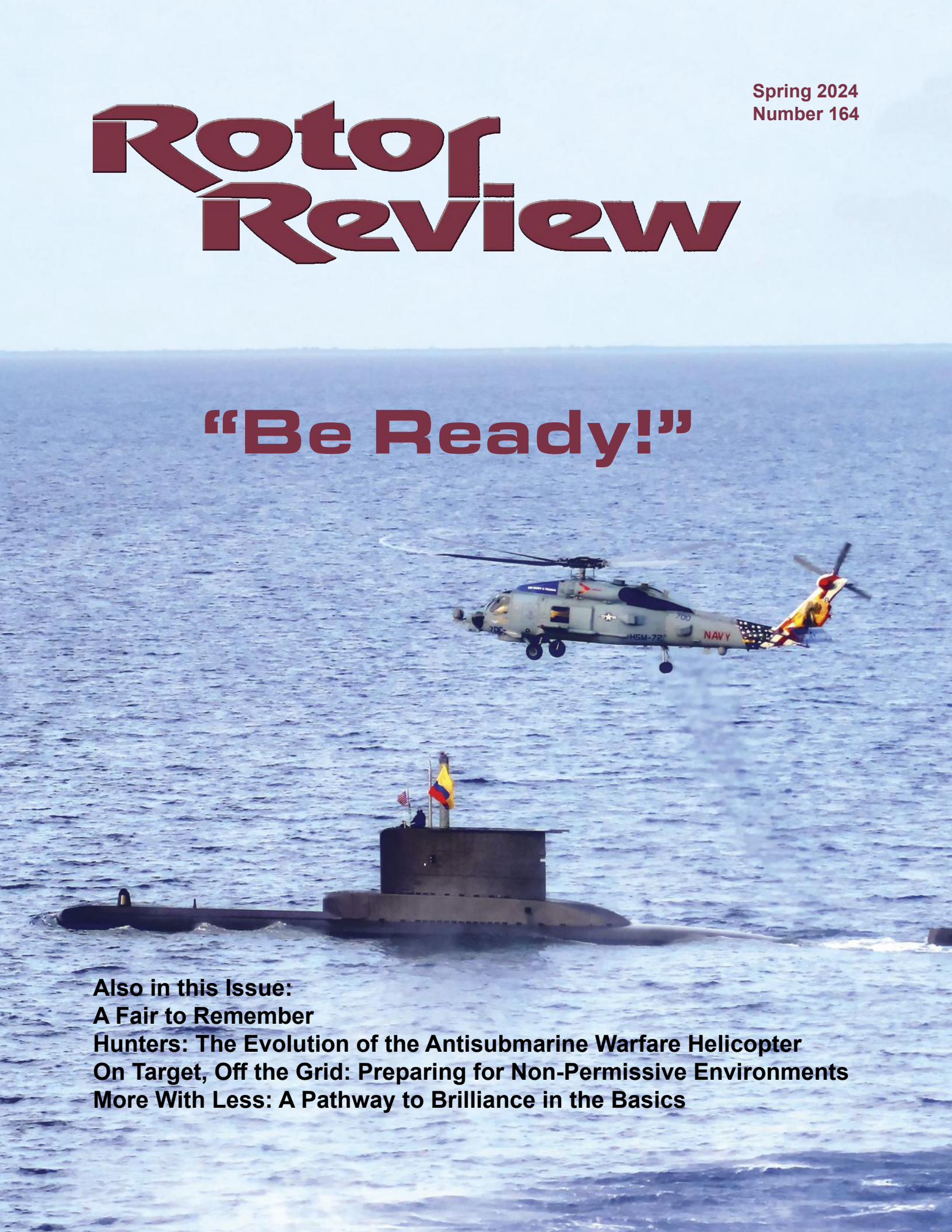
Spring 2024
Number 164

Rotor Review

"Be Ready!"



Also in this Issue:

A Fair to Remember

Hunters: The Evolution of the Antisubmarine Warfare Helicopter

On Target, Off the Grid: Preparing for Non-Permissive Environments

More With Less: A Pathway to Brilliance in the Basics

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COMMANDER, NAVAL AIR FORCES

I am humbled to lead our combat-ready Naval Air Forces. I am in complete alignment with the Chief of Naval Operations' priorities and Commander, U.S. Pacific Fleet orders. Our mission is warfighting, warfighters, and the foundation that supports them. Safety is a priority, and our vision is winning all-domain, agile, and flexible warfighting capability and capacity. Naval Aviation is essential to our maritime nation and our national defense. The Navy, enabled by Naval Aviation, provides global integrated deterrence to preserve the peace, respond in crisis, and win decisively in combat. The U.S. Navy's Rotary Wing and Tilt Rotor Communities play a vital role across the spectrum of operations, and remain integral to our surface force, expeditionary forces, Carrier Air Wings, and indispensable Carrier Strike Groups (CSG).

Today, our Sailors are actively standing the watch around the world to deter aggression, promote our nation's prosperity and security, and provide options to our nation's decision-makers. We are ready. I commend the 1 with their teammates of CVW-3 and USS Dwight D. Eisenhower (IKE) Carrier Strike Group; on station, battle-tested and ready to preserve free-flow of commerce and freedom of navigation in the Red Sea. The USS Gerald R. Ford Strike Carrier Group preceded them and laid the foundation of deterrence with our newest and most capable CVN. And the USS Ronald Reagan, USS Carl Vinson, and USS Theodore Roosevelt Strike Groups completed deployments supporting deterrence and interoperability with our allies and partners!

This year's NHA theme, "Be Ready," echoes the urgency of the next Commander, U.S. Indo-Pacific Command ADM "Pappy" Paparo. In an interview with CBS News he said, "We're ready, yes. I'll never admit to being ready enough." As Naval Aviators we must continually learn, assess, and innovate to prepare for our next flight and our next fight. Take time during this Symposium to have tough conversations that enable frank assessment of our warfighting readiness and how we play to our strengths and improve gaps in capability - hand in hand with industry partners. We are a learning organization and the Aviators deployed with the IKE CSG are sharing lessons learned in real time to improve warfighting tactics, techniques, and procedures (TTPs). I am proud of our CMV-22B Osprey Team as they return to flight and work toward a safe return to mission.

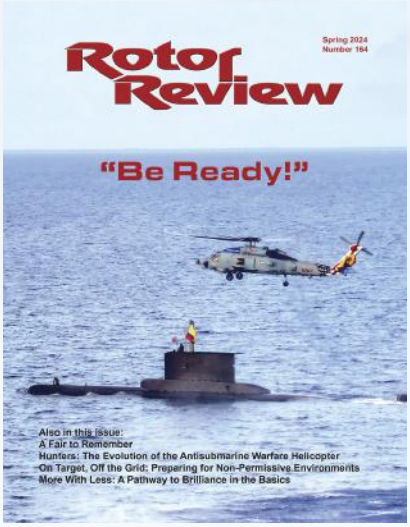
The Navy's true strategic advantage is its people, and in Naval Aviation we pursue warfighting excellence - we will double down on Get Real Get Better, treatment of Sailors, and Live Virtual Constructive (LVC) high-end training. These are key focus areas. We will team with all to deliver at cost, on schedule, and on performance. We are a warfighting team, and we must get the best from each and every teammate!

Lastly, we will recruit and retain talent from across America and we will position Naval Aviation as a pathway to numerous opportunities. You are a recruiter. Your Sailors are recruiters. Work as a team. Treat each other right. Be prepared to win.

Proud to serve on this team. Enjoy NHA Symposium '24 and bring your tough questions to the Flag Panel!

V/r,
Undra

VADM Daniel Cheever Air Boss #10



Spring 2024
ISSUE 164

About the Cover
Proud Warrior (HSM-72)
and ARC Pijao
by Christopher Moon

FOCUS: "Be Ready"

FEATURES

Rotor Review (ISSN: 1085-9683) is published quarterly by the Naval Helicopter Association, Inc. (NHA), a California nonprofit 501(c)(6) corporation. NHA is located in Building 654, Rogers Road, NASNI, San Diego, CA 92135. Views expressed in Rotor Review are those of the authors and do not necessarily represent the policies of NHA or United States Navy, Marine Corps, or Coast Guard. Rotor Review is printed in the USA. Periodical rate postage is paid at San Diego, CA. Subscription to Rotor Review is included in the NHA or corporate membership fee. A current corporation annual report, prepared in accordance with Section 8321 of the California Corporation Code, is available on the NHA Website at www.navalhelicopterassn.org.

POSTMASTER: Send address changes to Naval Helicopter Association, P.O. Box 180578, Coronado, CA 92178-0578.

Rotor Review supports the goals of the association, provides a forum for discussion and exchange of information on topics of interest to the Rotary Force and keeps membership informed of NHA activities. As necessary, the President of NHA will provide guidance to the Rotor Review Editorial Board to ensure Rotor Review content continues to support this statement of policy as the Naval Helicopter Association adjusts to the expanding and evolving Rotary Wing and Tilt Rotor Communities.

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We Will Be Ready

By RADM Dan "Dano" Fillion, USN (Ret.)

The Naval Helicopter Association Symposium of 2024 promises to be a pivotal event with its theme centered on "BE READY." As tensions escalate, in several AORs, the focus on ensuring pilots, aircrew, rescue swimmers, maintainers, and their families are prepared for any conflict is paramount. The symposium serves as a platform to address the challenges ahead and will provide senior officer/enlisted leaders perspective on how to enhance capability across all fronts to ensure the rotary force will "BE READY!"

Rigorous training protocols to ensure equipment reliability and fostering resilient support systems proved their worth in the recent sinking of multiple small boat threats. The armed helicopter concept has been validated and the crews/maintainers left no doubt that Naval Rotary Wing Aviation is ready to meet the demands of potential future conflicts. They know that they always must "BE READY!".

NHA recognizes the interconnectedness of readiness among all stakeholders involved in naval helicopter and tilt rotor operations. It acknowledges the vital role families play in supporting their loved ones in demanding and often hazardous missions. Emphasizing resilience within the familial support structure is crucial, as it ensures that those serving can focus on their duties with confidence, knowing their families are prepared to weather any challenges that may arise. NHA is your organization and when squadrons deploy, they can trust that NHA will, at a moment's notice, be ready to support the families of the deployed warriors. NHA is and will continue to "BE READY!"

NHA '24 will be another "first-ever" kind of event. Check out CAPT "Super G" Gillcrist's comments that follow for the particulars of Symposium 2024.

"Everybody wants to Win but most folks don't know how to Work to Win."

-Tony Dungey, Former NFL Player and Head Coach.

As always I am,

V/r and Committed Not Just Involved (CNJI),

Dano

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National President's Message

BE READY

By CAPT Tommy "Smokey" Butts, USN

This Rotor Review issue and NHA Symposium 24 are focused around the mantra of "Be Ready!"

At NHA Headquarters, we are focused on finalizing the granular details to ensure our marquee event is a success. I believe the schedule of events (SOE) reflects the feedback we received following the Symposium last year. Junior Officers (JO) and Enlisted Aircrew, your voice has been heard and many of your recommendations have been taken onboard and implemented. You will see some similarities in staple events such as the Keynote Address, Captains of Industry Panel, Flag Panel, and Aircrew Challenge. A few noticeable changes will be Professional Development sessions for JOs and Enlisted Warriors, community specific Aircrew Panels, a Luau for the Members Reunion, and more clear space in the SOE to have candid conversations, discuss solutions to issues, and build camaraderie within the Rotary Force.

I encourage you to read VADM Hughes' "Be Ready" article in this issue. Having personally spent time with CVW-3 Team Battle Axe prior to their deployment and during the Optimized Fleet Response Plan (OFRP), I can assure you that those squadrons "Were Ready" to execute when called upon. They executed to their level of training. Leading into deployment, I was impressed by the camaraderie, integration, and communication across Team Battle Axe, specifically between the two helicopter squadrons. There is no doubt that integration has led to their many successes during this deployment.

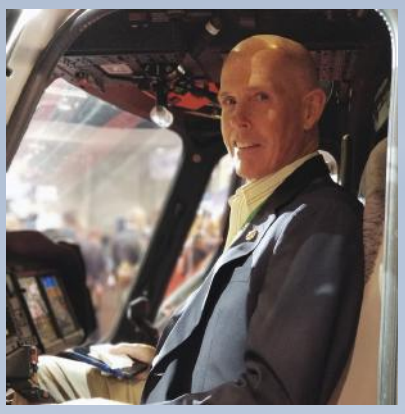
The 2024 NHA Symposium is at Harrah's Southern California Resort from 15-17 May. The actual first event is a Welcome Social held on the evening of 14 May. Following are other key events:

- "I-Bar" Welcome Social – hosted by Ms. Deb (14 May, 1800 at I-Bar DET Harrah's)
- Keynote Address – VADM Dan "Undra" Cheever, Air Boss
- CDRE / CAG Panel
- JO Call with Air Boss
- Enlisted Warrior Call with Force Master Chief
- Luau and Member's Reunion
- "The Challenge" – Aircrew Challenge conducted on Harrah's property
- Female Aviator Breakfast
- Captains of Industry Panel
- Flag Panel
- JOPA PRODEV Panel
- Flight Suit Social / Industry Reception
- Golf Tourney – ADM Baker (North Course)

If you haven't already, go to the NHA Website and register for NHA Symposium '24. I look forward to seeing you all in May.

It is an honor to serve as your National President of our professional organization.

V/r,
Smokey
NHA LTM #504



The 2024 NHA National Symposium: "Be Ready"

By CAPT Jim Gillcrist, USN (Ret.)

It is game on for the upcoming NHA National Symposium at Harrah's Resort Southern California from 15-17 May, which has been in the making since last Symposium.

Your NHA National Symposium is being worked by a team of committed volunteers (officer and enlisted) from both coasts, all led by National President, CAPT Tommy "Smokey" Butts, National JO President, LT Zoe "Latrina" Macfarlane, and National Senior Enlisted, AWRCM Nate Hickey. The NHA Team has taken inputs from last Symposium and crafted a theme and schedule of events aimed at creating a powerful and relevant conversation for the Rotary Wing and Tilt Rotor Communities.

With a hotly contested geopolitical environment around the globe, this year's Symposium theme, "Be Ready," is on point. And in fact, the Rotary Force is already in the fight. The focus is about having tough conversations that enable frank assessment of our warfighting readiness and how we play to our strengths and improve gaps in capability – hand in hand with Industry Partners.

What can you do as NHA Members? Well, if you are not deployed in harm's way, you can register, book a room, and participate in Symposium. You can bring your Fleet experience and your voice, and join the conversation – weighing in during the Flag and Captains of Industry Panels. JO or Aircrewman, you will have access to Rotary Force leadership to include the Air Boss, who is giving the keynote address. Symposium is your professional organization. By attending and getting involved, you enrich the overall discussion for Fleet Operators and Industry Partners. Your direct involvement strengthens the organization, forges the team, and fosters camaraderie.

Looking forward to seeing you at Symposium and hearing you articulate/represent Fleet challenges and concerns for your brothers and sisters who are on station, out at the tip of the spear.

So, bring your A-Game to the 2024 NHA National Symposium and make a difference!

Please keep your membership profile up to date (mailing address and region affiliation). If you should need any assistance at all, give us a call at (619) 435-7139 and we will be happy to help – you will get Linda, Mike, Megan, Allyson, or myself.

Warm regards with high hopes, Jim Gillcrist / LTM #43

CDR Michael Whittemore, USN (Ret.)
LTM #875

CDR Ed Rybold, USN (Ret.)
LTM #839

Newly "Coined" Lifetime Members (LTM) in the Spotlight

LT Jake Dunigan, USN
LTM #869

CAPT Rob Moore, USN (Ret.)
LTM #872

CAPT Matt Pringle, USN (Ret.)
LTM #874

CDR Gene Pontes, USN
LTM #878

AWR1 Tyler Hanson, USN
LTM #837

AT1 Joseph Walker, USN
LTM #877

Every Member Counts / Stronger Together

VP of membership Report

Always Have a Bag Packed

By LT Brendan "BradChad" McGinnis, USN

One of the most impactful pieces of advice I received when I transitioned from the FRS. This simple yet profound guidance emphasizes the importance of being the person others can rely on for sudden deployments or unforeseen tasks. By consistently stepping up and being dependable, you can position yourself at the forefront of the minds of the DHs and the front office.

Since then, I've navigated through both Fleet and shore tours, gaining valuable insights into maintaining balance while constantly being on the move. It became clear that, along with being operationally ready, prioritizing mental well-being and seeking support from peers are crucial. Our community fosters a culture of mutual care and success, where we lift each other up to ensure everyone thrives.

I was taught that readiness encompasses both proactive and reactive elements. While we must sometimes respond swiftly to unexpected situations, honing our proactive readiness distinguishes us from our enemies. Staying mentally and physically prepared eases the transition when called upon for unforeseen missions.

How does this relate to NHA? Our involvement expands our network, connecting us with experienced individuals and mentors who offer invaluable perspectives beyond our daily roles. Building these relationships and accessing diverse resources equips us to anticipate and tackle future challenges effectively, embodying the readiness ethos that defines our profession.

Another plug for the Max Beep Membership Promotion that remains in effect through April 30th!

Max Beep Officer Categories:

- Production (FRS / Training Command Squadron): 50 + wardroom ($1500)
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- Small Unit (Wing Staff / Weapons School / Detachment : 10-24 ($500)
- Disassociated: < 10 (2 free drink tickets at Flight Suit Social during Symposium for every unit member attending). This will be capped at 10 units with number of Lifetime Members serving as the tie breaker.

SIZE OF THE UNIT WILL BE DETERMINED BY NUMBER OF DESIGNATED HELICOPTER OR TILT ROTOR AVIATORS ASSIGNED.

Max Beep Enlisted Categories:

- Aircrew Shop: 15 minimum ($500)
- Maintenance Department / Detachment: 15 minimum ($500)

I appreciate your commitment to NHA and feedback is always welcome to make us a better organization to serve you.

Fly Navy,

LT Brendan “BradChad” McGinnis
VP of NHA Membership
724.809.6548
brendan.s.mcginnis.mil@us.navy.mil

Be Ready

By LT Zoe "Latrina" Macfarlane, USN

At Tailhook 2023, ADM Aquilino responded to a JO's question with two words: "Be Ready." That statement resonated within the room of aviators because readiness depends on the circumstances. What does being ready look like for the HSC Community in a time when there is change and uncertainty in some of our primary and secondary mission sets? For example, the discussion about the future of the MQ-8 adds uncertainty to the mission sets that HSC will be expected to fulfill. We don't have a clear answer on whether funding will continue for the MQ-8. If funding is discontinued, will HSC continue to have an unmanned platform? If not HSC, will another community fill in the role? Furthermore, there has been expansion within the AMCM mission. With HSC-23 recently picking up AMCM, both expeditionary squadrons on the west coast will be executing AMCM on LCS deployments.

Beyond questions about our capabilities within functional areas, we face more global questions (literally and figuratively). Are we ready for war with adversaries that we believe to be the biggest threats to national and international security? Just as importantly, would we be ready for a different adversary and battlespace than what we have been anticipating? To get a better sense of what our community thinks about our readiness, I polled the HSC-3 JO Wardroom with two questions. The first question was, "If we go to war in the next two years, do you think the HSC Community is ready?" The second being, "What mission do you think would be, or become, HSC's primary role in said war?" The answer to the second question is especially important. While we need to be ready for anything, we also need to take a hard look at what the future looks like for HSC and aviation as a whole, and train accordingly.

EABO, Combat Logistics, MCSAR, AMCM, ASUW, and PG/VERTREP/MEDEVAC were the six options listed as answers for the second question I asked. Of the thirty-two answers I received from HSC-3 JOs, twenty votes were for Combat Logistics, seven were for PG/VERTREP/MEDEVAC, two for AMCM, two for MCSAR, and one for EABO. Clearly, the resounding answer was combat logistics. Although my question was specific to HSC, I think that a similar question should be asked across all aviation communities. Furthermore, I think the statement "be ready" begs additional questions that are applicable across all platforms. First and foremost, are we ready? Even if the answer isn't a resounding "yes," folks in the aviation community have the heart and drive to get where we need to be no matter the environment or circumstances. Everyone in our community has chosen to serve. While there may not be a clear-cut answer to what the future looks like, the pilots, crewmen, and maintainers in the aviation community have the will and passion to meet the mission, and that can't be measured as a readiness metric.

Be Ready

By LT Elisha "Grudge" Clark, USN

Happy Symposium Season, Rotor Review readers!

Among these pages you'll find stories of submarine sightings (Hunters: The Evolution of the Antisubmarine Warfare Helicopter), a visit to the fair (A Fair To Remember), and CRM that transcended the coastline of almost the entire Western Coast Guard complement (CRM Cubed).

I am incredibly proud of every submission above, impressed as always by the paths being forged across the Fleet. I want to recognize a particularly humbling contribution by one of our Marine Corps Aviation brethren, Col. David "Metro" Fitzsimmons, who is currently at the helm of MAG-29. As a MAG CO, he is the Marine Corps' equivalent of a Commodore, and my vision as Editor-in-Chief has been one of unity, bringing Navy, USMC, and USCG more together. We are stronger together than we'll ever be alone. Our stories deserve to be told in keeping with this axiom.

Our theme for this Spring, Be Ready, focuses on every aspect of being ready for the fight. The solution for being ready has many perspectives and philosophies, many of which are covered at length in this pre-symposium issue. I'd like to talk about an essential component of being ready: learning from our mistakes.

When planes were getting shot down in large quantities during WWII, the Navy decided there was a need for a statistical analysis focused on where to armor them. Engineers made diagrams and schematics of the bulletholes, and noted that many of the planes were returning with them in the wings and fuselage. As the logic would follow, they proposed armoring the planes in those places.

But Abraham Wald, a statistician, disagreed. He told the engineers that they were focusing on the wrong aspect of the problem. They needed to focus on the planes that hadn't come back, not the ones that had. They needed to armor the spots on the planes that were clear of bullet holes, such as the engines.

Wald astutely observed something everyone else had missed: we learn from both our successes and our failures, but we cannot only take half of that lesson. With that in mind, I am happy to introduce the theme for our next issue, The Human Weapon, which will focus on fine-tuning the operators in the planes by placing an emphasis on mental and physical well-being. In order to succeed, we must have the self-awareness to know our weaknesses. Our strengths may be someone else's foibles, and our shortfalls may be bolstered by someone else's gifts. We only become ready for the fight if we can rely on the person next to us. That person can only Be Ready with your support.

Letters to the Editor

It is always great to hear from our membership! We need your input to ensure that *Rotor Review* keeps you informed, connected, and entertained. We maintain many open channels to contact the magazine staff for feedback, suggestions, praise, complaints, or publishing corrections. Please advise us if you do not wish to have your input published in the magazine. Your anonymity will be respected. Post comments on the NHA Facebook Page or send an email to the Editor-in-Chief. Her email is elishasuziclark@gmail.com, or to the Managing Editor at rotorreview@navalhelicopterassn.org. You can use snail mail too. Rotor Review's mailing address is: Letters to the Editor, c/o Naval Helicopter Association, Inc., P.O. Box 180578, Coronado, CA 92178-0578.

Rotor Review

Articles and news items are welcomed from NHA's general membership and corporate associates. Articles should be of general interest to the readership and geared toward current Navy, Marine Corps, and Coast Guard affairs, technical advances in the rotary wing / tilt rotor industry, or of historical interest. Humorous articles are encouraged.

Rotor Review and Website Submission Guidelines

- Articles: MS Word Documents for text. Do not embed your images within the document.
- Send as a separate attachment.
- Photos and Vector Images: Should be as high a resolution as possible and sent as a separate file from the article. Please include a suggested caption that has the following information: date, names, ranks or titles, location, and credit the photographer or source of your image.
- Videos: Must be in a mp4, mov, wmv, or avi format. With your submission, please include the title and caption of all media, photographer's name, command, and the length of the video.
- Verify the media does not display any classified information.
- Ensure all maneuvers comply with NATOPS procedures.
- All submissions shall be tasteful and in keeping with good order and discipline.
- All submissions should portray the Navy, Marine Corps, Coast Guard, and individual units in a positive light.

All submissions can be sent via email to your community editor (their emails are on page 3), the Editor-in-Chief (elisha.s.clark2.mil@us.navy.mil), or the Managing Editor (rotorreview@navalhelicopterassn.org).

You can also use the USPS mail.
Our mailing address is: Naval Helicopter Association, P.O. Box 180578, Coronado, CA 92178-0578

Be Ready

By VADM Jeff Hughes, USN

I am excited to again be offering some thoughts in advance of our upcoming annual symposium. Last year's symposium brought to life the theme of "Forging Legacy, Legends Past and Present." In that preparatory Rotor Review piece, I challenged us to not only celebrate the exceptional contributions of those who have gone before us, but also to forge the legacy of our generation by delivering the Navy the nation needs today, and into the future. This year's symposium theme, and all that has transpired in the last year, make "Be Ready" an especially appropriate rally point in 2024. We need to wring this out - discuss our experiences, offer fresh thinking, and drive action behind promising ideas. Besides the tremendous opportunity for camaraderie, this is why our professional organization hosts symposiums.

Photo by Petty Officer 2nd Class Cassandra Thompson, U.S. Naval Forces Central Command / U.S. 5th Fleet.

I initially thought this piece would be easy to write, but quickly realized that succinctly characterizing "being ready" would prove to be more challenging. The first thing that needed to be addressed was defining "being ready to do what?" Focusing your effort (ways and means) on clearly defined ends is the essence of strategy and planning. To achieve our national ends (why) the Navy is expected to perform missions, functions, and tasks regionally and globally (where) against likely competitors (who) in unpredictable timeframes (when). We prepare for routine deployments and crisis response based on probable threat-based scenarios, but the current geopolitical situation has us addressing a variety of things - some anticipated, and some less predictable. Naval history is replete with examples of individuals and units who responded brilliantly to the unexpected, but it also includes examples of others who responded ineffectively. A key takeaway is that our preparation should provide the necessary foundation from which to respond broadly, but with a focus on the core Navy missions, functions, and tasks the Joint or Coalition Force Commanders expect of us. I offer the following thoughts in hopes of generating discussion on this pivotal subject during our upcoming symposium.

What does "right" look like?

We all know it when we see it and it's usually evaluated after some test that determined the extent to which one's performance validated a certain level of preparation. Our community Required Operational Capabilities and Projected Operating Environments (ROC/POE) defines what we are expected to do in support of operational plans. The Optimized Fleet Response Plan (OFRP) then sets the unit level (and above) preparation requirements leading to attainment of a certification to support a range of tasks determined by the operational commanders.

As many of us were taking a knee during the New Year's holiday stand-down, others were put to the test. I'm referring to the crews from CVW-3 Team Battleaxe who responded to a call for support in the Red Sea. It's fair to say they envisioned how this mission would play out in the days and hours prior to it happening, but in the moment they showed the world that they were indeed READY. One might surmise that they "rose to the occasion," but I see it differently. When presented with the mission at hand, they executed as they prepared; which led to deliberate - not merely fortunate - outcomes. We will all hear more about this mission in the months ahead, but I asked the squadron skipper to provide his assessment as to why his team performed so brilliantly. I'm going to paraphrase his words. It first starts with culture, the command's mindset. Their mission execution was founded in a command-wide warrior infused winning attitude that was manifest in everything they did from the mundane to the high risk. He also emphasized that EVERY member of the squadron contributed to the outcome. They all rightfully focused on their individual contributions to enable the command's mission performance. When I read his confidently and passionately articulated description of the command's winning culture, it reads as you would expect it to: invest in your people and they will strengthen the team, the commitment to culture must endure leadership changes, and maintain high standards that reflect the quest for varsity level winning performance. This squadron didn't surge their performance to meet expectations, but rather, confidently executed as a team to deliberately and methodically accomplish the mission based on their commitment and preparation. This team is a learning and adapting organization. When they failed to meet a standard, they invested in applying the learning with a goal of constant improvement as opposed to focusing on assigning blame. They reward those who boldly take the initiative and enable their people to experiment and learn. This culture culminated in two helicopter crews engaging the adversary in self-defense with effective employment of HELLFIRE missiles and crew-served weapons. The crews' actions were assessed to be combat effective, destroying two fast inshore attack craft and two unmanned explosive boats that were overtly threatening freedom of navigation on the high seas. This team

brilliantly executed a timeless and enduring core Navy sea control mission, an area in which Naval Rotary Wing Aviation has always focused since we first took to the air from ships.

So, are you ready?

This is a question that we all need to ask of ourselves as individuals and then answer it honestly. Are we prepared physically, mentally, and morally to accomplish the assigned mission any time we fly? This question extends well beyond just getting ready for a specific event, it defines who we are as professionals. Are we fully committed to the noble cause of our service? Do we personify the winning mindset? Do we strive to learn, grow, and improve with every opportunity presented (and sought)? We are also always part of a team that relies upon our contribution - be it at the crew, detachment, or squadron level (and above). We make the team and the team makes us. I will also add something that may be considered controversial by some, but the adage of squadron, squadron mate, and self in that order may not be entirely appropriate. The intent behind putting others ahead of yourself is certainly righteous, but if you are not fully taking care of yourself, you may not be adequately postured to contribute your very best. To empower the team you must take care of yourself. Taking care of yourself includes your wellness, relationships, balance, and energy. You have choices and resources available if you are not where you need to be. Take advantage of command support and the numerous other outlets to get you back to where you want and need to be. To make your command ready and elite, you need to be a great teammate always ready and actively contributing to a winning culture. All squadrons more or less have similar opportunities and challenges, yet there is great variance between those at the top and those at the bottom. Much of what has been discussed here makes the difference. If you don't think your command is there, rally with those who are with you and take action. From the individual to the squadron level, you have the ability to set the conditions and drive outcomes.

Is the Navy ready?

As I'm targeting those in operational units as my key audience, your level of direct control diminishes as we look more broadly at the Navy writ large; however, never underestimate your ability to influence how we better develop and employ the force.

Let me start with some relevant context. I have served in three U.S. Navies. When I first joined the Fleet in the late 1980s, the purpose of the community and our type/model/series weapons system was clear. We were designed and employed to maximize the Navy's sea control advantage over our peer competitor. From my very first day in the FRS, we studied the threat, we learned the environment, and we constantly assessed ourselves and our squadrons. With the fall of the Berlin Wall during my nugget tour, we quickly pivoted to OPERATIONS DESERT SHIELD/DESERT STORM and commenced decades of protracted land campaigns. Power projection became the Navy's focus and was enabled by unfettered access to the maritime environment. For the past decade, the global security environment has seen the resurgence of competition with comprehensive adversaries, and the maritime domain has become contested in ways not seen since World War II by low and high end adversaries. The next fight will be all domain, but will favor the side that effectively controls the maritime battlespace. I assert that the Naval Rotary Wing Community is uniquely postured to deliver an outsized contribution to the restoration of our sea control advantage. You will be critical in both defining the problems we face and determining viable solutions.

We offer countless options to support our pivot to a more lethal and survivable distributed force. We have multi-domain, multi-mission game and offer a powerful voice in the conversation to bring Distributed Maritime Operations to life. It's in our DNA. We are also at a point where we must determine what the future of the Navy Rotary Wing Community will look like - as we did in the late 1990s with the Helicopter Master Plan / Helicopter CONOPS, which was much more than a future airframe determination. This work and the need to experiment, learn, and adapt with existing kit today serve as a call to action for us.

So how do we make the community, and Navy more ready? We push the envelope with what we have, determine creative ways to solve key operational problems, and define the future requirements that lead to warfighting advantage. This should happen in the cockpit, in your ready rooms, and with your command interaction with the weapons schools, and the warfare development centers. Embrace and explore mastering novel and creative ways of employment through experimentation, and exercises to seek advantages.

No military force has ever competed or gone to war with everything they need - let alone everything they want. We need to understand the future fight and our unique role in it so we can seek to exploit opportunities and impose costs on our adversaries to gain relative advantage.

In Closing

The challenges we face are not unprecedented. Within the last century, we have been victorious in global competition and conflict with capable and committed adversaries. The Navy has often proved to be a successful learning organization, which enabled us to adapt faster than our adversaries - and we are actively restoring this focus across the Navy today. Winning requires sacrifice, constant effort, confidence, thoughtful adaptation, and occasionally discomfort. We own our culture and must always be ready to win. Preserving the rules-based international system and meeting our national objectives require a steadfast commitment to striving to be an elite team. The stakes are again extremely high and we must act with urgency and a rededicated focus. It's our time, and if not us, then who? You are all here for a reason and must be ready to play your part. History will determine if we were ready, let's seize the opportunity to ensure that we are!

Be Ready

By Col. David Fitzsimmons, USMC
Commander Marine Aircraft Group 29

There have been many recent articles discussing Richard Betts' question on military readiness, "ready for what?" The strategic concept of readiness has been evolving in the Pentagon over the last few years but for guidance from the Commodore's Corner, I'm looking at the tactical level. Given current hostile events around the world, today's Navy and Marine Corps are facing threat levels not seen in decades. With open conflict in Europe, Africa, and Central Asia, combined with significant potential for open conflict developing in the Pacific and South America, it is only a matter of time before the U.S. military finds itself decisively engaged again. We need to be ready for fighting our rotorcraft on the modern battlefield. As our Department of Defense leaders focus on policy and a strategy of balanced investments and force management decisions, we need to focus on being exceptional at our day-to-day tactical jobs! In Marine Aircraft Group (MAG) 29, I am seeking proficiency in three areas to focus our efforts. No matter the location or enemy, Marine Corps rotary wing aviation needs to manage our signature by operating distributed forward in small elements, maintaining and repairing our aircraft from forward locations within the enemy's reach, and communicating within a larger network without large support packages.

The large signature associated with our past operations in Iraq and Afghanistan will not survive a contemporary peer adversary. Large footprints in fixed positions are easily targeted by shortened intelligence cycles and readily available precision weapons. Managing our signature with respect to force disposition and footprint will be an operational art; what size and scope will remain below the enemy threshold for targeting? A pilot or aircrew who can operate without large support elements is critical to the success of rotary wing aviation detachments maintaining a small signature. This concept is not new. One area of focus we need to "be ready" is the ability to lead in the sky and on the ground. Leading a small detachment within the enemy's reach has force protection and logistical concerns not often dealt with by aircrew. Forward staging rotorcraft and operating from low signature locations is not compatible with large-scale forward operating base infrastructure and resources. This will challenge pilots and aircrew to be responsible for some of the logistics of life support and basic security. We need pilots and aircrew who have given this problem set devoted study and are ready for those challenges when tasked to operate in a distributed battlefield.

Maintenance in forward distributed areas will challenge our current naval aviation maintenance posture, and aircrew will need exceptional systems knowledge to keep their rotorcraft in the fight. Navy and Marine Corps maintenance posture is generally a garrison-based construct. While we have the ability

Col. David Fitzsimmons, USMC
Commander Marine Aircraft Group 29

to do field maintenance, the system is optimized for a central location in close proximity to supply and intermediate-level maintenance expertise. Flying and fighting from distributed forward locations will stretch our ability to maintain aircraft. Are pilots and aircrews being provided realistic training opportunities to gain and maintain proficiency and skillsets of flying, with an intimate understanding of the aircraft, intermediate and varsity-level maintaining, sustaining, repairing, communicating, and fighting in a distributed and contested environment? This question should force us to think about how maintenance departments are split into forward teams, determine what level of maintenance can be reliably conducted from forward sites, review the frequency of inspections required for safe operations while allowing uninterrupted forward operations, and identify substitutes acceptable for consumable items and support equipment. All of these processes make it essential for aircraft commanders, who are responsible for safe execution of the mission, to know their machines better than ever. In the modern cockpits of multifunction displays and mission computers, the status of aircraft has become binary with the aircraft telling the pilot if it is up or down. Pilots need to fully understand the interdependency of systems within their machines so they can make real-time risk decisions that are supported by foundational Commander, Naval Air Forces (CNAF) systems knowledge and safety policies. It may not be easy to call for a specialist to troubleshoot a system in a forward location. A crew's decision to remain in place or knowingly fly a degraded but safe aircraft to a maintenance location will have implications on risk exposure and distribution of maintenance capabilities.

Communication remains the hallmark of any effective fighting organization and will absolutely be essential to distributed operations. Pilots and aircrew will need to be experts in radio and network capabilities, structure, and the signature that is produced. How our aircrew tie into the battle when airborne will be as important as how they tie into command and control of distributed sites on the ground. Where to go next, what to plan when they get there, how they will be supported, and coordinating resupply are just some of the considerations they will face when communicating. Degraded and denied spectrums will require savvy crews who can effectively communicate through several different means and waveforms. Signature management will also be key to how crews communicate; the pathways, spectrum, and domains may be a lifeline to friendly forces but can also betray a distributed location to the enemy if not managed properly. To be ready, we need to focus on rapidly developing communications capabilities available and ensure every aircraft commander can facilitate their own communications and network administration. This is no small task, but it's absolutely essential and very much akin to the pioneers of aviation evolving radio communications in past conflicts.

The future fight looms and the skills required to find success on the battlefield are daunting. Technological advantages are shrinking, and the targeting cycle is exponentially faster. Training and readiness will have to make up the difference. Aircrew training cannot be limited to great airmanship; we must be ready as leaders, platform-specific experts, and agile communicators familiar with the equipment and spectrum available today to be effective on the battlefield. The spirit of our naval aviation heritage has not changed, these responsibilities are not new, but now is the time to prepare because I suspect our time to be ready is dwindling.

Author's Note:
The content of this article is my view/opinions and does not represent the position/views of the DoD or USMC.

"Be Ready"… from the Mail Room of Naval Aviation: The Night Boat

By CAPT Arne Nelson, USN (Ret.), LTM #4 / RW # 13762
President, NHASF

Be ready reminds me of my various adventures on and around the night boat and to a lesser degree, night air refueling. Both, when done successfully, call for cold Class Six on arrival. But I digress. The night boat…

Summer, 1985, EMED / Beirut NLQ currency.
The challenge:

CH-53E Night Landing Currency, two night landings on any H-53 certified flight deck in a one-year time frame. Pro: 2 landings in a year, piece of cake…Con: deck time, let alone night deck time, HARD to schedule (i.e., you must take what you can get).

We had been working with ASCOMED to get us some deck time, mainly to keep everyone's night quals current. Finally, we got a deck: USS New Jersey, location: Beirut. We had operated with battleships often enough and knew we fit. Day lesson: With a freeboard of about 17 feet, we get wet, stem to stern! Night lesson: TBD

Three things were memorable:

1. On final with a 17-foot freeboard, we were drenched with rotor wash, and with the wipers on at full speed, cranking for all they were worth, rattling away like an orchestra maestro, but without ever touching the windshield. It was like landing into a fully-charged firehose.

2. Taking off to the upwind turn was uneventful, just black dark. But the downwind headed directly into Beirut, somewhere between the corniche and the airport, a haven for bad guys and that night included a light show of tracers, oil tanks ablaze, and general chaos, which could be seen from five miles out.

3. We got the quals.

Skip three years forward to the eastern edge of the English Channel. It is a dark night, low ceiling. Embarked in an LHA returning from a NATO Exercise in Norway, the HC-2 H-53 Det was tasked with a serious but non-life-threatening medevac from USS Ship to USAF Hospital Lakenheath. Destination weather ashore was 'dog,' in fact, while we were flying inbound, Metro changed current conditions to WOXOF. Hearing that, we immediately checked fuel gauges and recalculated our go-no go, agreeing that we'd have gas to make one approach in the UK, and then we'd have to depart The next dry land we would see would be Bermuda, so we could not afford any delay.

Sure enough, we contacted London Military for vectors for a GCA. We made it to short final, never seeing the runway environment, let alone approach or runway lights, and we waved off. They said they "heard us go by." They wished us good luck and gave us the ship's PIM (not number one cup*) and weather, as best they could.

After waving off at RAF Lakenheath (WOXOF), we made a beeline for our LHA, about halfway through the channel, with weather at minimums, overcast with low ceilings and reduced visibility. I was in the left seat, as an instructor with almost 2500 H-53 hours. I had ceded the right seat to my copilot, a newly minted HAC on his first detachment with 650 hours. He wanted the landing.

Over the channel, we descended to about 250 feet and proceeded to the ship. The TACAN was spinning which meant we were low and far. Slowly gaining on the ship under the low cloud, we were told to proceed straight in, look for spot 8. We had taken time to brief the procedure for a low vis approach and landing. He wanted to use the LHA glide slope light. We briefed that a 'green' slope would bring us in a little higher than we were used to, since it was set for the squadron of Harriers aboard.

Finally, after chugging halfway across the English Channel, we had a faint visual on the ship, corresponding to our TACAN lock, about a half mile ahead. I conferred with my copilot and backed him up with altitude and airspeed calls. He crossed the deck edge at 100-110 feet and a little fast, and initiated a big nose high flare, losing sight of the deck, the rigging, and LSE. Similarly, my sight was blocked by the instrument panel. Then, he yelled, "idon'thinkicandothistakethecontrols!" while double-clicking the radio transmit switch on the cyclic.

"I don't think I can do this! Take the controls!" was not a standard ICS transmission, and certainly not meant to be a broadcast radio call. I took control, sorted us out and landed, with the Air Boss scorching the electric wiring of my helmet.

I got the landing.

Finally, think of air refueling. It is night and dark. Now, the C-130 drags you into a large cloud. You call for a breakaway, and your wingman doesn't call his 90 or 180, leaving you attached in formation with a close-in C-130. Luckily you are attached on the port side. There is more room and you are glad to have mastered "recovery from unusual attitudes."

There is more to say about these debriefs, but those are other stories for another time.

The Scholarship Fund: Apply and Donate.

2023 was a tough year for fundraising, and as corporate sponsors reevaluate their donation policies, some have reduced their annual gifts. Thank you to the donors we have kept for your continued support. LMCO, TeledyneFLIR, USS Midway Foundation, NHA BoD, and our perpetuity KAMAN, Ream Memorial, the Big Iron, The Night Dippers, Raytheon, and Don Patterson 1000 Points…and others on the fence.

Scholarship News. A round of applause to our NHA Scholarship Fund Committee for their efforts to prescreen the 2024 applicant pool and deliver a slate of 46 highly qualified applicants, competing for fifteen $4,500 scholarships. The regional selection teams, including a CMC panel for military personnel and spouses, selected 15 competitive undergraduate, postgraduate, active-duty candidates, and military spouses. Next year we will have 15 $5000 scholarships.

Enduring legacy, REDUX: I'd like to tip my hat this month to the old H-46 bubbas and their legendary thousand pallet lifts. I am asking you to send in your stories with a challenge, and maybe fund a drive in honor of the aircrews and deckhands doing this stuff at night with a rack of red masthead lights as their only reference. NHASF Legacy Awards can keep the spirit of the Thousand Pallet Lifts alive.

Region	One San Diego	Two Wash DC	Three Jax	Four Norfolk	Five TRACOM	Six OCONUS	Seven Functional	Total
Total Applications	12	15	7	11	4	NONE	13	62
Complete Applications	11	12	6	5	3	-	9	46
Incomplete Apps/ineligible	1	3	1	6	1	-	4	16

For the Trustees:

If you are age 70½ or older and have an Individual Retirement Account (IRA), you can use the Qualified Charitable Distribution (QCD), also known as the IRA Charitable Rollover to make a gift to support the NHA through the NHA Scholarship Fund. Making a gift using a QCD can:

- Be an easy and convenient way to make a gift from one of your major assets.
- Reduce your taxable income even if you don't itemize your taxes.
- Count toward your required minimum distribution when they commence at age 73.

For your gift to qualify:

- You must be age 70½ or older.
- The transfer must go directly from your IRA custodian to the NHA Scholarship Fund.
- Your QCD gift cannot exceed $105,000 in one calendar year.

The Process:

- Tell your IRA administrator you'd like to make a QCD.
- Make out the check to the NHA Scholarship Fund and send it to P.O .Box 180578, Coronado CA 92178-0578.

The NHA Scholarship Fund is a 501 (c) (3) nonprofit charitable California corporation: TAX ID # 33-0513766. Please ask them to include your name and the fund you wish to support on the note line of the check.

Application Season for 2025 opens 1 September 2024

Donate: Anytime

** Pimm's No. 1 Cup is a gin-based beverage flavored with fruits and spices invented around 1823 as a health drink.*

SH-60F Update

By CAPT Bill Personius, USN (Ret.), President, NHAHS LTM #46 / RW#1621

This issue's theme, "Be Ready" is appropriate for NHAHS.

The CDR Lassen Medal of Honor Memorial SH-60F Helicopter on a Stick Project is making good progress and should be ready to start construction in June 2024.

This is a bit of a change from the original plan to have the project completed in June 2024, however, this timeline makes better sense now given several parts of the plan were slow to come together.

That is the bad news. The good news is that we are on track now to complete the project and have the helicopter mounted in October of 2024.

We don't have an actual approved Dedication Date for the Ceremony yet. However, we are working toward mid-October and the birthday of the Helicopter Community.

For those of you unfamiliar, the Helicopter Community Official Birthday is 16 October 1943. This year's birthday falls on a Wednesday. So that is the goal.

By the time that you read this article, I am hoping that we have an approved date for the ceremony so check our NHAHS Website and it should be published there.

The MOU for the long-term maintenance plan of the aircraft between the Base and NHAHS has been submitted to the Region.

The paperwork (and there has been a lot of it!) has been submitted and approved! No mean feat - and NAVFAC is ready to issue all the required permits to start construction.

The Seabees have been alerted and are standing-by, and planning to help support the demolition of the area by clearing the rock and foliage at the site.

All the raw materials required for the stanchion connecting hardware have been ordered and delivered.

FRCSW has taken acceptance of the materials and started work milling out a shim plate to fit against the belly of the aircraft and fabrication of the mount.

The aircraft restoration has been completed to include a custom paint job.

Some engineering work to keep the main rotor blades off the droop stops and look like they are conning has been completed.

The restoration of a MK-46 training shape torpedo is in work by CNATTU North Island to be mounted on the starboard side of the aircraft.

Preparations for a Dedication Ceremony have started.

Brick orders for the base of the stanchion are being reviewed and finalized to be submitted in time to be installed prior to the Dedication Ceremony. To date we have over 350 brick orders…don't go without leaving your mark on Naval Helicopter Aviation at NAS North Island…order a brick today! Get a brick for yourself, a friend, family member, loved one or fallen shipmate. You still have time to order a brick…see accompanying page to place your order.

$100 – 4" x 8" Brick
$250 – 8" x 8" Brick
$500 – 12" x 12" Brick

Thank you to all those who have ordered bricks and to all those who have donated funds.

Thank you to all our sponsors ,and thank you to all our volunteers to include the artisans at the Midway Hangar 805 without their help and support the restoration would not have happened.

Thank you to all of you for being patient as we just went over three (3) years on 3 February 2024 since we started this project.

I promise you… this project will be worth the wait when we are done with it.

"Be Ready!" We are going to get this project completed!

Keep your turns up!

Regards,
Bill Personius
CAPT USN (Ret.) LTM-#46, R-16213
President

Naval Helicopter Association Historical Society (NHAHS)
https://www.nhahistoricalsociety.org/
PO Box 180578, Coronado, CA 92178-0578

Help Fund the Lassen SH-60F

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VADM Stockdale Gate
Master Helicopter Base

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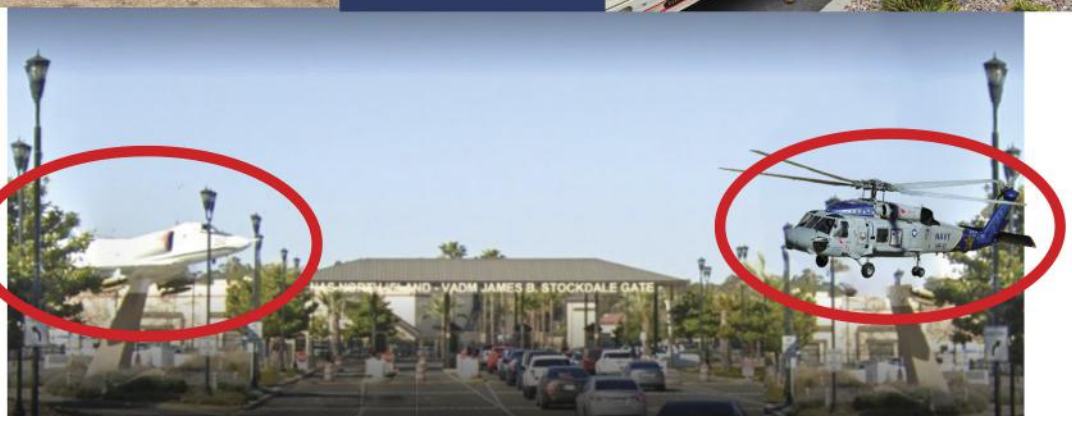


Computer Rendition of NASNI Stockdale Entrance with SH-60F on a Pedestal

Mail Checks to: ***Naval Helicopter Association Historical Society, Inc. (NHAHS)***
(Preferred) ***NASNI SH-60F Project***
PO Box 180578
Coronado, CA 92178-0578

Or Donate Online: ***https://sh60fhoas.navalhelicopterassociation.org/***

Enjoy a Q&A with one of our Editors, LT Samantha "Amber" Hein!

Editor since: October 2023

Hometown: Belleville, IL

Location: San Diego, CA

Past Squadrons/Commands: HSM-78 "Blue Hawks" attached to CVW-2 in CSG-1 aboard CVN 70 (USS Carl Vinson) & DDG 106 (USS James B. Stockdale). Currently a MH-60R FRS Instructor attached to the "Seahawks" of HSM-41.

Favorite Tour: HSM-78 during our 2021-2022 WESTPAC deployment. I know what you're thinking, a "COVID" deployment?! It was such a great time to experience the horror of Squid Games and consistently lose at Catan. In all seriousness, this time is when I got the closest to the wardroom, and I miss all the inside jokes, memories, and…Guam.

Favorite EP: Immediate Landing/Ditching. It has the most steps so it feels like a small win to recite it verbatim.

Favorite Color: Purple!

Favorite Food: Sushi or cookies.

Favorite Hobbies: Absolutely demolishing my husband in pickleball and petting my dog, Truman.

Why did you decide to become a Rotor Review Editor?

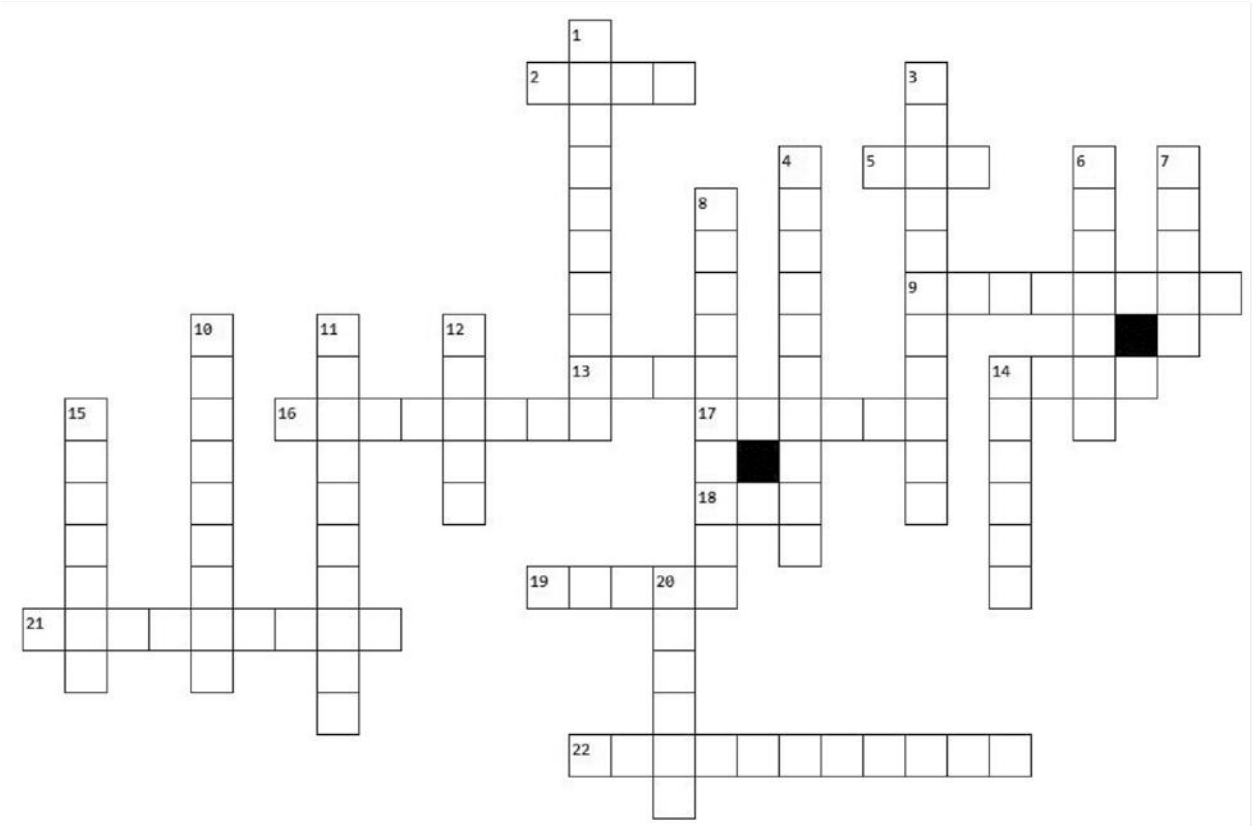
I studied Journalism in college, and I thought it was a good time to dust off my editing skills. Plus, I always love going to the NHA Symposium so I wanted to support one of their products.

What is your favorite memory in Naval Aviation?
Taking off in the dark and watching the sun come up. They are the most beautiful sunrises I've ever seen.

What are your goals for the future?
I plan on staying in and seeing where the Navy takes me. I'd love to fly forever. After that, my husband and I want to move back to the Midwest, get a nice piece of land, and spend our retirement frequenting Missouri sports and traveling the world.

Think you can Be Ready?
Try your hand at this crossword puzzle. Good luck!

By LT Quinn "Charity" Stanley, USN



Across

2. Primary way to effect an overland rescue

5. Coordination of fires so all munitions arrive at the target at precisely the same time; abbr.

9. CSG Rehearsal Exercise

13. USN form of warfare involving mobile, low-signature forces

14. Logistic method used by the Army to increase helicopter mobility and flexibility

16. Operates with a pulse signal for detecting non-stationary targets

17. NATO's newest member

18. Responsible for coordination and control of aicraft during PR mission

19. To call to a state of readiness; Status held by on-call PR assets

21. A weather phenomenon or a combat stealth fighter

22. CRM skill that allows aircrew to alter their course of action under pressure

Down

1. One of CNO Franchetti's Priorities

3. Performing a given skill with expert correctness

4. Toughness; Capacity to recover quickly from difficulties

6. Secretary of the Navy Carlos

7. An unknown air contact

8. Gas turbine that is optimized to produce shaft horsepower

10. Operational _____

11. USN goal to dissuade adversaries

12. Prepared mentally and physically for action

14. Location of NAWDC

15. An aquatic mammal or a twin engine SAR aircraft

20. Body of water through which 30% of global container traffic passes

Get Ready For Symposium

Naval Helicopter Association (NHA) Symposium
May 15-17, 2024

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Benefiting the Historical Society and Scholarship Fund

Admiral Baker North - Directions

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1100 Registration - 1200 Shotgun Start

Includes: Cart, Box Lunch, Pizza, Beer, and Prizes

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Registration/Payment Method:
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NHA VP for Symposium
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NHA JO President
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CRM Cubed

By LT Ryan O'Neill, USCG, Sector Humboldt Bay and LT Cori Sanchez, USCG, Sector North Bend

As pilots, we brief the crew before every flight on Crew Resource Management (CRM), often breezing over "Wave-off Actions, Sterile Cockpit Procedures, and the Two-Challenge Rule." Every year, we spend an hour with an instructor, evaluating historical mishaps in the hopes that one day the training will prevent one of our own. However, we very rarely examine a positive example of CRM and how it plays a part in cases across multiple districts, sectors, and assets. On June 19, 2021, along the California-Oregon border, we got to experience firsthand the impact our CRM trainings have had.

Players:
CG6565, MH-65D from Sector Humboldt Bay, CA
CG6524, MH-65E from Sector North Bend, OR
CG2709, C-27 from Air Station Sacramento, CA
CGC Benjamin Bottoms, WPC from San Pedro, CA
CG47261, MLB from Station Chetco River, OR
M/V Almi Spirit, Tanker ship in vicinity
S/V Barlovento, 79' German-flagged sailing schooner

1535L, MCKINLEYVILLE, California:

I had just put the steaks and veggies my wife had dropped off for us into the fridge by the wardroom. It was a slow Saturday duty and we didn't even have a training flight, so our crew decided to fire up the grill and have some steaks that evening for dinner. I was getting hungry, and wondered what time everyone wanted to start eating. Battling the laziness of a sunny Saturday afternoon, I started making moves to get the crew together out on the patio to kick off our festivities. Then, the SAR alarm went off…

"Put the ready helo on the line for a DSC Alert, 70 nautical miles west of Crescent City. Now, put the ready helo on the line."

Immediately I thought, "Man, this is totally going to be a false alarm, and we are going to fly out there for an hour, get stood down, then fly an hour back. Steak day is ruined."

"Helo crew, be advised, a correlating Emergency Position Indicating Radiobeacon (EPIRB) hit was received in the same location as the Digital Selective-Calling (DSC) Alert."

Steak day was definitely going to be ruined...

Meanwhile in NORTH BEND, Oregon:

It was a typical weekend duty day in North Bend. Sunny blue skies, warm weather, and no rain in the forecast. Okay, not so typical. But after a productive morning trainer, we were just turning on Netflix when the Command Center called: an EPIRB hit off a German flagged yet otherwise unidentifiable vessel 70 NM west of Crescent City, CA, and just two miles south of the Oregon-California border (outside of the North Bend AOR). "Humboldt's got this one," I thought and returned to the TV.

1603L, MCKINLEYVILLE, CA:

We had just completed startup checklists in the 6565 and were preparing to taxi out with a standard fuel load and a self-locating datum marker buoy (SLDMB), because nobody knew what the nature of distress was, what the vessel was, or if it was even still afloat. I requested a cover asset since we would ultimately be 90 nautical miles from home plate, and over 70 nautical miles from the nearest point of land. The command center requested a C-27 from Sacramento, but advised me that we would probably get on scene first. Our crew had briefed and we were taxiing out when the command center informed us that they had learned it was a 79' schooner taking on water, and one crewmember had sustained a head injury and a broken arm, but they did not have direct communication with the vessel. Now the plan changed… We left the SLDMB on the ramp and asked the line crew to bring out a litter as we now were focused on the medevac of the crew member with the head injury. After only a few minutes of delay, we were off and fuel was going to be tight.

1638L, MCCLELLAN, California:

Air Station Sacramento launched the C-27, 2709 to provide cover for the Sector Humboldt Bay helicopter. They had multiple pumps onboard.

1620L, HARBOR, Oregon:

Station Chetco River launched a 47' Motor Life Boat to the last known position of the EPIRB hit. ETA - 8 hours.

1655L, COOS BAY, Oregon:

CGC Benjamin Bottoms diverted from training to the last known position. ETA – 4 hours.

1706L, On board 6565:

Throughout the hour transit to the last known position, we talked about a rescue plan. I estimated we would have less than 30 minutes once on scene with enough fuel to take us to Crescent City Airport, where we could transfer the survivor to EMS and refuel to go back out to render further assistance, if needed. About 30 miles offshore, the weather began to rapidly change; the seas went from calm 6 foot rollers, to huge white capped waves. The winds, which were about five knots out of the West-Southwest back at Sector, were now a stiff 55 knots out of the Northwest. With the change in conditions, it actually worked out that we would have slightly more time on scene if we changed our Bingo location to home field, which was 90 nautical miles from the last known position (LKP). On maritime channel 16, we could hear a seagoing tanker, the M/V Almi Spirit engaging with Sector Humboldt Bay Command Center. Almi Spirit had altered course and was on its way towards the distressed vessel. We hailed them on CH 16 and they informed us they were in communications with the crew of the stricken vessel. They also told us the vessel was named Barlovento, and it was dead in the water with no electrical power, taking on water, and there were six people on board. Wow, ok…

We arrived in the vicinity of the LKP, scanning for a beacon with the DF, and established visual contact with the 800 foot M/V Almi Spirit. The tanker advised us that the schooner was about three miles off their starboard bow. Our crew began scanning the white capped water but still could not see it. Time was critical and I could not believe we were all having such trouble seeing this 80 foot vessel and that we weren't getting a DF needle swing. Finally the flight mechanic located the vessel, conned us in the direction, and we descended to about 200 feet. When I finally saw the ship and got closer to the surface of the water, I realized why we were having trouble spotting it. The 20 foot waves were hiding the entire vessel when it was in the trough, and its white hull blended in with the white caps. At this point, we had about 14 minutes to Bingo.

1714L, NORTH BEND, Oregon:

At this point, we had been monitoring the situation down in California and knew they would be launching us as back up soon. We had heard the initial forecast from Sector Humboldt Bay as 30 knots out of the North, four miles visibility with haze, and 12 foot seas. We also knew that there was a vessel taking on water with six personnel on board (POB), but a quick Google search of "Barlovento" resulted in so many different ships that we were not sure what to expect. As fairly new pilots to the mighty Echo model (about two weeks after the transition), we tended to stay on the conservative side of the risk vs. gain discussions. However, the conditions seemed ripe for a case. We packed a pump and launched in the 6524 to the south, knowing we had time in the air to plan and we would still need to stop to refuel.

1730L, On board 6565:

The schooner, despite all sails down and no engine power, was being pushed down swell at about 10 knots. We elected to perform a harness deployment of the swimmer to the water a few yards in front of the predicted path of the vessel. The swimmer disconnected and swam towards the boat, grabbing on to a line trailing from the stern. For every part of 8 minutes, the swimmer was being towed behind a vessel that was effectively underway at 10 knots, and hand-over-hand pulled himself aboard the ship (this is a story for another time). He learned that the survivors were German and didn't speak fluent English. The injured crewmember had fallen from a rack. He brokE his arm, and hit his head on the deck pretty hard. The vessel had taken on an unknown amount of water, and did not have electrical power, which is why they were using a handheld radio that only had the range to reach the nearby tanker. With three minutes to bingo, the swimmer jumped into the water with the survivor. We moved in for a basket pickup and with the known time constraint, the swimmer hopped in the basket on top of the survivor. We were up and away with the first survivor. We communicated with the C-27 during the 45-minute transit back home and learned they were a few minutes from the scene.

1740L, On board CG2709:

The C-27 arrived on scene from Sacramento. They established communications with the M/V Almi Spirit and successfully dropped a pump to the S/V Barlovento. However, the crew of the sailing vessel was unable to operate the pump.

1756L, BROOKINGS, Oregon/CRESCENT CITY, CA:

The 6524 landed at Brookings Airport, a small self service station near the southern border of Oregon. While the crew worked to refuel the aircraft, I conference called with Sector HB Ops, CDR Darrah, the North Bend Command Center, and the North Bend SMC for more information. It sounded as though Barlovento had about two hours of seaworthiness remaining; we learned that the C-27 also had a pump onboard.

After spending thirty unsuccessful minutes trying to get the fuel pumps working, we relocated the aircraft to Crescent City, a small serviced airport near the northern border of California. After learning the sailing vessel now only had about one hour left until it sunk, we ditched the pump, took the extra fuel, and headed out to sea.

1833L, MCKINLEYVILLE, CA:

After transferring the patient to EMS and taking max fuel, we headed back to the scene. This time, the 6524 was also enroute from a fuel stop and we were able to hash out the next steps among the 3 aircraft. We had learned the C-27 had performed a successful drop of a dewatering pump, but the pump was inoperable and the vessel continued to take on water. The 2709 had a second pump, and they were communicating with the survivors if it was worth it to try again. We asked the C-27 to let them know the helicopter was heading back out and could take all the survivors off the boat if they wanted to get out. The tanker relayed to the C-27 that the survivors would like to be rescued. So we prepared for hoisting and crunched the numbers with the survivors' weights that the 2709 had gathered.

1929L, On Board 6565

Having previously been on scene, our crew had a good idea how the rest of the rescue would go. Our challenge would be to communicate our ideas to the other 2 aircraft and see if it worked with their plans, and the tanker who could ultimately relay to the survivors (for some reason, no CG asset was able to communicate directly with the survivors via radio). We explained to the C-27 that we would like to lower the swimmer down near the boat who would then signal for one survivor at a time to jump off the stern. The rescue swimmer (RS) would recover them and bring them up to the helicopter. The C-27 relayed this to the tanker, who then relayed to the schooner that we would be sending down our swimmer and then the survivors would be put into a rescue basket and brought in the helicopter. Our crew clarified: "We would not be sending down a basket, the survivors will be rescued by the swimmer on the cable." Then we heard the correct message relayed by the C-27 and the tanker. We would not have much time on scene, and the last thing we wanted was the survivor to wait until they saw a basket before jumping in the water. We began the hoist, and our swimmer was able to use some non-verbal communication, motioning to the survivors to jump towards him. We recovered the next three survivors this way.

1941L, On Board 6524

During the transit from Crescent City, we had started hearing communications between Sector Humboldt Bay, the 6565, the C-27, and the M/V Almi Spirit. Up until this point, we hadn't been able to determine the exact methods of recovery that the 6565 had used for the first survivor, and we were still unsure how many survivors remained onboard. My

The Coast Guard Cutter Benjamin Bottoms pulls into the Port of Los Angeles channel. **U.S. Coast Guard photo by Petty Officer 1st Class Mark Barney.**

rescue swimmer having served on every 65 model in the Coast Guard, asked me if I had ever done a live hoist to a dead in the water (DIW) sailboat. I told him that I had not but planned to put him next to the boat if we were able to, and watched the seas get progressively larger as we headed further offshore. However, with the comms getting clearer, we realized that the method the 6565 was using would work great and that the crew onboard the schooner had been previously briefed.

We pulled up on scene, now with winds sustained at 50+ knots and seas of about 20 feet, and watched from a hover next to the 6565 as they pulled up the fourth survivor and departed for fuel. We slid to the right, lowered the rescue swimmer to the water, and started the hoists. To remain above the swinging mast on the schooner, the hoist was from an altitude of about 150 feet. For those of you operating the Echo model, we used a combination of CAAS HOV and BALT, since the seas were significant enough to cause fluctuations in the RADALT. As we pulled up the last two survivors, the copilot was recalculating the new aircraft weight.

"We're going to be at 9,315 pounds," he told me as the FM conned me plumb. With the winds, I knew we would not be even close to an overtorque, but mentally, I was already calculating how quickly we could perform Rescue Checks Part 3 to see if we could stay under the two minute limit. We could not. We ended up in a 3+ minute hover over 9200 pounds, and as we headed back to Humboldt Bay, I hoped the clause in the 1H-65E-1 Hover definition stating "in winds of 35 knots and below" would save us from a long night of maintenance. It did not.

6524 completed the hoists of the remaining two survivors as the 2709 relayed the play-by-play to the command center. Once all survivors had been rescued, the aircraft thanked the tanker for the excellent assistance and sent them on their way. 2709 escorted both 65s back inside the air defense identification zone (ADIZ), and we all thanked their crew for the help as they returned to base. 6565 and 6524 safely arrived to Sector Humboldt with the remaining 5 five survivors back on deck. The next challenge for the crews was finding a place for dinner around midnight in sleepy McKinleyville…

Crew resource management is "optimizing not only the person – machine interface and the acquisition of timely, appropriate information, but also interpersonal activities including leadership, effective team formation and maintenance, problem-solving, decision-making, and maintaining situational awareness."[1] Since the evolution of CRM from "Cockpit Resource Management" to "Crew Resource Management," the concept behind the model has shifted from a single-pilot tradition to team performance. In this way, we can also evaluate CRM across multiple crews, separated by miles of sea, air, and land.

Crew resource management can be viewed as a model with three major components: input factors, group process factors, and outcome factors. The most significant of these factors is group process, or the quality of interpersonal interactions.[1] Reinforcing appropriate attitudes, effective communication, efficient decision-making, and team management is how CRM training improves group process to affect better flight operations.

One study conducted in the development of the CRM model found two prevailing negative patterns of leadership in previous mishaps: the "macho" pilot and the pilot who fails to control the cockpit.[1] Hazardous attitudes such as these can lead to conflict between pilots or crews, and it is important to remember it is not who is right, but what is right, especially when every second counts on a SAR case. In the S/V Barlovento case, conflict between crews would have been catastrophic: the vessel sunk only minutes after the second aircraft departed scene.

The premier critical skill of CRM on a case like this is Communication. As aviators, we strive to achieve a shared mental model among members of our crews for every flight and every mission set. We have briefs and an entire blue book aimed at prompting development of a shared mental model. At our Annual CRM Refresher Training, we talk about barriers to communication and distractors from CRM, but what if one of the barriers is that your crew is spread across six responding assets? Every person involved in that case shared a common goal of rescuing those six people on the stricken schooner. Our challenge was to develop a game plan, and share that game plan, so we could accomplish that goal smoothly and safely.

Behaviors commonly associated with effective communication in CRM studies are: inquiry, advocacy, and assertion.[1] With no Coast Guard asset in direct communication with S/V Barlovento, the 6565 crew had to rely on communication with the M/V Almi Spirit for case details. Some barriers to communication were: this was not a CG asset and may not have experience with rescues at sea and they are not familiar with what is pertinent to a helicopter rescue crew. The 6565 asked (inquiry) concise but specific questions one at a time on CH 16 and allowed M/V Almi Spirit to answer each one. When they arrived on scene, they deployed a crewmember to the vessel to obtain details directly from the survivors. On the transit back home with the first survivor, the 6565 passed along all the information they had to the C-27 crew who was arriving on scene and establishing radio contact with M/V Almi Spirit. The C-27 crew also relayed information from the scene to the enroute 6524.

The 6524 had heard about the basket hoist of the first survivor and initially planned basket recoveries for the remaining POB. After the 90-mile game of telephone, the Humboldt crew asked the North Bend crew, via the C-27, if they would consider using the technique currently employed (advocate) to prevent a miscommunication to the survivors, who had just watched three of their shipmates hoisted directly by the swimmer.

The assertiveness of the Humboldt crew made it easy for the 6524 to make the same decision. The direct swimmer hoist took less time than a basket hoist anyway, and on the last evolution, the side of the vessel was just about underwater with every swell.

These case results were positive: six people saved, a safe return to home stations by all crews involved, and the successful experience of working with multiple crews. And often, CG crews, with all of our training and technical expertise, succeed in their missions, whether they are Search and Rescue, Air Intercept, or Airborne Use of Force. It's easy to sign the aircraft back in and forget about the flight over a beer. But CRM does not end when the flight ends. Another essential component is crew self-critique, and this should occur both during and after mission completion.[1] As we continue to assess our decision-making on this case, we urge you to do the same.

Notes

1. Robert L. Helmreich, H. Clayton Foushee, Chapter 1 - Why CRM? Empirical and Theoretical Bases of Human Factors Training, Editor(s): Barbara G. Kanki, Robert L. Helmreich, José Anca, Crew Resource Management (Second Edition), Academic Press, 2010, Pages 3-57, ISBN 9780123749468, https://doi.org/10.1016/B978-0-12-374946-8.10001-9.

Trillion Dollar Stakes, A Thousand Dollar Problem

Helicopter Sea Weapons School Atlantic plays critical role in NATO's Dynamic Move

By LT Eric J. Mott, USN

Nestled in the foothills of the Apennines at the southern end of the legendary Riviera di Levante lies a thousand year old maritime center called La Spezia. Two thousand miles away by sail where the Low Countries hold off the mighty North Sea lies the sleepy coastal resort town of Ostend. As distant as these two destinations may seem, their esoteric connection holds vital the prosperity of Europe, and perhaps even the world. Every year these popular ports of call play host to a little-known war game called Dynamic Move (DYME), NATO's premier mine countermeasures exercise based on real geography, mine threats, and maritime vessels. With over 90% of global trade carried over the waves, not to mention the trillions of dollars' worth of transactions carried under them via cables and pipelines, the stakes have never been higher. Unfortunately, the downside to this high-seas gamble is logistical risk, or, in other words, modern life. If critical sea lines of communication (SLOC) go offline, even for a brief period, entire economies can be destroyed. Some SLOCs are so vital that closure would result in an imminent humanitarian crisis.

But what lurks beneath or above the waves to bring such a disaster is not some sexy submarine, ship, plane, or missile, but rather an unassuming naval mine costing only a few thousand dollars. Technology so simple and inexpensive that any adversary can obtain and employ it. Moreover, naval mines' clandestine nature makes them an easy choice for gray zone tactics and asymmetric warfare. On a psychological level, even the ostensible establishment of a minefield, regardless of its actual existence, is enough to bring to a standstill commercial and naval traffic alike. That's why NATO, especially with its vulnerability and proximity to numerous maritime choke points, is well adapted to the threat of naval mines, with two of its four standing naval forces dedicated to mine countermeasures (MCM). For its European partners, it is not uncommon for MCM to be their navies' mainstay. For the U.S., however, what's left to counter this problem is a hodgepodge of long-promised "modern" systems and an aging fleet of forward-deployed wooden-hulled ships and maintenance-heavy helicopters. In fact, both the Avenger-class MCM ship and the sole remaining operational MH-53E airborne mine countermeasures (AMCM) squadron, the HM-15 Blackhawks, saw commissioning the same year: 1987. However, what they lack in modern sophistication, they make up for in actual operational experience: they've swept and hunted bona fide enemy mines with real world consequences. In short, their systems and tactics are proven, but it is time to pass the baton.

La Spezia Naval Base

As a Navy, we find ourselves in a precarious position - the complete transformation of a critical warfare area that has seen its share of neglect. That's why it is critical to capture and pass on the knowledge, and perhaps even wisdom, from the trove of harrowing time spent in the minefield by those who dared set foot in that arena. One such individual is Mr. Mark Reynolds, a civilian contractor at Helicopter Sea Weapons School Atlantic, who has been training HM pilots and aircrew for over three decades. But, if that is not special enough, he's likely the only person still working in MCM for the U.S. who has actually been in a mine strike. During Operation Desert Storm, he was already a contractor supporting AMCM operations aboard USS Tripoli (LPH 10) when it struck a contact mine on the morning of February 18th, 1991. Having been thrown from his rack during slumber, his life henceforth would forever be entwined with mine warfare. This blast is still being felt today as every HM WTI learns their craft from his indispensable teaching.

Our charge now, with the imminent sundown of the MH-53E Sea Dragon and with it, Mr. Reynolds' time with the Navy, is to effectively parlay his teachings to the next vanguard of AMCM and, ideally, the MCM Community at large. This is where DYME is involved. Held twice a year, once in La Spezia, Italy, home of the Italian Mine Warfare and Hydrographic Command, and once in Ostend, Belgium, home of the NATO Naval Mine Warfare Center of Excellence, DYME offers a stage where NATO MCM Staffs can demonstrate their prowess and earn their Response Force certifications, a requirement for ascension to one of the standing NATO MCM Groups. For the third time in a row now, HSCWSL has sent both pilot and aircrew HM WTIs to assist, train, and evaluate over 140 personnel from 24 partner nations on Task Force, Task Group, and Task Unit level staff planning and execution of AMCM operations as well as

analysis of game simulation accuracy. Moreover, this most recent iteration saw HSC-21 participate as observers, one of a series of milestones planned to bring them up to speed on all things MCM. Importantly, on the horizon is their participation in the Advanced AMCM Tactics Continuum held at HSCWSL, where they'll get to train with the Dragon Master himself, Mr. Reynolds, further solidifying his legacy by bridging the past with the future. Our shared hope is that this will equip HSC-21 to excel as AMCM leaders in this coming RIMPAC and the next DYME.

International Mine Countermeasures Exercise.
Photo by Petty Officer 3rd Class Daniel Rolston, USN.

More importantly however, we need them to be ready to carry the torch of AMCM into an uncertain future where the use of mines is not just likely, but a guarantee. As Sir Walter Raleigh famously said almost 200 years ago: "For whosoever commands the sea commands the trade; whosoever commands the trade of the world commands the riches of the world, and consequently the world itself." Will we be ready to counter the pernicious threat of naval mining? Are our new systems up to the challenge? Are we a competent Naval MCM Force? Only time will tell, but what's for certain is best summed up in the words of Carl Jung: "The world will ask who you are, and if you do not know, the world will tell you."

On Target, Off the Grid: Preparing for Non-Permissive Environments

By LT Sarah Blake, USN

LT Blake at Pax River

The aviation community relies heavily on Global Positioning System (GPS) for navigation. From using ForeFlight on an Electronic Knee Board (EKB) to the convenience of shooting an ILS approach, we have grown accustomed to using GPS on a daily basis. For example, when was the last time you flew a night flight over the mountains and did not have GPS as your primary or backup navigation source?

It is one thing to be searching for LZ #19 at Camp Pendleton at night without any guidance systems, but it is an entirely different situation to be navigating in the South China Sea without any valid waypoints marking territorial waters. With the increasing likelihood of a kinetic conflict with the People's Republic of China (PRC), the helicopter community must ensure it is ready for the fight. We cannot afford to be caught unprepared and forward-deployed in a GPS-denied environment, as the potential consequences are severe.

What is even more concerning than a lack of precision guidance is the lack of Link-16. Not having access to a command and control network in a kinetic environment is a major issue and fundamentally changes our operations. How will we conduct our tactical operations, such as receiving or passing targeting information or coordinating a SCAR mission in a Romeo? We need to include a GPS-denied environment simulator event in the syllabus to prepare for this inevitable wartime situation and we need to do it without delay. We should become experts at tracking a PRC submarine approaching the torpedo range of an aircraft carrier, but we also cannot forget to teach the geopolitical situation surrounding our scenarios. If we are tracking a hostile sub in the real world, we will be operating in a non-permissive environment.

Every aspect of flying helicopters is vulnerable to jamming and denial-of-service attacks, including basic features such as VHF/UHF communications and radar altimeters. It is open-source information that our adversaries are capable of this denial. The threat is real and right now we are at risk of being caught off guard. We must approach this reality with the utmost seriousness and determination. We must all work together to be ready for the fight and start training for denied environments now.

The Crucial "Be Ready" Mindset of the Search and Rescue Community

By CMDCM Keith "Flip" Griffin, USN (Ret.)

Being a retired Command Master Chief (CMC) now for five years brings a distinctively unique perspective to viewing the Navy, shaped by a career's worth of experience and the clarity that comes with distance from active duty. While on active duty, my focus was inherently tied to the immediate needs of my command, the well-being of my Sailors, and the operational readiness of the units I was honored to serve and lead. Upon retirement, this lens has widened, allowing for a more reflective view of the Navy's evolving culture, policies, and strategic direction. Freed from the day-to-day operational concerns and the immediate chain of command, I can appreciate the broader impacts of decisions made at the highest levels, see the long-term outcomes of initiatives I was part of, and critique or commend changes with the benefit of hindsight. This vantage point enables me and others in my position to offer valuable insights into the Navy's trajectory, mentoring the next generation of leaders with a balanced understanding of tradition and progress.

2515th NAAD (HS-15) MEDEVAC Border Pick Up

Background

Throughout an incredibly successful and lucky career, as a Search and Rescue Medical Technician (SMT), I experienced the exhilarating blend of aviation and emergency medical services, which provides a unique vantage point on the front lines of emergency crises. In what I would call the "Golden Years" of SMT, due to the expansion of SMT sea billets, including in the South China Sea Area of Responsibility (AOR), and the creation of the 2515th Naval Air Ambulance Detachment (NAAD), this role demanded rapid adaptation, profound medical and aviation knowledge, and unwavering composure in the face of life-and-death scenarios, all while navigating the complexities of care in the sky. However, mostly it involved a train, train more, and wait mentality. Over time, this accumulation of training, experiences, and insights becomes invaluable, not just in the immediate execution of duties, but in shaping the future of the profession. The lessons my colleagues of the time and I learned in the air and ground—ranging from patient care innovations to advancements in safety protocols and teamwork dynamics—have the potential to drive forward the evolution of search and rescue. By mentoring newcomers, contributing to educational endeavors, and engaging in policy development, any former SMT's legacy can influence generations. This ensures that the profession continues to grow in both effectiveness, adaptation, and sophistication, ultimately leading to better patient outcomes and the ongoing elevation of the job scope in general.

That said, I was informed recently that the genesis of the 2024 NHA Symposium theme of "Be Ready" is based on a simple and clear answer that Admiral John C. Aquilino (Indo-Pacific Command Commander) gave during a Q&A while seated on the 2023 Tailhook Flag Panel. Simply put, when asked about what Junior Officers should tell their Sailors as to what to expect in a future conflict in the South China Sea AOR, he paused and simply replied… "Be Ready!"

Well, in an era where geopolitical tensions simmer in the South China Sea, the readiness of the United States Navy Helicopter Search and Rescue (SAR) Community has never been more critical. As nations navigate the complex web of territorial claims and strategic interests in this vital maritime corridor, the U.S. military, particularly its SAR units, must remain vigilant and prepared. The necessity for these units to stay focused and "Be Ready" for any potential conflict in the South China Sea/Pacific Fleet AOR, requires that they look to the not-so-distant past to draw vital lessons from the experiences of 2515th NAAD MEDEVAC units in the Central Command (CENTCOM) AOR of Iraq between 2006 and 2015.

Lessons from OPERATION IRAQI FREEDOM: A Naval MEDEVAC Units' Experience

The period from 2005 to 2012 in Kuwait and Iraq offered critical "Be Ready" lessons for military operations, particularly for NAAD Sailors assigned there. These units operated under challenging conditions and conducted rapid medical evacuations on a scale never seen before in Naval Aviation.

Our experiences underscored several key principles applicable to the SAR Community in any future conflict in the South China Sea AOR:

Rapid Response: The essence of MEDEVAC operations is the ability to respond swiftly to emergencies. It is equally crucial for SAR missions in the Pacific. In potential conflict zones, the timeliness of response can save lives, both military and civilian.

Adaptability: Kuwait and Iraq's diverse terrain and combat conditions required MEDEVAC crews to adapt quickly. Similarly, the South China Sea's vast and complex environment demands flexibility in SAR operations, from open water rescues to evacuations on remote islands.

Technological Integration: Advanced technology in aircraft, communications, and medical technologies significantly enhanced MEDEVAC capabilities for the NAAD. For the SAR Community, leveraging innovative technology, from drones for reconnaissance to enhanced communication systems, can improve mission efficiency and safety.

Tactical Innovation: SAR crews and planners need to embrace the fact of dual zones of engagement. Similar to mass casualty events where hot and warm zones are designated, "lily padding" patients between front lines (hot) and subsequent lines (warm) of conflict will be crucial to successful movement of patients.

Interoperability: Cooperation with our sister services was a cornerstone of success in CENTCOM. In the South China Sea, collaborating seamlessly with allies and partners will be vital, given the multinational interest in maintaining peace and stability. One place to have immediate insight would be to tap resources and lessons learned from forward deployed squadrons such as HSC-12, HSC-25, and HSM-77.

Historical Adaptation: SAR crews need to look into history as to the successes and pitfalls with conflicts of our past within the South Pacific AOR to see what applicable lessons can be leveraged. As it has been duly recorded, regarding the successes and failures in OPERATION ENDURING FREEDOM, there are similarities with the Soviet invasion of Afghanistan. As we learned from the medical evacuation lessons of World War II, technology might change, but the lessons of war still endure.

Preparing for the Future

The potential conflict in the South China Sea requires the U.S. Helicopter SAR Community to be on high alert. This is nothing new for the Naval helicopter community, as we have always taken a "first to launch, last to land" attitude. This involves not only maintaining peak operational readiness but also engaging in continuous training and exercises that simulate the challenging conditions expected in the region. Joint exercises with allies, focused on interoperability and rapid deployment, can enhance collective readiness. Moreover, learning from the CENTCOM experience, SAR units must prioritize the mental and physical well-being of their personnel. High-stress environments demand robust support systems to ensure that SAR teams can perform their duties effectively over prolonged periods.

2515th NAAD (HSC-21) MEDEVAC Pick-up

Enhancing Strategic Capabilities and Partnerships

As it has been widely known for some time now, the South China Sea is a pivotal region and of strategic importance, hosting significant portions of the world's maritime trade. Beyond its economic significance, it is a potential flashpoint involving China and several Southeast Asian nations, making it a critical area for U.S. military and diplomatic engagement. In this context, the U.S. SAR Community's "Be Ready" mindset in regard to preparedness is not just about conflict readiness but ensuring the safety and security of international waters for all. The geopolitical landscape of the South China Sea is fraught with historical disputes and strategic chokepoints, crucial not only for regional security but for global trade. The U.S. Helicopter SAR Community's role extends beyond traditional search and rescue; it encompasses ensuring the free navigation of these waters and providing rapid response capabilities in times of natural disasters or military confrontations. This multifaceted mission necessitates not only state-of-the-art equipment and training but also robust strategic partnerships with regional allies. The cultivation of these relationships is paramount, as demonstrated by the collaboration between U.S. forces and their counterparts in CENTCOM AOR for all those years, and which continues today. Joint operations and shared learning experiences bolster interoperability and foster a unified approach to regional security challenges.

Training for High-Intensity Conflicts

The conflict in CENTCOM underscored the importance of rigorous, scenario-based training that prepares units for the unpredictability of real-world operations. For the SAR Community, this means not only drills that simulate the technical aspects of rescue operations, but also exercises that prepare crews for the psychological and physical stresses of potential combat SAR (CSAR) missions. High-intensity conflict training, involving both conventional and asymmetric warfare scenarios, will ensure that SAR personnel are equipped to manage the diverse challenges posed by state and non-state actors in the South China Sea.

Embracing Technological Innovation

In Iraq, the rapid evolution of battlefield technology transformed operational capabilities. For the SAR Community, embracing technological innovation means leveraging new tools for communication, navigation, and medical care. Advanced medical evacuation systems, telemedicine, and portable diagnostic tools can significantly enhance the survival rates of casualties. Moreover, integrating artificial intelligence and machine learning algorithms into SAR operations could improve the decision-making processes, from optimizing search patterns to analyzing environmental data for safer mission execution.

Fostering a Culture of Resilience and Preparedness

Finally, the experience in CENTCOM highlighted the critical importance of resilience among military personnel. For SAR units, this resilience is twofold: it pertains to the physical and mental endurance required to execute high-stakes missions and to the organizational flexibility necessary to adapt to rapidly changing tactical and strategic landscapes. Building a culture of preparedness within the SAR Community means continuous learning, from after-action reviews to incorporating lessons from other conflicts and operations. It also means prioritizing the mental health and well-being of SAR personnel, ensuring they have access to comprehensive support services to cope with the stresses inherent in their vital work.

Conclusion

Just as it was in 2005, when SAR crews were preparing to do something no other Fleet squadrons had done in the past, the anticipated challenges in the South China Sea demand a well-prepared, technologically advanced, and strategically astute U.S. Navy Helicopter SAR Community as a whole. Adopting the "Be Ready" mindset from Admiral Aquilino's response during Tailhook 2023 and drawing from the extensive operational lessons of MEDEVAC units in CENTCOM in the past, SAR teams are tasked with being perpetually ready to tackle not only the logistical and tactical challenges of maritime operations but also to navigate the complex geopolitical intricacies of the region. As tensions persist, their readiness to respond, adapt, integrate, and cooperate reflects the United States' unwavering commitment to regional stability, international law, and the safeguarding of human life at sea. This state of perpetual "Be Ready" preparedness is not merely a military obligation, but symbolizes the U.S.'s deep-seated dedication to humanitarian principles, the safety and well-being of those traversing these contentious waters, and an enduring commitment to peace and stability in the region.

South Pacific MEDEVAC - (HS-14) HM1 Keith Griffin

About the Author

Master Chief Griffin is a retired CMC and 20-year Search and Rescue Medical Technician. He was fortunate enough to have been involved in every aspect of the SAR HM Community until his retirement in 2019. He has the unique perspective of being the first SAR HM to stand up a carrier-based Fleet squadron SMT Program with HS-14, in Atsugi, Japan and being TAD in the first year of the 2515th NAAD's existence on Wave 2. He has accumulated over 1200+ hours in various rotary and fixed wing military aircraft and was selected as the 2009 NHA Region One Aircrewman of the Year. He holds undergraduate degrees in Counter Terror Studies and Military Organizational Leadership, and an International Master's degree in Disaster Management & Risk Mitigation. He is a graduate of the CMC/COB Course (Class 161), the Senior Enlisted Academy (Class 198, Gold), and the Coast Guard CPO Academy (Class 200).

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More with Less: A Pathway to Brilliance in the Basics

By Capt Mike "Chowdah" Ayala, USMC

Natural as a Reflex

One of the most debated topics in Marine Aviation is the topic of proficiency and what it entails. The Cambridge Dictionary defines it as: the fact of having the skill and experience for doing something. In Chapter 2 of the AH-1Z Training and Readiness Manual proficiency is defined as: "a measure of achievement of a specific skill" in which skill proficiency is maintained by adhering to the time period for each skill or its "refly period." In order to maintain proficiency in a specific skill, one must "repunch" that code within the refly period. If they don't, then they must typically fly with an instructor who is proficient in that code and can repunch the copilot who is not.

I'd like to take it a step further and make the argument that true proficiency isn't just the practice of repunching codes and turning red boxes green on MSHARP/SHARP for our Aviation Safety Officers and Operations Departments to screen for on daily flight schedules. T.E. Lawrence wrote in his autobiography, *Seven Pillars of Wisdom,* that "Nine-tenths of tactics are certain, and taught in books: but the irrational tenth is like the kingfisher flashing across the pool, and that is the test of generals. It can only be ensured by instinct, sharpened by thought practicing the stroke so often that at the crisis it is as natural as a reflex."

Natural as a reflex. In a resource-constrained environment with reduced ordnance availability, low-density exquisite weapons systems to train to, and many mouths to feed when it comes to aircrew flight time and progression at tactical Fleet units, is this a concept that is even remotely possible? I would make the argument that it is, but we must focus on the things we have direct control over, namely, how we mentally and physically prepare for flight events.

Last Mag

Throughout Naval Aviation, ordnance availability and flight time are at a premium, especially for new copilots going through their initial syllabi. My experience with this in the HMLA Community has been no exception. Initial qualification in ordnance delivery events demand large ordnance allocations per aircraft that costs millions of dollars per year just to make qualified copilots and legal crews. The reality of the situation is, many initial qualifications take place without having the required ordnance amounts required per the T&R Manual, with many students getting qualified by shooting as few as seven rockets or even less (they rate up to 19 depending on the event). The number of rounds or rockets available for qualifications is heavily dependent upon the time of year or the health of the unit's fiscal year Non-Combat Expenditure Allocation (NCEA). This issue is exacerbated when you start to peel back the onion on how many AGM-114 HELLFIRE or APKWS II an individual pilot has shot

The kingfisher flashing across the pool

in their career, which is typically, maybe one or two unless they participated in a large exercise or attended MAWTS-1's Weapons and Tactics Course. At the end of the day, we work with what we have, not what we want (which is a larger and healthier NCEA which is directly tied to funding as well as procurement from industry). So how do we get to where we need to be when it comes to accuracy metrics?

Make it Count

The answer lies in a mix of both mental and physical preparation with an emphasis on the basics. In baseball, good habit patterns are not established in games or scrimmages. Skills are developed either in the batting cages with a tee or live pitching. Off the field, video tapes are reviewed and batting mechanics are scrutinized. According to Popular Science Magazine, hitting a baseball is the hardest skill to pull off in sports (Rynston-Lobel).[1] I would argue that shooting rockets, guns, and precision guided munitions from a moving aircraft is also up there in terms of difficulty, especially when you loop in other factors such as the night environment, moving targets, objective area obstacles, enemy threat systems, and etc. The act of flying an appropriate rocket and gun delivery profile to intercept a stable delivery sight picture takes hours of "flying the numbers," both in the aircraft and in the sim with most students focusing mostly on their instruments until their inside-outside scan gets faster. The issue is, many pilots never reach the level of proficiency required to be truly comfortable or confident in their ordnance delivery techniques, which in my opinion, is indicative of us not focusing on what the real end state needs to be: a repeatable and consistent/stable sight picture via repeatable and reflexive aircraft inputs.

Unguided ordnance delivery is just one piece of the puzzle. Cockpit management is something all prospective aircraft commanders and flight leaders are evaluated on during their training syllabi. Many times, mismanagement of certain tasks leads to an event failure. Some examples of these critical tasks include: failure to FENCE in/out, adjust lighting

configuration, set and update accurate JOKER/BINGO fuel states, optimize sensors, egregious weapons switchology errors, flying around with a Master Arm on, or other safety of flight lapses that catch students off guard when they're task saturated and under pressure. These issues are many times indicative of having weak repeatable internal cockpit processes, namely, their habit patterns have not been repeated and enforced enough to become reflexive, which takes away available attention and brain power to critically think and lead either their own aircraft or flight elements. In other words, they lack proficiency. The reason I know this is because I too have been guilty of this early in my own career and had to learn the hard way about the necessity of repeatable processes and what it buys you.

As a rookie, my swinging mechanics were all out of whack. I had to relearn how to swing and hit again. I did this by focusing on doing the same actions the same way every time I strapped into a sim or an aircraft. I did mission chalk talks on white boards with friends and instructors and debriefed ordnance delivery tapes. I utilized white space flight time to focus on simple things such as dynamically changing navigation routes, optimizing sensors, calculating feasibility of support/time on station for pop-up tasking, or running attacks on pop-up targets of opportunity. Over time, I got faster, more accurate, and overall better. But it took several instructors with much more flight time and experience and a lot of painful cockpit debriefs, and large helpings of humble pie in order for me to identify the gaps in my proficiency to trigger these changes in my own habit patterns.

On-Time, On-Target, Every Time

So how do we get our young copilots and mid-grade instructors to increase their own proficiency without going through the painful changes I went through? We as aircraft commanders and instructors have to focus on the basics of cockpit management, professional airmanship, and for my shooters out there, on the basics of ordnance delivery. The more proficient each of us gets at the basics of adjusting navigation routes, calculating running BINGOs, FENCEing In/Out to include aircraft survivability equipment/expendables, optimizing sensors, achieving a repeatable unguided ordnance delivery sight picture, QAing weapons setup and appropriate switchology, and honing our laser marksmanship for precision guided munition, the more lethal, survivable, and ready we'll all be.

Hitting a baseball may be the hardest thing to do in competitive sports, but batting .300 in our line of work when it comes to ordnance effects or sticking an L-hour simply isn't good enough. On close examination, successful baseball hitters exhibit almost exactly the same mechanics, albeit their individual techniques to reach that point where bat meets ball might slightly differ. The same can be true of our aircrew. On time, on target, every time we're called upon is the expectation with mission success being the endstate. Individual instructor and aircraft commander techniques to achieve success will always differ. But the requirement remains the same. If we are truly expected to do more with less, then we must be methodical and deliberate in how we manage the few training aids we do have to create high quality, dependable, and lethal aircrew. And the way we get there is by being disciplined in coaching, evaluating, and executing the basics of professional tactical airmanship.

Footnotes

1.Rynston-Lobel, Eric. "Hitting a Baseball Is the Hardest Skill to Pull off in Sports. Here's Why." Popular Science, 6 Aug. 2020, www.popsci.com/story/science/why-is-hitting-a-baseball-so-hard/.

Author's Note:
The content of this article is my view/opinions and does not represent the position/views of the DoD or USMC.

Crew Resource Management (CRM) and Eight Critical Questions Every Aviator Should Ask

By LCDR Tim "Pickle" Dinsmore, USN (Ret.)

At Tailhook '23 during the Flag Panel, Commander, Indo-Pacific Command (ADM John Aquilino, USN) responded to a J.O.'s query about what he might pass along to squadron mates regarding a potential conflict in the Western Pacific. After a long thoughtful pause, ADM Aquilino's only response to the question was "Be Ready!"

Readiness might mean many things to many people. To some, readiness might mean completing the required number of NVD shipboard landings, doing your quarterly SAR flight, or shooting a reasonable number of rockets, or bullets, or missiles prior to your deployment. Whatever readiness is to you, it's doubtful that you even consider how ready your CRM is to fly and fight in an environment that is increasingly technical, complex, time-restricted, and sensory overloaded.

Regardless of the robust firepower at your disposal, your stick and rudder skills, your ability to lead and be led, your intelligence, or the knowledge you have crammed inside your brain, you are only part of a crew. Your crew is what makes your aircraft safe, effective, lethal, and part of the most powerful Navy in the history of humankind. You, as a member of a Navy flight crew, form a highly reliable team. If you agree that the Navy, your squadron, your Sailors, your bosses, your friends, your family, and yourself are dependent on your crew for your safety, effectiveness, and lethality, then it begs the question: Is your CRM ready?

This article is about questioning yourself, and it's about strategies to make you a better warrior. This article is going to ask you to take a close look at yourself from a critical angle. So, trigger warnings aside, let's agree that readiness is a state of mind, which involves technical competencies, but starts in the gray area between your ears.

There are many destructive attitudes you might have that will break or detract from your CRM readiness. This article is for and about you, the young aviator or aircrewman. You are an exceptional person. You are a member of an exceptional fraternity of men and women, with a proud legacy. You represent the finest America has, flying in the most austere environments in the world, and in the best aircraft your nation has to offer. Even though you are a TYPE A+ exceptional person, you can always be better. You might have some or all of the CRM blocking attitudes we'll discuss, but you won't know until you ask yourself.

1. Am I trustworthy? How do I prove it? There are two types of trust. Positional trust: you are wearing a set of gold wings and show up at our squadron, so you are trusted to fly in our helicopters. Personal trust: this is created by repeated

The crash of Czar 52. Photo credit U.S. Air Force

interactions with other individuals having positive results. This is earned through shared common experiences, shared values, similar ideas, altruistic behaviors, and reciprocation. This type of trust is built both verbally and non-verbally, and has to be constantly cultivated. The most highly effective and reliable teams, not coincidentally, have the highest levels of trust. Any outsider looking into the small group dynamics of any flight crew can instantly see their resident level of trust. How you interact, the team's shared sense of humor, the way the team communicates, and how often and what the team communicates, indicates the level of trust in that team. If you aren't constantly building trust with your crew, then you are removing trust from the trust bucket. When the bucket is empty, it is nearly impossible to refill. Do you build trust every time you fly?

2. No egos in the cockpit? Do I really believe that? As discussed earlier, you are exceptional, smart, and capable, wearing gold wings, and have proven yourself time and time again. Exceptional people always have an ego, and chances are your personality goes with it. In a multi-crew team environment, your ego runs contrary to the CRM you need to be safe and effective. You don't know what is best for your crew, you just think you do, if you aren't asking. Egoism creates blocks to communication, especially the required, receptive part of the two way give and take. Additionally, you are more likely to discount important pieces of information based on your own self-perception. Think of your crew as a set of puzzle pieces. You fit neatly together to complete the puzzle. Take away a piece, and the puzzle is no longer a puzzle. Your ego, and sense of self can be a hindrance to finding where the pieces fit. More specifically, it forces your crew to work around you. It breaks down trust, communication, and in some cases, the timing of your interactions. The most effective teams, in addition to having high levels of trust, also have the

highest level of humility. Shedding the behavior of needing to be right (and constantly proving to yourself, more than your crew, you are) will allow you to share and contribute your individual efforts more quickly and effectively. We all have egos, let's not lie to each other that we don't. Practice the art of deliberate humility. How do you maintain and demonstrate your humility to your crew?

3. Do I sometimes think everyone else is dumb? When you were a kid, did you ever notice the dumbest kid in class didn't know they were dumbest? Before you were selected to be a member of a Navy flight crew you had to prove your intelligence. In fact, the Navy gave you an IQ test. Whether it was the ASVAB, AFOQT, SIFT, or ASTB, your intelligence was tested before you were offered a flight slot. Most everyone in your crew is about as smart as you are. Intelligence is critical to forming interpersonal relationships and how we form our perceptions of others. In fact, most of the people you form long-lasting relationships with are about as smart as you. Smart people congregate together, especially in Naval Aviation. If you think everyone else is dumb, you are discounting them. It's much better to assume you are the dumbest kid in class. If you assume everyone is smarter than you, then you always have something to learn from each member of your crew. Their failures and successes teach you plenty. You will form closer relationships better, and faster, when you are willing to learn from others. What did you learn from your crew?

4. Am I a servant leader? If you say it aloud, you might not be. Servant leaders do not have to tell anyone they are servant leaders, because everyone knows they are servant leaders by their actions. Autocratic leadership detracts tremendously from your CRM readiness. If you say, "my aircraft, my crew, my guns, my flight, my mission," then you are telling everyone, most importantly your crew, that you are going to rule your side of the cockpit with an iron fist right up to the point of your mishap. Always use the terms we and our together every time you speak with your crewmembers, with the exception of saying "my controls." You do not fly helicopters. The entire crew forms a flight team that flies in the helicopter and, together, you all accomplish the mission. You might sign for the aircraft as its commander (the Navy will hold you responsible for it), but if you want to be a servant leader, consider signing for the aircraft as the representative of the crew. Will your crew say you are a servant leader?

5. How can I set the example and be a role-model for my peers? Start with the presumption that what is so great and exceptional about you is just as great about them. You have a role every time you meld with a crew. Excelling in your role is very easy: strive to be technically competent, knowledgeable, professional, ask for help, and be ethical and humble. If you do those things, you will naturally become a role-model capable of coaching, supporting, and bettering your crew. What did you do to be a better role-model?

6. Do I put a premium on multi-tasking? If you do, stop. No one is good at multi-tasking. If you want to tell the Skipper that you can do a lot of things poorly, make sure to tell the Skipper that you are great at multi-tasking. Research suggests we can probably do about three things well (simultaneously), and those things ought to be aviating, navigating, and communicating. Everything else that divides your time is a task. If your crew has too many tasks, task saturation takes hold, decision making suffers, and CRM breaks down. Most everyone agrees that prioritizing tasks keeps saturation at bay. It's in everything we do, from our checklists, to our emergency procedures, to our tactics. How you set task priorities is important because the order those tasks are completed often determines the results. Do you shed a task to another crewmember, do you look to your crew to help prioritize tasks, do you try to do more than you should… do you try to multi-task? In the flight environment, the next two or three tasks and the order in which you complete them, as individuals and as a flight team, always determines your success or failure. Many times it is the difference between living and dying. How ready is your CRM to assess your task saturation, the task saturation of each crewmember, and the task saturation of the crew as a whole?

7. How good of a pilot / aircrewman am I? We all are Fleet average, or we wouldn't be here. We test ourselves constantly against the standard, from NATOPS Checks, to Instrument Checks to Tactical Level Checks. But, the truth is that "good flying" is really simple. It's just finding the successful habit pattern and repeating it over and over again. A habit is a set of behaviors that always yields the expected result; an internalized prioritization of tasks and subtasks. You probably have a set of safe habits, consisting of learned behaviors and self-created priorities, that might be similar but will never be the same as the person sitting next to you. Have you ever said or heard the words … "this is technique only?" No one habit is right or wrong, providing the result is safe, effective, and complies with the rules. It is important to understand the subtle differences in the habits of your fellow crewmembers, because it's a window into how they prioritize. If you want to take your CRM to the next level, make an effort to understand how your crewmembers prioritize, and learn to recognize when they become task saturated so you can be an effective part of the team. Through those non-verbal actions, you will teach them how and why you become task saturated. This will increase crew trust. How do you know your copilot or crewman is task saturated?

8. How well do I really communicate? On FAM 3 in the HTs, your instructor gave you the controls and told you to hover. As an AW, do you remember that first FRS SAR flight when you worked the hoist and had to move the aircraft over that spot? Your instructor asked you to perform, and then gave you a whole bunch of great instruction on how to hover or hoist better, and since communication is a two-way street, I'm sure you remember everything they said. You might be a great communicator, but can you teach everything you know to a junior crewmember? The way you communicate is important, but when you communicate is even more important in the crew environment. Your crewmembers are ready to receive information at very specific times during tasks, and those windows become smaller during periods of peak workload and crew task saturation. Just like on your first day learning the habit pattern of hovering, great communication presents succinct and relevant information at critical nodes during flight. Your excellent communication skills are worthless if you can't assess when your crew member is ready to receive the information. Sterile cockpit procedures are a great way to ensure task prioritization, crew situational awareness, and that critical information is received. Sterile cockpit for helicopters is when you are climbing to your cruise altitude, when you are descending in the landing environment, or transitioning to a coupled hover. Speak when spoken to, and only talk about those things necessary for the safety of flight. In the sterile environment, be deliberate, disciplined, and intentional. Do you set the example and enforce sterile cockpit procedures?

Over the next 100 years, everything will change. Change is inevitable. Weapons systems, aircraft, ships, the nature of conflict, and the tactical environments we fly in will all change. However, as long as the Navy has multi-seat crewed aircraft, CRM will exist. It is the one item in the continuum that will always be constant. With your crews, you will share the elation of success and the woes of failure. Your crew will keep you safe, you will solve complex problems together, and you will experience conflict and potentially combat at their side. As an aviator, your crew is your greatest asset. Is your CRM ready?

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The Right Gear Makes All The Difference

By CAPT Leslie Kindling, MSC, USN
Force Aeromedical Safety Officer, Commander Naval Air Forces, U.S. Pacific Fleet

Walking around in boots that cause blisters, wearing a flight suit that does not fit right, and having no means to urinate in the aircraft are significant distractions decreasing warfighter performance. Thankfully, you and your aircrew have options.

NAVAIR 00-35QH-2 (also known as the QH-2) provides the Aviation Life Support System (ALSS) Allowance List. It outlines responsibilities for squadrons and individuals regarding receipt, issue, custody, and accountability for flight clothing and operational equipment. The official source for this and all Naval Air Systems Command (NAVAIR) technical manuals is the Naval Air Technical Data & Engineering Service Center (NATEC). Using your CAC, you can request access to NATEC's Technical Data Website: https://mynatec.navair.navy.mil/natechome.htm.

The QH-2 provides the minimum authorization, but commanding officers may deviate from the minimum by establishing written policies specifying quantities of items to be issued to their aircrews. For example, a helicopter squadron CO may set a policy for all assigned aircrew to receive two-piece flight suits in place of one-piece flight suits. The CO may also set policy to offer bladder relief systems to aircrew who do not necessarily require one per CNAF Manual 3710.7 or the QH-2. The CO's ALSS Policy can also delineate optional items from the Naval Aircrew Systems Program Office's (PMA-202) State of the Art (SOA) Catalog that will be issued to aircrew and maintainers. The current SOA Catalog can be accessed from PMA-202's Website: https://pma202.navair.navy.mil/.

Per CNAF Manual 3710.7, a urinary relief system of the aircrew's choice shall be made available to every aircrew, except for those flying in non-ejection platforms with onboard urinary relief systems. Considering the challenge various individuals have using the onboard relief tube, especially when wearing anti-exposure suits, I encourage you to discuss adding bladder relief systems to your CO's ALSS Policy.

Per the QH-2, officer students in the Jet/E-2/C-2/F-35 pipeline will be issued a male or female AMXD-max Starter Kit unless they decline in writing. This was added in August 2023, and it will be some time before all jet aircrew have bladder relief systems. AMXD-max is the second generation of Omni's Aviation Bladder Relief System. The Navy version of Omni's third generation system, Skydrate, is approved for use across the Fleet under an Interim Flight Clearance with implementation into the Aircrew Systems NATOPS approved at conference 13 March 2024 (signed NATOPS expected late summer 2024). NSNs for Navy Skydrate are in work with Defense Logistics Agency (DLA) and will be distributed to the Fleet via an Aircrew Systems Advisory. AMXD-max and Navy Skydrate are not on the supply system shelves as DLA has not completed a contract with Omni. AMXD-max and Navy Skydrate are available through GSA, which has a current contract with Omni.

The Male and Female Skydrate System

To get the best flight suit fit, you need to know your options. Flight suits are available in three different cuts: unisex/male, misses, and womens. Unisex/male flight suits have a standard-length zipper (Type I). Misses and womens flight suits are available in two different zipper lengths: standard (Type I) and extended (Type II). The extended zipper is intended to aid in using bladder relief devices. Unisex/male size range is 32 Short to 52 Long. Size range for misses (straighter at hip) and womens (additional ease at the hip) is 30 X-Short to 44 Long. The Aircrew Personal Protection Equipment (Clothing) Manual Volume 1, NA 13-1-6.7-2-010 WP 004 01, provides the NSNs for each size, cut, and type in both Green (Class 1) and Tan (Class 2).

A female's foot is not a smaller version of a male's foot, and womens boots take this into account. Womens boots account for a shallower big toe, more curved inner length, shorter outer length, narrower instep circumference, and higher arch. In the past, womens flight boots were only available

Per the QH-2 and Aircrew Systems Advisory 24-07, pregnant aircrew will be issued up to two additional maternity flight suits. The maternity flight duty uniform (MFDU) is a version of the basic CWU-27/P flight suit modified to account for pregnancy and is available from the stock system in 21 sizes. Size prediction charts and NSNs for the MDFU are provided herein. As I write this, more than 100 MDFUs in each size are on the shelves with the DLA.

Even with all the sizes and styles available through the stock system, custom fitting of flight clothing might be needed. Aircrew Personal Protection Equipment (Clothing) Manual Volume 2, (NA 13-1-6.7-2-020 WP 067 00), provides guidance for custom fits. Reach out to your Aeromedical Safety Officer (AMSO), Aeromedical Safety Corpsman (AMSC), or use the PMA-202 Website link above to connect with a Fleet Air Introduction Liaison Survival Aircrew Flight Equipment (FAILSAFE) Representative who will get the process started.

Women's Size Prediction Charts for Navy/Air Force Maternity Flight Duty Uniform (MFDU)

Length	Short	Regular	Long
Height	<64"	64" – 68"	68">
Inseam	<29"	29" – 31"	31">

Size	X-Small (30-32)	Small (32-34)	Medium (34-36)	Large (36-38)	X-Large (38-40)	2X-Large (40-42)	3X-Large (42-44)
Bust	32 ½-34 ½	34 ½-36 ½	36 ½-38 ½	38 ½-41 ½	41 ½-44 ½	44 ½-47 ½	47 ½-50 ½
Waist	25-27	27-29	29-31	31-34	34-37	37-40	40-43
Hip	35-37	37-39	39-41	41-44	44-47	47-50	50-53

Do not hesitate to reach out to me, your nearest AMSO, AMSC, or the FAILSAFE T` eam at NAVAIR and at the Aviation Survival Training Centers with your flight gear questions.

Maternity Duty Flight Uniform Stock Numbers

Size & Length	National Stock Number
Extra Small – Short	8410-01-696-1931
Extra Small – Regular	8410-01-696-1934
Extra Small – Long	8410-01-696-1954
Small – Short	8410-01-696-1973
Small – Regular	8410-01-696-1962
Small – Long	8410-01-696-1974
Medium – Short	8410-01-696-1977
Medium – Regular	8410-01-696-1990
Medium – Long	8410-01-696-2013
Large – Short	8410-01-696-2014
Large – Regular	8410-01-696-2015
Large – Long	8410-01-696-2017
X-Large – Short	8410-01-696-2018
X-Large – Regular	8410-01-696-2021
X-Large – Long	8410-01-696-2022
2X-Large – Short	8410-01-696-2024
2X-Large – Regular	8410-01-696-2032
2X-Large – Long	8410-01-696-2040
3X-Large – Short	8410-01-696-2041
3X-Large – Regular	8410-01-696-2045
3X-Large – Long	8410-01-696-2047

AWS1 James Philip Buriak, USN, died 31 August 2021 in a Naval helicopter crash off the coast of San Diego. He served as a naval aircrewman rescue swimmer (AWS) with HSC-8. The legacy of a hero is the memory of a great name and the inheritance of a great example. This foundation was created in the wake of Jimmy's death as a way to honor him and his memory but also keep his purpose alive - to help others. Jimmy served as a rescue swimmer whose motto is, "So others may live." We've embraced this motto for the foundation and its purpose of being there everyday, but especially on your worst possible day, knowing that we are here to walk that journey with you. Our mission is to ensure the sacrifices of those in the aviation community are honored and those that are left behind are supported, empowered and continue to be part of the community.

We are an all-volunteer, military and military spouse organization dedicated to providing pre-mishap education and immediate post-mishap support for the Navy and Marine Corps Aviation community and their families. We offer three programs.

• Program 1: Pre-Mishap Education: Pre-mishap education includes talking to squadrons, commands, and families about important "need to know" information and how to best prepare a service member and a family. We discuss POA's, wills, commercial life insurance policies, etc.

• Program 2: Post-Mishap Support: Post mishap support includes providing immediate financial relief for the service members' children, such as childcare, diapers, wipes and formula, in the month following the mishap.

• Program 3: 90 Day Road Map and Advocacy: The Foundation will provide families with information of what is needed, and an overall picture of what the first 90 days will look like. The Foundation also strives to provide support, information, resources, and advocacy as needed during these times.

Telephone: (619) 736-2364
Address: 2509 George Mason Drive #56455 Virginia Beach, VA 23456. https://theaws1jamesburiakfoundation.org/

Osprey Nacelle Improvement: A Game Changer for Agile Combat

By Christopher "chet" Misner, Sr Manager, Bell Strategic Pursuits

A CMV-22B Osprey from the "Sunhawks" of VRM 50 and a CMV-22B Osprey from the "Titans" of VRM 30 conduct flight operations on the flight deck of the aircraft carrier USS Nimitz (CVN 68). Nimitz is underway conducting routine operations. **U.S. Navy photo by Mass Communication Specialist 3rd Class Emma Burgess.**

The V-22 Osprey has been and will continue to be one of the most sought-after aircraft by theater commanders, second only to intelligence, surveillance, and reconnaissance assets. As the nation's first operational military tiltrotor, the V-22 provides commanders with mission flexibility to win in today's operating environment and in any future fight.

The Osprey's ability to take off and land vertically like a helicopter and fly horizontally like an airplane is transformational, providing our armed forces with unique capabilities that change how missions are accomplished.

The aircraft's nacelles, capable of rotating 90 degrees to deliver unmatched flight versatility, are located on the ends of the wings and house the power and propulsion for the two rotors.

As the V-22 fleet was approaching 450,000 flight-hours, it became apparent that the wing component was subject to significant forces, including vibration and heat. The Bell-Boeing Team, along with industry partners and Fleet maintainers, implemented a data-driven design change to improve the reliability and maintainability of the critical nacelles, making the V-22 an even more powerful platform.

The Nacelle Improvement (NI) Program aimed to simplify the nacelle structure, originally designed decades ago with a series of wires and junction boxes. The effort led to the successful re-engineering of more than 1,300 parts and using point-to-point wiring, making manufacturing more affordable and less time-consuming.

"Nearly 60% of all maintenance actions occur within the V-22's nacelle area, so the NI effort is designed to attack the highest reliability and readiness degraders while maximizing return on investment for the taxpayer," says Kurt Fuller, Bell Senior Vice President and V-22 Program Manager.

The NI Program was initiated with CV-22s, the U.S. Air Force's variant of the Osprey, and the modification has demonstrated consistently positive results.

Before NI modification, the average maintenance time dedicated to nacelles was more than 2.5 hours per flight hour.

Twenty CV-22s have undergone the NI modification and with over 4,000 hours flown, those aircraft have required only 12 maintenance hours and have not required any maintenance actions on the modified nacelles. This has saved the Air Force over 10,000 in total nacelle maintenance hours. Maintainability and reliability were key performance parameters in the new design to measure success, and the results have exceeded expectations.

Delivering both short-term and long-term benefits to support the longevity of the fleet, the NI Program provides immediate readiness advances that will continue to pay long-term dividends in availability and affordability.

The results seen by the Air Force will translate to the Navy CMV-22 and the Marine Corps MV-22. In the Indo-Pacific theater specifically, the increasing need for sea services to prepare for and execute Expeditionary Advanced Base Operations and Distributed Maritime Operations is exposing a vulnerable logistical capability gap.

If deterrence fails and conflict occurs, naval commanders will have to resupply their forces over vast distances. This poses significant operational challenges where force structure does not match its combat logistics requirements.

In times of rapid response and crisis, commanders cannot spend as much time planning how to support the force as to employ it.

The solution is to focus on fortifying the Osprey fleet now. Taking actions today to modernize and sustain the V-22 variants across the services will ensure that operational capabilities align with strategic imperatives.

The requirement to move troops and cargo between dispersed bases, forward logistic support sites, and ships at sea will prioritize the need for a dedicated logistics connector. That connector must be able to achieve the speed, range, and versatility that only tiltrotor technology can provide. The V-22 is that valuable connector.

The strategic imperatives facing the Navy and Marine Corps, combined with the demonstrated, significant returns on investment in aircraft availability and affordability, make support for the Nacelle Improvement Program an imperative.

Maintainers get the job done. **DVIDS images**

Navy Helicopter Pilot's Mission: Find Love

What Happens When the Job Makes You Undateable?

By Erin Edwards

Re-published with the permission of the author and the San Diego Reader.

"Ovaries of steel," said my copilot, impressed by my poise. After a six-hour patrol in the Red Sea, I had landed the helicopter on a 30'x30' square fifteen feet above the surface of a heaving sea, in bad weather, at night. That was just part of the job. I served in the Navy from 2012-2022 as a qualified Aircraft Commander, solely responsible for a $50 million Sikorsky Seahawk helicopter and the lives of four crew members. I was stationed at Naval Air Station North Island on Coronado for four years, I logged over 2000 flight hours serving in two overseas deployments. Many of those hours were spent in a combat zone, escorting ships through dangerous waters in the Middle East. I know what it feels like to run my fingers along a four-pack of hellfire missiles and remove the red safety pin as I prepared for flight.

MH-60R Seahawk helicopter takes off from the flight deck of the guided missile destroyer USS Stout (DDG 55). **US Navy photo.**

I'm not the only one. In 1973, just six women earned their pilot wings. As of 2023, that number has risen to 1605. And over those last fifty years, women have shown what they can do. Women can fly any aircraft and participate in all combat missions. They are flying helicopters and fighter jets, hunting subs, shooting rockets, dog fighting, dropping bombs, and saving lives - but not all the time.

There is something that keeps women Naval Aviators up at night, something that is far from the aviation nightmares one might imagine. It's not surface-to-air missiles or engine malfunctions. It's much worse. Their type-A personalities cannot control it, cannot outsmart it, and cannot lead their forces in a sortie against it. The thing that keeps them up at night is dating. "Landing on an aircraft carrier wasn't as difficult a task as finding a boyfriend when I was 23," says Kelsey Adler, a former Navy pilot who spent the latter part of 2014 in a super hornet jet doing landing drills. (Well, not all women — LGBTQ members have expressed to me that their flight suits are effective in romantic pursuits as well as military ones.)

I will never forget the day when I realized I was not dateable. I was in my early twenties, hanging out at Backyard Kitchen & Tap in Pacific Beach. A man approached me and asked what I did for a living. He was plain looking, short, with brown hair and marched toward me like he knew what he wanted, which I liked. I answered honestly, and returned the question. His eyes shifted focus to the floor and remained there as he hovered beside the open chair next to me, halting his confident momentum. He whispered "accountant" and vanished. Not everyone tucked tail and ran off into the underbrush, of course. There were times when men, bless their hearts, stayed much too long, displaying their deep knowledge of aircraft engines and rotor systems because, you see, they had "always wanted to be a pilot." I wasn't so much a potential date as the embodiment of who they might have been.

Eventually, I started telling anyone remotely interested that I worked at Staples, because it seemed like a basic job, the sort that doesn't get in the way of getting to know someone. My peers adopted similar tactics. Some bold pilots chose professions such as dolphin trainer, horse jockey, kindergarten teacher, supermodel, or my personal favorite, financial advisor at J.G. Wentworth.

But despite the ruse, all too often, these women are forced to resort to adventures on dating apps filled with men trolling for sexual escapades or trysts with enlisted Navy members, who are off limits as it would violate military fraternization policies. According to female pilots of all ranks, the risk is not worth the reward. So instead, they put aside their pining for men to focus on the demands of the job – becoming tactically proficient and working hard to be accepted into the boys' club of aviation.

CDR Kristen Hansen, USN, Commanding Officer, Strike Fighter Squadron (VFA) 122, shakes hands at the change of command ceremony at Naval Air Station Lemoore. **U.S. Navy photo.**

It worked for me — up to a point. No matter how hard you work, there is always downtime. One night, when the seas were too rough to fly, I gripped my bed with one hand, gripped my pen in the other, and jotted "Family Goals" into my notebook. This was a math riddle. I began flight school at 23. The minimum time commitment for a pilot is 10 years. Given my status as undatable during that time, I would be 33 before I could change professions and even attempt to attract a man. I figured two years of wooing, marriage, then children. The answer to the riddle is 35. "When is a pregnancy considered geriatric?" were the final words scribbled across the page.

Again, I'm not alone. Due to extensive training, many women aviators are in their late twenties or thirties by the time they stay in one location for three years. Once they do, they face the pressures of family planning and trying to balance having children without dismantling their flying careers. For many, this leads to fear of being "like 80 and a crazy cat lady," as Commander Kristen "Dragon" Hansen puts it. Hansen, who served as one of the real pilots who flew for the filming of Top Gun: Maverick, was single for over a decade due to deployments, a remote duty location, and commitment to her job.

Finally, while on a solo vacation, she decided to put considerable energy into her personal life and turned to eHarmony. Sitting at her computer, she typed out what she thought was a reasonable profile. However, she didn't quite know what to do about the fact that she was going to be at sea for 18 out of the next 24 months. She imagined the conversation: "Hi, nice to meet you. Let's go on our first date in a month. Let's plan our second in another month. Another in another month. Then, if I really like you, will you write to me and send me care packages during my ten-month deployment?" Realizing the absurdity of the situation, she canceled her subscription.

When she was 36, a fellow jet pilot asked for her number. Baffled, she almost gave him her work number. By the time the two pilots found themselves on their first date — after battling overlapping deployments — 368 days had passed. Six years later, her wedding gift to him was a complete copy of their email correspondence from the year they waited to meet. "I played the long game and it worked!" said Hansen.

She is one of the lucky ones. Happily, so am I. My husband was also a fellow pilot; today, we live in Logan Heights, and he flies Blackhawks for SDG&E. But all too often, the female Naval Aviators who should rest easy knowing they are well trained and tactically equipped for combat are kept awake by thoughts of cocktail bars filled with rejections, unhelpful dating apps, and potentially, cats.

A Fair to Remember

By LT Jennifer Haddy, USN

Outreach is a vital part of sustaining relationships in our communities. Their support is the driving force behind our military. Without the support of our local, state, and national communities, the Navy would be unable to accomplish the important operational tasks that defend the interests of our country and its people. It can be extremely surprising to realize how few people we protect, actually understand what we do. This could not have been more prevalent than in Salt Lake City, Utah - a city that is neither close to the water, nor used to dealing with the Navy.

HSC-6 helicopter "Geronimo" on the ground at the fair.

Hundreds of faces at the busy Utah State Fair turned skyward as our MH-60S flew right over their heads. The rodeo crowd paused to look up as it was announced that an "Army Blackhawk" was coming in to land. To the surprise of many, we turned final and rolled out to a sight of thousands of flashing lights from carnival rides, food stands, and a cleared LZ in the middle of a packed parking lot. Many kids could not believe what they were seeing: a large military helicopter landing right in front of them. They were even more shocked by the diverse crew of pilots and aircrewmen who climbed out of the helicopter after a safe shutdown. It was an incredible opportunity to demonstrate our unique capabilities as a platform.

LT Jennifer Haddy, LT Christopher Leonard, AWS2 Eladio Perez Pineda, and LT Matthew Arceo

We spent every day that next week in the sun at the Utah State Fair for Navy Fleet Week as part of the Navy's diversity, equity, and inclusion initiative, talking with locals and those who traveled from out of town for the fair. There seemed to be a common theme throughout the week. Nobody knew who we were or what we did. Most assumed we were in the Army or Air Force, and they thought that our helicopter was no longer operational. Each time, we would politely explain that it was only twelve years old, and it was dirty from just returning from a long deployment with HSC-6 in the Pacific Ocean. At one point, we were even asked what wars the helicopter had fought in. A lot of community members asked great questions once they realized we were in the Navy, and we were able to discuss what the Naval Helicopter Community does while inspiring the next generation.

It was truly a unique experience to talk with so many people who are so far removed from our shores, observing their admiration of such a diverse crew. It was especially special for me to be able to represent the female aviator community for the Navy's 50th Anniversary of Women Flying in Aviation this year. One of my favorite comments was from an older gentleman, who remarked, "I can't believe that a woman flies this thing." Comments like that demonstrate why we need to better represent the Navy with more community outreach events to normalize women and minorities in our military.

Representing the Navy and chatting with hundreds of locals over five days was an irreplaceable experience that made a true impact on the community. Every child left wanting to be a gunner or a pilot, and every adult left knowing more about our helicopter and community. Most people had never been

that close to a military helicopter before, which led to some entertaining questions. My personal favorite came from a little boy asking, "Is this a Hot Wheels?"

We also had the opportunity to visit the Utah State University Navy ROTC Program to talk with the students about the aviation community. Hearing their questions reminded us of how far we all have come to be seated on the other side of the table, telling our stories. It was a pleasure to pay it forward to the next generation of Naval officers and pilots.

Being in an operational squadron can be difficult sometimes, working so hard only for people to not understand what we do. It was such an important and special opportunity to be able to represent the Navy, show people who we are, and explain why our operations are so important. The people of Salt Lake City were extremely welcoming, and we thank them for their hospitality!

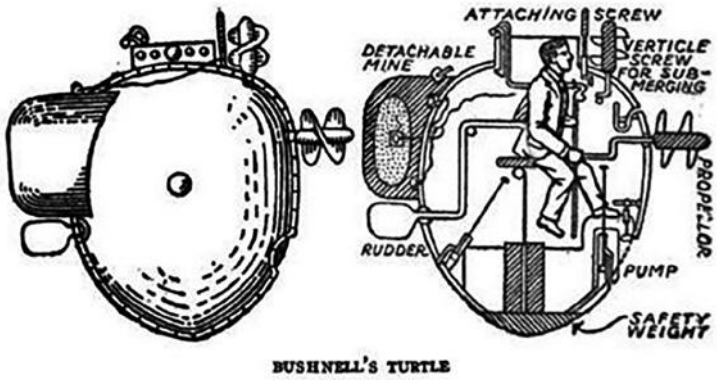
NC1 Minerva Flandes, AWS2 Eladio Perez Pineda, LT Matthew Arceo, LT Jennifer Haddy, LT Christopher Leonard, LTJG Gabriella Gordon, and AM2 Marianne Ndiaye.

Hunters: The Evolution of the Antisubmarine Warfare Helicopter

Beginnings of Antisubmarine Warfare

By LT Lauren "Bender" Chavis, USN

On a chilly October night in 1776, a watchman aboard a British frigate braces against the cold. The ship is anchored just off Manhattan and is tasked to maintain the blockade of New York Harbor. The half-moon lights the rolling swells, but not well. The watch stander squints against the night breeze and spots something. He thinks. Trash maybe. But it drifts against the current. Strange. It is too small to be a shipping vessel. Maybe a trick of the light. He blinks. It continues closing the frigate. He shouts a challenge. Nothing heard. He shouts again. Nothing heard. He turns, just for a second, to see if anyone else is witnessing this event. He turns back and sees nothing. Must have been a trick of the light.



BUSHNELL'S TURTLE

Sergeant Ezra Lee sits scrunched in the Turtle, submerged just beneath the waves. He is piloting the clumsy vessel back to dock. That was a close one.

Unbeknownst to the watchman, he witnessed the first subsurface vessel utilized in combat: the Turtle, an American submersible that attempted to affix explosive charges to the underside of British ships in New York Harbor during the American Revolutionary War. Although its attacks were ultimately unsuccessful, the endeavor originated the concept of undersea warfare that grew to include the German U-boats of the World Wars, the ballistic missile submarines of the Cold War, and the modern submarines of today that are used for reconnaissance, deterrence, and offensive attacks.

As the watchman spotted and deterred the vessel, he also unknowingly spawned the field of Antisubmarine Warfare (ASW). Prior to the First World War, the primitive nature of submarine designs and their limited operational use meant ASW amounted to little more than acknowledging the existence of submarines. When they were employed, however, submarines held a distinct advantage over the surface vessels they faced, as they were difficult to detect, track, and attack. Spotting them was lucky. If they failed to slip away after detection, ASW attacks were limited to attempting to damage their periscopes with hammers or catch them in a net. However, as more capable submarines developed into World War I, so did efforts to combat them.

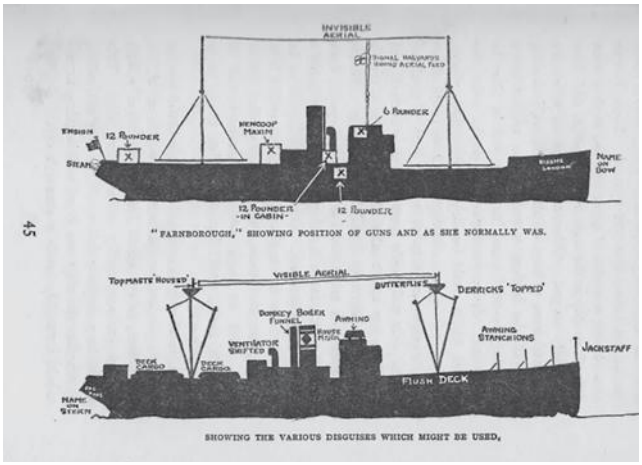
Antisubmarine Warfare during the World Wars

It is March of 1916. The German U-boat U-68 departs through the Ems River on her first war patrol, assigned to an operating area off the coast of Britain. She comes across an unflagged merchant vessel. She is unarmed, easy prey for the boat's young captain, eager to make a name for himself with a successful engagement. U-68 positions herself off the merchant vessel's bow and fires a torpedo. Miss. The U-boat surfaces, calculates another shot, and fires again across the ship's bow. The merchant stops and launches a boat, a sign of surrender. The U-68 captain maneuvers his submarine to position alongside his captured quarry.

As the U-boat approaches, the vessel raises the White Ensign, a flag worn by British Royal Navy ships. This is no merchant. It is the Q-ship HMS Farnborough, a decoy. The Farnborough uncovers her guns and opens fire, striking U-68 several times. As the boat begins to sink, Farnborough steers to her location and deploys a depth charge, destroying the remains of the vessel. It is the first successful ASW weapons engagement on an enemy submarine.

During WWI, submarines became a major issue for surface vessels. Towards the beginning of the war, ASW relied heavily on visual detection of the submarine, and attack required warships to get in close to ram it or shoot it with guns. The invention of "indicator loops," long cables meant to detect the magnetic field of passing submarines, and the advancement of mines, depth charges, and torpedoes eventually put a dent in the German U-boat inventory. For the first time, aircraft were also utilized to detect and sometimes destroy enemy submarines. While seaplanes and airships made successful attacks, their main role was deterrence—forcing U-boats to submerge, effectively preventing attack and navigation.

In the Second World War, while every major Navy had a submarine fleet, few had developed advanced tactics on how to combat them. After reinvigorating their submarine fleet in the interwar period, Germany wreaked havoc on Allied convoys utilizing "wolfpack" tactics and coordinated attacks of multiple U-boats over radio. In response, Allied ASW tactics and technology improved to combat the threat. Recognizing the advantage of aircraft in ASW, many technological developments focused on increasing airborne ASW lethality. The new technology included advancements in radio frequency detection capabilities, improvements in airborne radars, the development of airborne magnetic anomaly detection, and advent of sonobuoys, expendable hydrophones that detect and relay submarine acoustic information.



These technological advancements, in addition to improvements in Allied ASW tactics, neutralized the majority of the German U-boat threat and ultimately led to the Allied victory in the Atlantic.

Helicopter Antisubmarine Warfare

It is an early April morning in 1945, now a year since helicopters first flew in combat. A crew of young Navy and Coast Guard lieutenants and research scientists are not in combat, but they are in danger. They are the first flight test of a new technology, a helicopter-borne dipping sonar. The sonar reels out of the hovering helicopter into the ocean and listens for acoustics that operators can interpret to find and track a submarine. But the hover must be perfect to keep the cable directly underneath the aircraft, which is difficult with the primitive controls in the experimental helicopter with the unwieldy new sonar.

To aid the pilot in his precise hover, the crew tosses references in the water. Floating lights? Washed away. Dye markers? Blown by the rotor wash. The comic section pulled from a Sunday newspaper? Just right. The pages soaked in water, keeping them in place under the downwash, and the brightly-colored comics stood out in sharp contrast to the ocean water. A good enough reference for now. They'll fix that later.

During World War II, Igor Sikorsky and his team of engineers demonstrated the R-4, the first helicopter adopted by the United States military. Although intended as a personnel recovery platform, it also proved helicopters could be practical for ASW patrol, extending the range of ship sensors. Of particular interest was the possibility of an airborne dipping sonar that could be deployed from a helicopter, listen for submarine acoustic signatures, be recovered, and re-deployed to continuously track a submarine.

The United States Naval Research Laboratory designed an underwater sound recorder and, starting in 1945, installed it first on an experimental helicopter, then on the more powerful Sikorsky H-5, and ultimately on the Sikorsky H-19. The evaluating pilots and sonar operators determined that the dipping sonar was able to detect and track submarines and, after some redesign to decrease pilot workload (no need for newspapers anymore) and make the sonar more lightweight and compact, the Navy accepted the AN/AQS-4 in 1952. The pilots and sonar operators who trained on the new helicopter-sonar package, became members of the first two Naval Helicopter Anti-Submarine Squadrons: HS-1 Seahorses and HS-2 Golden Falcons.

The legacy of those first HS squadrons persists. The Golden Falcons still exist today, redesignated as HSC-12 in 2009. The technology, though more advanced, exists today as well. The AN/AQS-4 was the predecessor of the AN/AQS-13 dipping sonar, utilized for nearly 50 years on helicopters such as the SH-3 and the SH-60F, and the predecessor of the AN/AQS-22, the current dipping sonar aboard the MH-60R.

The unique role of helicopters in ASW has developed over generations of aircraft and aircrew. The development of sonobuoy employment and processing capabilities, magnetic anomaly detection, lightweight torpedo carriage, more robust acoustic processors, and more advanced tactics has made helicopters vital assets from ship or shore to hold enemy submarines at risk.

Today, U.S. Navy Helicopter Maritime Strike squadrons are deployed around the world, sharpening their skills against submarines and standing ready for the next fight.

The Professional Flight Instructor

By CDR W. Alex "Flanders" Buell, USN

"I don't get it, are you a reservist?"

"Are you a Full -Time (FTS)?" "What exactly is a Professional Flight Instructor (PFI)?" As a PFI assigned to Training Air Wing FIVE (TW-5), these are the questions I routinely get from fellow aviators who are fascinated by the fact that I am a permanent flight instructor as a Commander on active duty and don't have to move. After answering, I typically get a rapid follow-up, "how do I become one?" Life as a rotary PFI is awesome, and it is a true retention gem for the aviator who desires to continue serving their country in the cockpit when rank and time in service tend to push one to fly the desk. To separate fact from fiction in this relatively new program, I'll do my best to share my story as to how I got here, what the program is, how to best position yourself for selection, and how to have a successful tour once selected. I'll caveat this with the fact that I have never worked at the Bureau of Personnel, so please take what I am telling you with a grain of salt. Do your research as things tend to change, and talk to folks you know who are PFIs and have had differing experiences.

I'll keep my story brief as I expect that if you are reading this article, you are anxious to get to the program details. Hang with me, there is a point to all of this. For most of my career, I was an "on-track" aviator, meaning I was on the path for a coveted Commanding Officer billet. I completed my nugget Fleet tour at HSL-45 and my production tour at HT-18 with competitive EPs. I did the obligatory disassociated tour as a Tactical Action Officer on the USS Abraham Lincoln (CVN 72) and managed to screen for O-4 and Department Head. I had a successful department head tour at HSM-49 and got a #1 competitive EP.

Then, I started a trip from "on-track" to "off-track" and came off the so-called "golden path." During my mid-department head tour FITREP debrief, my CO was gracious enough to be open with me that I would be getting a "short-ticket" of five months due to a Change of Command mid-cycle. Shout out to all the COs who have those difficult conversations with your Officers. They matter. He explained that they would do what they could to explain this situation on my FITREP, but in all likelihood, I would advance to Commander but wouldn't get selected for Commanding Officer. He advised me to get a plan "B." I continued to work to keep the door open by completing a Joint Tour at U.S. Southern Command and knocking out Joint Professional Military Education (JPME) Phase II. On previous tours, I finished a Masters and JPME Phase I in my off time, trying to check all the boxes. During my Joint Tour, as predicted by my sage former CO, I advanced to O-5 but failed to select for command and went to USS Gerald R. Ford (CVN 78) for my final disassociated sea tour. Side note, I consider both of my disassociated sea tours beneficial experiences that helped me become a better Naval Officer. I worked with some amazing Sailors, did some cool stuff, made some close friends, saw some captivating new ports around the world, and overall had a good time.

While on this second disassociated tour, I learned about a new program to retain flight instructors – the Professional Flight Instructor Program. I applied with about a year left on my orders and was honestly not expecting to get picked up. I figured they wouldn't select someone who had been out of the cockpit for almost five years, but they did. Up to that point, my plan was to retire when I hit 20 years on the dot to pursue commercial aviation on the outside. With new life, I am now on my second PFI tour in Milton, FL leading the transition from the TH-57 to the TH-73 and loving every minute of it.

Why am I telling you all this? To give hope to those of you who think you have reached the end, or see your "off-track" moment looming. The PFI Community is small and thus selective, but the Navy needs the flight instructor talent you have in order to produce the world's best aviators for the Fleet. Let's move on to some program details and how best to set yourself up for selection.

Flight Instructors (from left to right): CDR Kevin Koenig, LCDR Kevin Meier, CDR Christopher Gzybowski, CDR Alex Buell, and CDR Zubin Major

The PFI Program was established to address shortfalls in officer manning and better utilize flight training experience. There is admittedly not a lot of official information on why the Navy decided to start this program, but from my conversations with senior leaders, it was mainly to address shortfalls in the strike community and bolster T-45 student naval aviator (SNA) production that had been languishing. Wait, so how did this end up helping the helicopter community? Great question. As unrestricted aviators, helicopter pilots can also be utilized in primary flight training, which frees up strike instructors to go to the T-45. Also, at about the time the PFI Program took flight, the new TH-73 Program was in its infancy and needed some senior rotary IPs to shepherd the transition. This opened up several billets that were an easy fill with rotary PFIs.

So what's in it for you? First of all, if you are a pigeon, meaning you don't like to fly, then this isn't for you. You will fly a lot. Second, do you like going to the boat? If so, then this also isn't the program for you. You will be permanently assigned within the Naval Aviation Training Command (NATRACOM) and removed from the standard sea-shore rotation. This allows you to pretty much homestead for the rest of your career. There is a slight possibility as a rotary PFI of having to move from Milton, FL, to Corpus Christi, TX, or vice versa.

Levity aside, there is a catch, like everything in the Navy, but in my opinion the "goods" far outweigh the "others." To start, you will owe three years upon acceptance into the program and will no longer be eligible for command screen. Second, you must continue to perform, or you can find yourself not continued as a PFI. If that happens, you'll return to the sea-shore rotation and most likely find yourself on "USS Going To Sea." PFI is basically an agreement between the member and the command. If either party isn't satisfied, you can revert back to normal officer detailing.

Alright, on to what you have been waiting for – how to get selected. Let's start with eligibility requirements. You can find everything I'm about to tell you on the MyNavyHR Website in the PFI section. To apply, you must have previously completed a flying production tour, have completed or be in your department head tour, and have a PRD within the year or the following year from when you are applying. You also can't be within 36 months of statutory retirement. These requirements can be waived with your Commanding Officer's endorsement. So, yes, LTs can apply. At TW-5, we hold our own board for those waivers and typically push up one IP each from our VT and HT Communities. We have had one LT selected from TW-5, but the vast majority have selected with all eligibility requirements. Our most recent selectees have come from Fleet assignments. Bottom line here is if you want PFI and you're early in your career, get a production tour under your belt and keep shooting for department head as a ticket to play.

Selection is tough. For the past three years, two to four PFIs are chosen out of the helo communities each year. According to the Bureau of Personnel, approximately 20 rotary-wing pilots apply annually for PFI. Over the past two PFI Boards, rotary-wing pilot selection was about 20%, but varies based upon number of applicants and the demand signal from the PFI Community. Competitive FITREPs demonstrating sustained superior performance from all tours are heavily factored. Letters of recommendation were also helpful. They are reviewed and considered, and those coming from Major Commanders or Flag Officers receive increased attention. Most selectees are currently in operational department head tours due primarily to their competitive records, tactical proficiency, timing to serve multiple PFI tours, and upcoming shore rotation as part of the natural detailing flow. OP-T and post-operational department heads have been selected, but timing and sea duty requirements may reduce their competitiveness for selection. Training Wing Commodores were authorized to nominate one instructor, including Lieutenants, for a Department Head tour waiver. Again, "foot-stomping," if you want PFI, you should focus on strong performance in every tour and getting your department head ticket punched to be as competitive as possible. Even if you don't have all the requirements and want to do this, it doesn't hurt you to apply. You may be surprised to find that things can and do change. My advice would be not to self-eliminate by not applying.

If you've been picked up for PFI – congratulations! You will find it a rewarding tour. Let's talk about how to have a successful tour, and by that I mean a tour where you are offered continuation as a PFI. When you show up, realize that the title PFI doesn't mean "pit pilot." Expect to be given collaterals commensurate with your rank. You are there to instruct but also to be value-added to your command. When it comes time for FITREPs, ensure yours contains a line in block 41 that specifically states that you are recommended for retention as PFI. That will be needed for follow-on tours. Your experience matters, and the students and other instructors need your mentorship. Give freely of your time to produce the world's finest aviators and future department heads in whatever command you find yourself. Don't be the guy or gal who gets selected and just puts in the minimums. That will kill the program and the reputation of your fellow PFIs. It's a small community, and people will know you. Work hard, play hard, fly lots, and enjoy the ride is the best advice I can give.

I hope this has helped you better understand the Professional Flight Instructor. PFIs provide expertise, continuity, and mentorship to students and other instructors. If this is for you, go for it! It's worth the effort. Keep trucking on your milestones and remain competitive. If you make it, pay it forward. Invest in your trainees, your command, and your profession so we can keep this program going for future generations. Keep the turns up, and hope to see you on the flight line!

The National Flight Academy
Inspiring the Next Generation through Naval Aviation

By CAPT Pat Everly, USN (Ret.)
Executive Director, National Flight Academy

When I retired from active duty in 2019 as the Professor of Naval Science at Embry-Riddle Aeronautical University my wife and I faced a dilemma. Where do we want to live and what do we want to do? The short-term answer was to move to suburban Atlanta where I taught Navy Junior ROTC at Duluth High School in Gwinnett County, GA. While it was an extremely rewarding job, we had always planned to call Pensacola home. So we pulled the trigger and set our return date for the summer of 2021. Our plans came into focus; full time retirement, build the forever house, brew beer, and play golf, lots of golf! Those well-laid plans took a turn after a phone call in May of 2021 with CAPT Tim "Lucky" Kinsella who was NAS Pensacola's Commanding Officer. Full disclosure here, Lucky and I have known each other for quite a while. He was one of my flight students at HT-8 in the late 90s, when we both flew Phrogs at HC-11 (always a Gunbearer!), and he was the HS-11 Dragonslayers XO/CO when I was the Deputy/Commodore at HSCWL.

When we spoke, he asked if I had plans once we were settled back in town and my answer was nothing concrete other than finishing the house and enjoying retirement. Lucky convinced me to talk with the President and CEO of the Naval Aviation Museum Foundation, RADM Kyle "KC" Cozad, USN (Ret.) about a position at the National Flight Academy (NFA). Quite honestly, I had no idea there was a National Flight Academy or what it was about.

A couple of phone calls with RADM Cozad led to a tour of the facility in mid-July 2021 and a realization of the incredible potential of the program. A bonus was the opportunity to work with RADM Cozad again, all of which led me to accept the position as Executive Director in August of 2021. Let me get to the whole point of this article. It comes down to answering three questions:

- What is the National Flight Academy?
- How do we accomplish our mission?
- Why should it matter to you?

What is the National Flight Academy?

Despite the name, NFA is not a traditional flight school but rather an immersive STEM (Science, Technology, Engineering, and Mathematics) experience with Naval Aviation at its heart, housed in a state of the art 102,000 square foot virtual aircraft carrier named Ambition. Ambition is located adjacent to the National Naval Aviation Museum onboard NAS Pensacola and her mission is to inspire students, we call them Ambition Experimental Pilots (AXPs), to pursue challenging math and science courses, encourage them to strive for excellence, and to not place limits on future goals. Since its inception in 2012, more than 18,000 students have graduated from its programs and as part of the Northwest Florida STEM Center of Excellence, NFA is one of three educational experiences that form a continuum designed to impact students from 5th through 12th grade. It is unlikely that a single hands-on STEM experience will change the trajectory of a young person's life, but repeated exposure over several years can have a decidedly positive impact. The STEM Center of Excellence consists of the following programs:

A student in the National Flight Academy Simulator

- STARBASE Pensacola: a DOD sponsored 5th grade program focused on Title 1 5th graders in Escambia County.
- The Flight Adventure Deck (FAD): a hands-on field trip located in the National Naval Aviation Museum catering to middle school students (6th-8th grade) from Escambia and Santa Rosa Counties.
- The National Flight Academy: an immersive STEM experience ranging in duration from 1 to 6 days for ages 11-17. This program is available to interested students from the U.S. and abroad.

How do we accomplish our mission?

Simply put, we accomplish the mission by making learning fun and providing an environment that encourages teamwork and healthy competition. There are three program lengths: a 1-day Adventure, a 3-day/2-night Cruise, and our flagship 6-day/5-night Deployment. All programs expose students to life onboard Ambition and the innovative technology used for planning and flying missions to include 40 networked flight simulators and a 12-station virtual reality lab. As the length of the program increases, the storylines get more detailed, missions increase in complexity, and the level of immersion grows. The 6-day Deployments are run for 11 consecutive weeks each summer (typically from late May to early August) with the shorter Cruises and Adventures taking place during the school year.

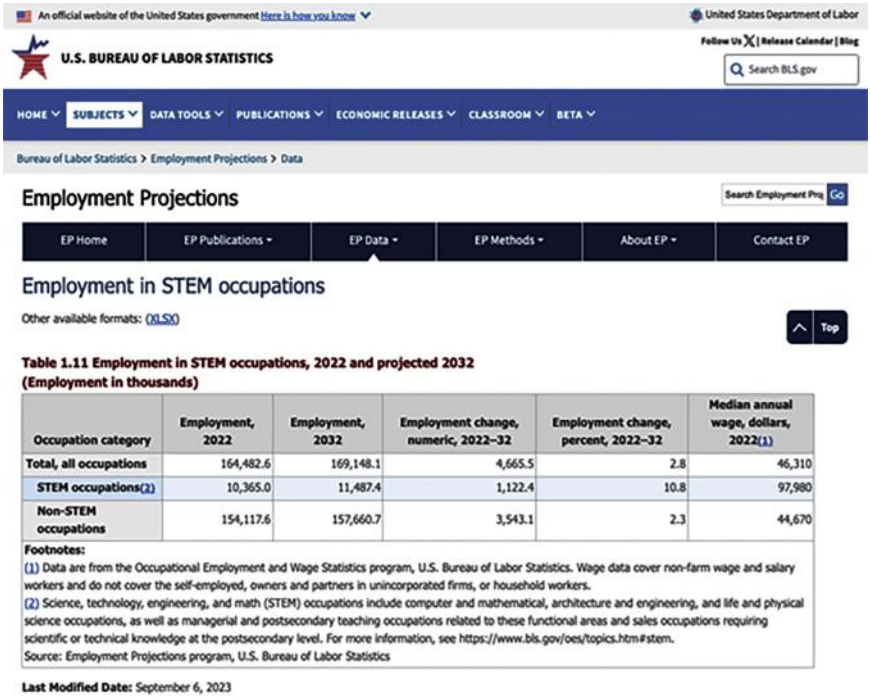
During the summer, up to 168 AXPs per week come aboard Ambition on Sunday morning, get assigned to one of twelve squadrons, and prepare for an exciting week. Throughout the week AXPs live 6 to a stateroom, eat meals on the mess deck, and plan and execute their missions. Ambition is equipped with technology that produces the sounds and feel of a ship at sea to include engine vibrations, sounds of catapult and arresting gear for aircraft launch and recovery, and traditional Navy bells along with 1MC announcements. Thankfully, we do not practice General Quarters!! All this is done to enhance the sensation that the AXP is underway and involved with something much bigger than themselves.

A typical day starts with reveille at 0630 and does not end until lights out at 2230. Just like in real estate, location is everything when it comes to maximizing the experience. Each week the AXPs observe a Blue Angels practice from the flight line, participate in numerous team building and squadron activities, see a giant screen movie in the museum, tour the museum and Hangar Bay 1, are introduced to one of the Naval Air Technical Training Center A Schools, and many other activities designed to build confidence, improve communication, and bond as a team. Their hard work is rewarded on Friday when graduation is held in the Blue Angels Atrium at the National Naval Aviation Museum.

Why should it matter to you?

The bottom line is we need people with STEM skills in the military and a wide range of industries. Critical positions in STEM related fields go unfilled each year and the competition for talent is fierce. It is worthwhile noting that industry eyes the same group of individuals the military is focused on recruiting. One aspect that merits pointing out is that when referring to STEM jobs, the definition is not limited to career fields requiring a 4-year degree in a technical field. The scarcity of qualified individuals in the technical trades is a tangible problem manifesting itself daily across the country. The table below from the U.S. Bureau of Labor Statistics in September 2023 highlights the value of STEM education in terms of employability and median income.

If a student can spend a day, three days, or a week at one of the National Flight Academy's programs and come away with a greater appreciation of their abilities, then we have accomplished our mission. Few things are quite as satisfying as shaking the hand of a young man or women at graduation on Friday, and seeing them stand a bit straighter and carry themselves with greater confidence knowing there are fewer limits on what they can achieve. As I approach the end of my third year at NFA, I can say without reservation that this place makes a difference in the lives of its graduates. I do have a favor to ask of the readers, please share what you have learned about the National Flight Academy with your family and friends. The more visibility, name recognition, and understanding of what we offer translates into a greater opportunity to impact the lives of students everywhere.



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Employment in STEM occupations

Other available formats: (XLSX)

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Table 1.11 Employment in STEM occupations, 2022 and projected 2032
(Employment in thousands)

Occupation category	Employment, 2022	Employment, 2032	Employment change, numeric, 2022–32	Employment change, percent, 2022–32	Median annual wage, dollars, 2022(1)
Total, all occupations	164,482.6	169,148.1	4,665.5	2.8	46,310
STEM occupations(2)	10,365.0	11,487.4	1,122.4	10.8	97,980
Non-STEM occupations	154,117.6	157,660.7	3,543.1	2.3	44,670

Footnotes:
(1) Data are from the Occupational Employment and Wage Statistics program, U.S. Bureau of Labor Statistics. Wage data cover non-farm wage and salary workers and do not cover the self-employed, owners and partners in unincorporated firms, or household workers.
(2) Science, technology, engineering, and math (STEM) occupations include computer and mathematical, architecture and engineering, and life and physical science occupations, as well as managerial and postsecondary teaching occupations related to these functional areas and sales occupations requiring scientific or technical knowledge at the postsecondary level. For more information, see https://www.bls.gov/oes/topics.htm#stem.
Source: Employment Projections program, U.S. Bureau of Labor Statistics

Last Modified Date: September 6, 2023

Editor's Note:
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Change of Command

HSM-41
Seahawks

CDR Timothy Rogers, USN
relieved
CDR Eli Owre, USN
April 11, 2024

HSC - 6
Indians

CDR Robert Dalton, USN
relieved
CDR Mason Berry, USN
March 28, 2024

HSMWSP
Honey Badgers

CDR Robert Belflower, USN
relieved
CDR Kevin Shikuma, USN
February 15, 2024

HSM-75
Wolfpack

CDR Nathan Stein, USN
relieved
CDR Matthew Pratt, USN
February 5, 2024

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Helicopter Sea Combat Squadron Six Conducts Change of Command

By LT Mikelund Bellomy, USN

The Helicopter Sea Combat Squadron SIX (HSC-6) "Indians" conducted a change of command ceremony on the shores of Naval Air Station North Island, Coronado, California on March 28th 2024.

CDR Robert "Big Daddy" Dalton relieved CDR Mason "Dingle" Berry as the 60th Commanding Officer of the "Indians." CAPT Thomas Butts, Comanding Offfcer of HSC-3, participated as the guest speaker.

CDR Mason W. Berry is a native of Vineyard Haven, MA and graduated from the United States Naval Academy in 2004 with a Bachelor's degree in General Engineering. Upon graduation, he reported to Pensacola, Fl to begin flight training. In 2006, CDR Berry earned his pilot wings and reported to San Diego for Fleet Replacement Pilot training in the MH-60S Knighthawk helicopter. In 2007, CDR Berry reported for his first sea tour as a member of HSC-25 in Guam. During his tour he deployed three times including two deployments to the 7th Fleet Area of Responsibility (AOR) and one deployment as part of the 2515th Naval Air Ambulance Detachment conducting MEDEVAC operations in Kuwait and southern Iraq. Leaving HSC-25 in 2010, he reported to Fleet Replacement Squadron, HS-10, in San Diego for duty as a flight instructor in the SH-60F/HH-60H Seahawk helicopters. In the summer of 2012, HS-10 was decommissioned and merged with HSC-3 where he finished his instructor tour as the NATOPS Officer for HSC-3. CDR Berry reported to USS Green Bay (LPD 20) as the Air Boss in the Spring of 2013. While on board, he oversaw the overhaul of the ship's flight deck and associated equipment during an extended ship's availability. Additionally, he was designated the Senior Watch Officer and managed a successful homeport transfer from San Diego, CA to Sasebo, Japan and two subsequent deployments in the 7th Fleet AOR. Upon completion of his tour on Green Bay, he returned to flying and reported to HSC-15 as the Safety Department Head in 2016. In December of 2016, LCDR Berry was re-assigned to HSC-4 after HSC-15 was slated to be deactivated. While a member of HSC-4, he deployed twice with the USS Carl Vinson Strike Group to the Western Pacific and served as both the Operations Officer and Maintenance Officer.

In December 2019, CDR Berry reported to the Joint Staff in Washington, D.C., Strategy Plans and Policy Directorate, as part of the Joint Strategic Planning Team. He moved to the Strategy Development Division and ultimately to Deputy Directorate for Global Integration. His primary responsibilities included overseeing the development of Strategic Opportunities, Global Campaign Plans, and Global Integration Frameworks.

CDR Dalton is an American citizen born overseas in Johannesburg, South Africa. His family moved to Alexandria, VA, in 1994. He is the son of an enlisted U.S. Sailor and grandson of a World War II South African Air Force pilot. He is a 2007 Virginia Tech Corps of Cadets graduate, earning his Bachelor of Science degree in Biological Studies, and was commissioned through the Naval Reserve Officer Training Corps. He holds a Master of Arts degree in Defense and Strategic Studies from the U.S. Naval War College. Designated a U.S. Naval Aviator in 2009, he is a 2014 U.S. Navy Rotary Wing Weapons School (SEAWOLF) graduate and has flown over 3,200 flight hours.

CDR Dalton's operational tours include the HSC-9 "Tridents" of CVW-8, stationed in Naval Station Norfolk, VA, deploying on the USS George H. W. Bush (CVN 77); the HSC-12 "World Famous Golden Falcons" of CVW-5 as the Training Officer, forward-deployed to Naval Air Facility Atsugi, Japan, deploying on the USS Ronald Reagan (CVN 76); and the HSC-14 "Chargers" of CVW-9 as a Department Head, stationed in Naval Air Station North Island, CA, deploying on the USS John C. Stennis (CVN 74). He supported Operations IRAQI FREEDOM, ENDURING FREEDOM, NEW DAWN, INHERENT RESOLVE, FREEDOM SENTINEL, and RESOLUTE SUPPORT.

Ashore, CDR Dalton served as a Seahawk Weapons and Tactics Instructor with the "Savages" of HSC Weapons School, Atlantic, stationed in Naval Station Norfolk, VA, and the U.S. Naval War College at Naval Station, Newport, RI. Commander Dalton is humbled to serve beside the world's finest warfighters "so others may live." He is the loving husband of Casey and the proud father of three beautiful children, Grace, Alice, and James.

HSC-6 provides Anti-Surface Warfare, Special Operations Forces Support, Personnel Recovery, Search and Rescue, Vertical Lift, and Logistics capabilities for Carrier Air Wing 17 (CVW 17) in support of the USS Nimitz (CVN 68) and Carrier Strike Group 11(CSG 11) operations.

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SEAHUNTER Update – MH-60Rs Arrive at NAWDC

By LCDR Andrew "Bobby" Webster, USN

The first of four MH-60Rs arrived on January 26, 2024 delivered by CDRE "Jean Luc" Richard, LT "Tin Man" Canclini, and AWRCM Nick Hunter. After a three-year effort involving CNAP, N98, and NAWDC Staff, all of the Carrier Air Wing's aircraft are now represented on the NAWDC flight line. The arrival of the MH-60R within the first year of standing up the MH-60R Weapons School, SEAHUNTER, will go a long way to improving SEAHUNTER instructor staff tactical proficiency and open opportunities for advanced tactical development and experimentation.

With the SEAHUNTER Staff growing from six to ten Lieutenant instructors, the addition of four MH-60Rs doubles down on the HSM warfighting development at NAWDC. This decision also aligns with the MISR Weapons School mission to increase the lethality throughout the Joint Force as showcased in the semi-annual RESOLUTE HUNTER Exercise. RESOLUTE HUNTER is the Navy's only Joint & Coalition all-domain killweb development exercise that increases the interoperability, and lethality required to build warfighters who can dominate the decision space of the 21st century fight.

If you are looking to lead, train, and fly at the tactical edge, NAWDC now leads all of Naval Aviation with the MH-60R onboard.

Naval Aviation Warfighting Development Center (NAWDC) at Naval Air Station Fallon is the center of excellence for Naval Aviation training and tactics development.

A Skipper's Parting Remarks and Regime Handoff Serve as a Solemn Reminder to Be Ready

By LT Elisha "Grudge" Clark, USN

On a characteristically crystal-clear San Diego Thursday, CDR Kevin "Shak" Shikuma relinquished his duty as HSMWSP Commanding Officer to CDR Robert "Wrecks" Belflower, and with that, closed the last chapter of his time on active duty. On February 15th 2024, with both their families in tow, they braved the relentless winds that lashed over the bow of USS Midway. The scene perfectly modeled the time the ship had spent underway years ago carrying then IS3 Richard, now HSM Commodore Richard, who served as the ceremony's honored speaker.

"One of the best parts about Naval Aviation is, if you stick around long enough, you cross paths with almost everyone in the community," said CDR Shikuma in his introductory remarks. He went on to share a warming anecdote, proving his case. "For Commodore Richard and I, our paths have crossed enough that I could say he is partly responsible for the way I turned out, good or bad. When I showed up at HSL-40 fresh out of flight school in 2005, a then LT Richard instructed one of my first events in the Seahawk. Fast forward a few years, we served together at HSL-48 and LCDR Richard sat on my Aircraft Commander Board - which I barely passed and I'm still not sure which way he voted. Jump a decade later, I have had the honor of serving with now CAPT Richard."

Commodore's remarks confirmed their student instructor relationship, clarifying that the flight event they'd had at HSL-40 was not particularly memorable, which is usually indicative of a successful syllabus flight. CAPT Richard recalled the last time he roamed the halls of USS Midway, at a time when the world looked different. He stressed the importance of the HSM, Rotary Force, and Naval Aviation Community as the world order is being defined and redefined.

CAPT Richard concluded his remarks by highlighting the pride he felt for the two officers sitting beside him. As CDR Shikuma retook the stage, he paid tribute to his Sailors, friends, and family in attendance. He also circled back to a subject that has been in the front of every Naval Aviator's mind since four Houthi pirates met their fate in the Straits of Hormuz. What direction are we headed next?

"When I said my oath as a Midshipman in 1999, the world was different. The U.S. stood alone as the single major power. There were no peer competitors that posed risk of large-scale maritime conflict. 9/11 shifted the Navy's focus from maintaining maritime supremacy to supporting the ground forces engaged in the prolonged Global War on Terror. Fast forward a couple decades and the global landscape has changed completely. The rapid rise of China and the Great Power Competition that accelerated in the 2010s, is now the focus. China's rapidly expanding capability, coupled with their determination to revise the rules-based order, and threaten their neighbor, has created a sense of urgency for the United States and our allies and partners to be prepared."

As CDR Shikuma concluded his remarks, CDR Belflower took the stage. With the wind at his back and the servicemembers he would lead as Commanding Officer before him, he put forth his vision for the HSM Weapons School in the years to come and acknowledged continued dedication to its mission.

"At HSM Weapons School, we strive to live up to the SWTI ideal, to be humble, approachable, and credible in our quest to ensure every squadron and detachment that goes over the horizon is a deterrent to any potential foe, and if deterrence fails, is ready to fight and win in combat."

The uncertainty of our world today shapes how we prepare for tomorrow. Rising tensions oceans away are difficult to fathom on the backdrop of a crystal-clear day aboard a flight deck that now serves as a relic of only a few years. But such is the dilemma of a peacetime military. War is a scenario that is difficult to imagine, but it must be imagined for there to be any hope of victory. The only option is to Be Ready.

"This team punches well above their weight and has made an extraordinary impact, not just across HSM and Naval Aviation, but across the Joint Force."
- CDR Kevin "Shak" Shikuma, USN (Ret.).

"Shak embodies the Seahawk Weapons and Tactics Instructor ideal of a humble, approachable, and credible leader, and we thank him for his incredible service."
- CDR Robert "Wrecks" Belflower, USN.

Getting Started Telling Your Stories

By CAPT George Galdorisi, USN (Ret.)

In the last issue of Rotor Review, we kicked off our writing series designed to help all of you, who are part of the naval rotary wing community, accelerate your journey to tell your stories. And while we'll offer advice in these quarterly columns, importantly, as your professional journal, Rotor Review offers you multiple opportunities to share your thoughts both in print and online.

This issue, we wanted to share some tactics, techniques, and procedures and suggest a building-block to getting your thoughts down on paper or on a computer and then working with them to produce something that someone else wants to read. When I do writing seminars in various places around Southern California, many people come to those events with the notion that they'd like to write a book, typically a novel or a non-fiction book like a memoir.

Truth be told, most of the people with this aspiration haven't written anything before: not a magazine article, or a conference paper, or a newspaper op-ed. While there are some enormously talented individuals who have awakened one morning, decided to write a book, and have done so, I don't know any of them. Every writer I know who is a professional or personal colleague or friend, who has published a book, has written articles first.

All right, you're at least vaguely motivated to write something, now the question is, "What should I write?" Here is what my first agent, John Boswell, suggested: Write whatever you are passionate about. Think of it as this, you're in a bar with your friends, someone is talking, and you just have to say something. What do you say?

Breaking down his suggestions more specifically, think about:

- What are you really passionate about?
- What do you wish you had more time for?
- How would you spend a year as a "professional dilettante?"
- What do you think about when you're alone?
- What do you worry about and what issues concern you most?
- What have you done that people seem curious about?
- Is there a topic where friends turn to you for advice?

Great! Now that you have something you want to share, where do you share it? This is the advice I give to writers interested in publishing something in a print or online forum:

- Write for magazines and journals you read. You understand what they want.
- Write for the ones first that don't pay for content. They are eager for any contribution.
- Move on to magazines and journals to which you subscribe. If you subscribe to the magazine, you're paying yourself.
- There is a reason they call it an "honorarium." It typically isn't a lot of money.
- Follow the magazine's editorial guidelines. These are typically not a mystery.
- Your article should follow accordingly regarding type of content, length, and other factors

Now you're in the starting blocks and want to submit, but how exactly do you do that, and how do you get them to accept what you want to submit. There are some specific tactics, techniques, and procedures that work well:

- Read the front matter of the magazine or journal. It will tell you how to submit.
- If necessary, cold call to get an e-mail address of the magazine's editor.
- Write a compelling, detailed draft e-mail, then put it aside for a few days.
- Go back and edit it - share it with a friend and then make it as short and punchy as possible.
- This is lots of work, yes, but it is your audition.

In writing seminars I lead, we spend a bit of time with these query letters. Here is one that one of my students crafted. By way of background, and as you can see from his letter, he has been a sailor for a long time. I've highlighted, **in bold**, the

aspects of his letter designed to catch the editor's eye and get him or her to say: "Yes, I'd love to see your article, send it to me."

Dear Mr. Johnson,

I have been an avid reader of Sail for many years and receiving my monthly magazine in the mail each month helps remind me why I love sailing so much.

Over the course of years I've enjoyed Sail, I've noticed you periodically feature articles about cruising the Caribbean. These articles have all been terrific and they speak to me. Here's why.

For over twenty years, I was skipper of a Pearson '32 based in St. Thomas, USVI taking visitors on cruises throughout both the U.S. and British Virgin Islands.

I don't mind telling you it was a lucrative business and one that I was passionate about. Cruising News did an article focused on my business in 2010. One way I expressed this passion was my service as editor of our Virgin Island Sailing monthly newsletter.

I have read several articles in Sail that talk about cruising in the USVI in a general way, but none that get deep into specifics. I lived this adventure for over two decades and believe there is so much more to tell.

One of the things that kept customers coming back to my business was the "secret coves" in the U.S. and British Virgin Islands. Most of these coves could only be reached by small boat.

I believe an article, "The Ten Secret Coves of the Virgin Islands" would be of interest to your informed readership. I can have a 1,500-word article to you on this subject in short order. Additionally, I have attached a JPG file of a photo of one of my favorite coves, "Crescent Cove," on the southern shore of St. John. Should you decide to publish this article I have a large collection of illustrations of various Virgin Island coves I'm happy to share.

I look forward to hearing from you and look forward to continuing the dialogue.

Yours in sailing,

I think you all can "deconstruct" this letter and see how well it sells this article. If you were the editor, how could you say no?

Finally, remember this. Publications can't exist without content. Editors embrace anyone who can:

- Create interesting content that meets their needs.
- Deliver quality content they don't have to edit.
- Deliver on time – or early.
- Accepts editorial changes with ease.

So, to paraphrase the Nike ad: "Just do it." And write articles that have staying power, not just things on social media. And put your heart into it. As my friend and writer Robert Masello puts it in his book, Robert's Rules of Writing, "Writing takes deliberation and thought, craft and commitment. If you're serious about writing, burn the journal and get to work." And as you get to work, remember that Rotor Review is your professional journal. It's a great place to submit your first article.

Last word: As one of my squadron mates once noted in a profound moment of wisdom regarding how to get along in the squadron (and not run afoul of the XO), "An ounce of gouge is worth a pound of wisdom." When I find an article in a newspaper or magazine that I think can serve as good gouge to help me with my writing journey, I put it on my website. There are scores of writing tips that I'd like to share with you. Just go to my website: http://www.georgegaldorisi.com/, look under Blog, and then go to Writing Tips.

Every Day is a Gift by Senator Tammy Duckworth

Reviewed by LCDR Chip Lancaster, USN (Ret.)

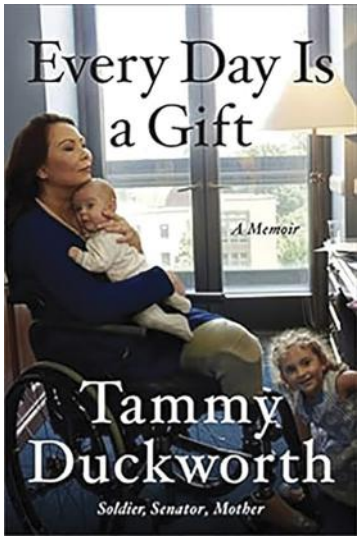
"If you asked me today how I would describe myself, the first words out of my mouth would be Soldier and Helicopter Pilot. Flying for the Army was more than the best job I ever had; it became my identity. It's who I am."

She is Tammy, and yes, I feel that I can use that familiarity with her even though she is a United States Senator. After reading her book, one is so into understanding her, that she is like a member of your family or the copilot sitting next to you. Her remarkable story is told in three parts. Part One is her story growing up. Part Two is her Army training, operations, and recovery. Part Three overlaps with Part Two taking her recovery into her family life and political career.

Her formative years before high school are spent in Thailand, Cambodia, Singapore, and Malayasia largely in gated communities but where she can see outside, witnessing the turmoil and angst U.S. laws had on the Amerasian Community. Her family reaches Hawaii for her high school years. There they live in poverty, on food stamps and school subsidized meals, scrounging for coins on the street until family drama forces her to go against her dad. She gets a job to support the family passing out flyers to tourists, selling street corner roses, and hustling beach volleyball. She postcards her mom who finally arrives to take charge and get the family back on track. Her dad gets a job in Virginia and moves the family there for her college years. In her later adult years, she would become a staunch advocate of the poor, Veteran's issues, and public schools based on her experiences in Hawaii.

In Virginia, they settle in the DC area where she enrolls at George Washington University to get a Master's Degree and Army ROTC at Georgetown University. She gets jobs with the U.S. Naval Institute and with the Smithsonian, although not at the same time. Her goal is to work in civil service for the State Department. Her ROTC takes her to summer basic training in Kentucky where, in three weeks, she is sold on joining the Army. In basic, she learns about Army aviation, the Rifleman's Creed and meets her future husband, Bryan. She finishes her Masters, joins the Army Reserves, and the couple move to Dekalb, Illinois where she has been accepted for the PhD Program at Northern Illinois University.

In Dekalb, she is also accepted for Army aviation and her reserve unit sponsors her for flight school. At Fort Rucker, she finds out that she cannot get a Cobra slot since the Army does not allow women combat pilots yet. She can, however, get a Black Hawk slot so she faces off with the Sergeant Major who will only give it to her if she finishes number one in her class. She gets the highest grades in all of the systems classes and simulator training, also winning the respect and admiration of her class leader, a Desert Storm tank commander combat veteran. She gets the Black Hawk slot and absolutely loves flying them. In her words, flying the H-60 "was about strapping the bird onto my back and being in control of a ferocious, unforgiving machine. A machine that looks like it shouldn't be able to fly. I love the head-banging heavy metal of it. That's why I'm a helicopter pilot." She marries Bryan after flight school and settles into her PhD Program while flying with Illinois National Guard Units.



She makes deployments in the late 90's to Egypt, Guyana, and Iceland performing NATO and humanitarian missions. Following 9/11, her unit gets called up for Iraq in 2003. She's in Iraq for 8 months as an aviation operations planner, but getting stick-time with different units. We see her sense of humor with descriptions of the plight of women's underwear which the Army has not figured out yet, and dealing with bodily necessities in a flight suit, "to pee or not to pee," so mostly you don't. The day of her shootdown starts out like any other piece of cake logrun with her fortunate to get right seat stick-time. Events take a vicious turn when, out of nowhere, they're hit with an RPG. Her shootdown is described in graphically vivid second-by-second detail. I'll not get into it here, suffice to say that I felt every second, exacerbated by my own time in the cockpit. Her injuries are so severe that everyone thinks she is dead, but they're not leaving her body, "never leave a fallen comrade behind." Three of the crew of four are severely wounded. Fortunately, they are accompanied by another 60 which flies them to their base in Taji where they are medevaced to the surgical unit in Baghdad within the critical golden hour following the shootdown.

Doing what they can in Baghdad, Tammy is then transferred in an airborne ICU to Landstuhl to Andrews to Walter Reed in less than 72 hours following the shootdown. She won't wake up for another eight days while the wonders of modern medicine help her through, keeping her alive. She awakes in a wall of excruciating pain with Bryan and her mom by her side. Her recovery is long, long and painful but brightened by other recovering female amputees as well as the Sex-Talk and Cookies Couple (you're just going to have to get the book), the Milkshake Man, and a host of celebrities both good and not so good. Good ones like Gary Sinise, Adam Sandler, and Al Franken, and the not so good to be left nameless for now.

If you have been through any rehab, multiply it by a factor of a thousand to even have an inkling of what Tammy had to go through. Her driving goal is to get back to Army Pilot flight status; a long shot, but not out of sight, others had done it. She's given prosthetic legs, both every day functional titanium and formal realistic ones. Her sense of humor kicks in again when she describes her formal feet as the size of boats, clearly the Army dropped the ball on female body parts as well as underwear and flight suits.

While in rehab she also has to deal with her dad's illness and death adding to the stress of recovery. She gets Army H-60 simulator time, mastering all of the systems, procedures and maneuvers before finally realizing that her Army Pilot flight status is not going to happen. Although she can manage the simulator, and probably the actual aircraft, she could never be a dependable crew member with her disabilities. The realization hit her like a hammer, another thing to recover from. After her first Alive Day (Google it) one year after her shootdown, she channels her energy and determination to being an advocate for disabled vets, ultimately running for Congress.

That's two thirds of the story. You will have to get the book to find out about her congressional career, having babies, and becoming the firebrand advocate for the poor, women, IVF (in vitro fertilization), and veterans. What I have covered only scratches the surface, not telling of her personal issues with her family, the Army, and medical service for women and Vets. Tammy Duckworth's memoir is an open and frank accounting of her life focused on a catastrophic event and recovery that pulls no punches and will leave you emotionally drained, yet inspired. She takes you first-hand through every phase of her life and experience in a clearly written style, liberally sprinkled with her sense of humor. When you turn the last page, you will leave the book knowing Tammy Duckworth. I give it five stars and two thumbs up. Get it, read it; you will not be disappointed.

Congratulations to the next generation of Naval Aviation warfighters who received their Wings of Gold at NAS Whiting Field. These aviators will move to the Fleet to learn their designated platforms.

Congratulations to the New Naval Aviators
March 22, 2024

Congratulations to the New Naval Aviators
March 8, 2024

Congratulations to the New Naval Aviators
February 23, 2024

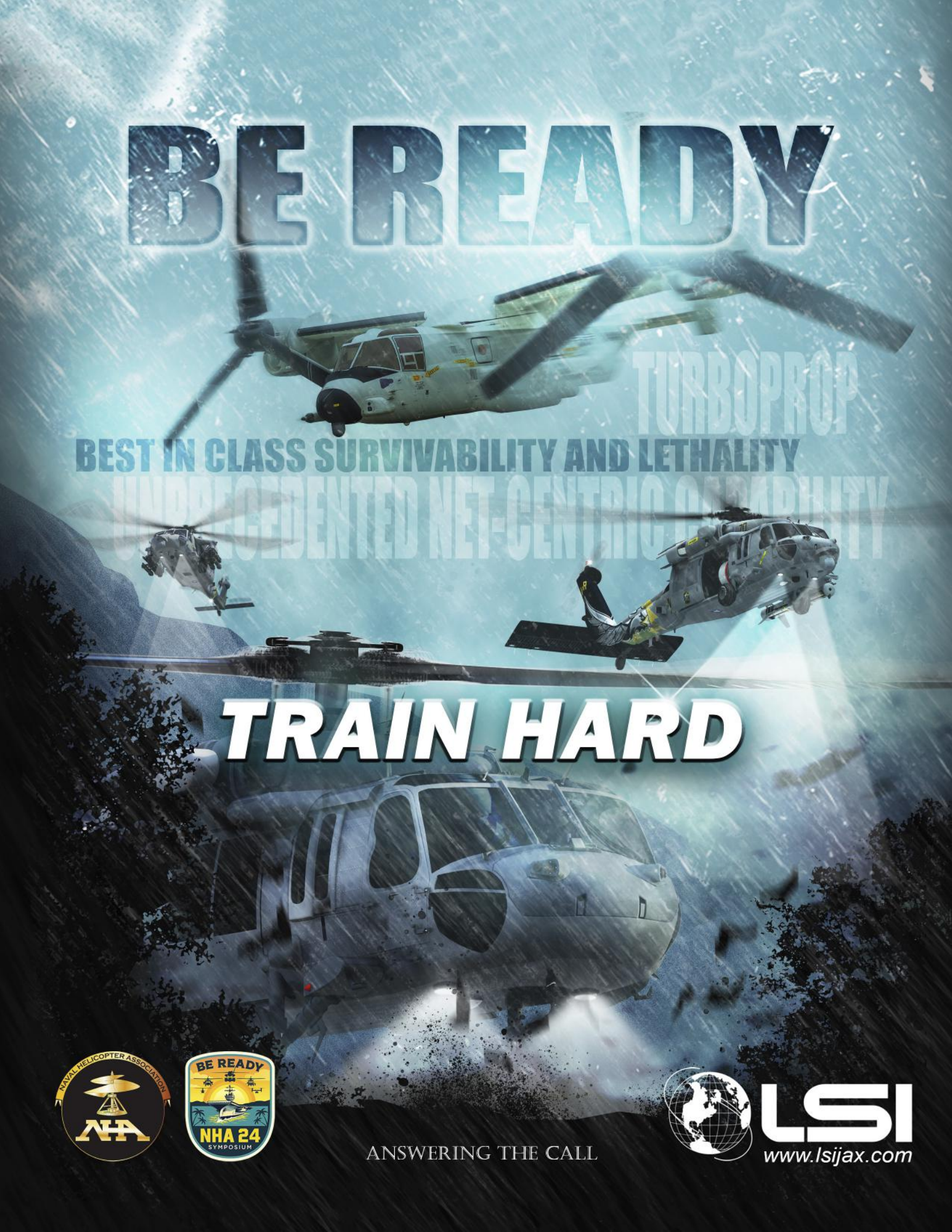
Congratulations to the New Naval Aviators
February 9, 2024

Congratulations to the New Aircrew of HSC-3
March 1, 2024

HM1 Brian Romero, USN, AWS3 Andrew Janvarin, USN, AWS3 Haakon Kjellesvik, USN, AWS3 Seth Misken, USN, AWS3 Michael Perez, USN AWS3 Duane Smotherman, USN, HN Andrew Conklin, USN, HN Gage Dobson, USN, HN Matthew Gangemi, USN, and HN Denis Lane, USN.

CROSSWORD SOLUTION

Answer	Clue	Puzzle #
FARP	Logistic method used by the Army to increase helicopter mobility and flexibility	14 Across
COMPTUEX	CSG Rehearsal Exercise	9 Across
Sweden	NATO's newest member	17 Across
RedSea	Body of water through which 30% of global container traffic passes	20 Across
TOT	Coordination of fires so all munitions arrive at the target at precisely the same time	5 Across
Lightning	A weather phenomenon or a combat stealth fighter	21Across
Flexibility	CRM skill that allows aircrew to alter their course of action under pressure	22 Across
Land	Primary way to effect an overland rescue	2 Across
AMC	Responsible for coordination and control of aicraft during PR mission	18 Across
MTIRadar	Operates with a pulse signal for detecting non-stationary targets	16 Across
EABO	USN form of warfare involving mobile, low-signature forces	13 Across
Alert	To call to a state of readiness; Status held by on-call PR assets	19 Across
Warfighter	One of CNO Franchetti's Priorities	..1 Down
Fallon	Location of NAWDC	14 Down
Proficiency	performing a given skill with expert correctness	..3 Down
Necessity	Operational _____	10 Down
Deterrence	USN goal to dissuade adversaries	11 Down
Bogey	An unknown air contact	7 Down
Dolphin	An aquatic mammal or a twin engine SAR aircraft	15 Down
Deltoro	Secretary of the Navy Carlos	6 Down
turboshaft	Gas turbine that is optimized to produce shaft horsepower	8 Down
Resilience	Toughness; Capacity to recover quickly from difficulties	4 Down
ready	Prepared mentally and physically for action	12 Down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Signal Charlie

CAPT Dick Catone, USN (Ret.) following a memorial service for a fellow helicopter pilot, is credited with the following statement: "I guess we are all in the starboard delta waiting for Signal Charlie." Starboard Delta is the holding pattern for the airborne Search and Rescue helicopters on the starboard (right) side of the aircraft carrier. They fly at a low altitude so as not to interfere with the fixed-wing aircraft recovery pattern, and only land when the last fixed-wing aircraft is safe on board. When tower calls the helicopter to pass "Charlie" to a landing spot, the crew knows the fixed-wing recovery is complete, all is well, and it is time to come back. Hence, the statement appears appropriate that someday we will receive our own "Signal Charlie" and will be called home for a final landing.

Signal Charlie has been created to inform our membership and honor the passing of fellow unrestricted aviators. It is only as good as the information we receive. If you have an obituary or other information that you would like to provide concerning the passing of a shipmate, co-worker, or friend of the community, please contact the NHA National Office at signalcharlie@navalhelicopterassn.org and we will get the word out.

CAPT Robert K. Doane, USN (Ret.)

Captain Robert "K" Doane, USN (Ret.) passed away on Monday, February 5th, 2024 from complications of esophageal cancer. He was born on June 30, 1942 in Indianapolis, Indiana to Pauline Holt Doane and Robert Kenneth Doane. He entered the Navy as a NAVCAD and received his wings as an unrestricted Naval Aviator in August 1966. ENS Doane is Navy Helicopter Pilot Designator Number R-8570.

His initial squadron tours were with HC-1 and HC-7 flying combat SAR missions in North Vietnam. Following this, he reported to HC-5, which became HSL-31, as an instructor pilot and eventually served as Officer in Charge of CNO project (DV-98), evaluating follow-on LAMPS aircraft. He then joined HSL-33 as a plank owner and deployed to WESTPAC as Officer-In-Charge of the Pacific Fleet's first SH-2F detachment aboard USS Brewton (FF 1086).

Returning to HSL-31 as an instructor pilot and Admin officer in 1975 he was instrumental in the movement of the squadron to North Island and became the COMNAVAIRPAC NATOPS Evaluator for the SH-2F. Selected for the college completion program, Captain Doane attended San Diego State University where he earned a Bachelor's Degree in Public Administration.

Joining the "Magicians" of HSL-35 in 1977, Captain Doane served as Maintenance Officer and was subsequently selected for command. He reported to the "Snakes" of HSL-33 in 1979 as Executive Officer and assumed command in 1980. Following command, Captain Doane was the Air Operations Officer on the staff of COMCRUDESGRU ONE, Operations Officer on USS New Orleans (LPH 11), Assistant Chief of Staff for Aviation on the COMNAVSURFPAC staff, and in August 1990 reported to COMASWWINGPAC.

Captain Doane graduated from the Naval War College and earned a Master of Arts degree in International Relations as well as a Masters of Science in Personnel Administration from Salve Regina College. Captain Doane was named both the Naval Helicopter Association's "Pilot of the Year" and "Maintenance Officer of the Year" and was authorized to wear the following awards: Meritorious Service Medal with Gold Star, four Air Medals, two Navy Commendations, and a variety of unit and campaign ribbons.

In retirement, Bob enjoyed traveling with his wife Susan, eating a good meal, socializing with friends, and spending time with his children and grandchildren. Captain Doane is survived by his wife of 34 years, Susan, his former spouse, Valerie, a daughter Angela Ceceña (Ricardo), a son Michael Robert Doane, grandsons Alec Ceceña, Chad Ceceña, Collin Doane, Owen Doane, and a granddaughter, Natalie Ceceña.

In lieu of flowers, the family requests that you make a donation to your favorite charity. If you have a story or photo to share, please email: angcecena@gmail.com. Services for Captain Robert "K" Doane USN (Ret.) were held at Miramar National Cemetery, in San Diego, on Friday, April 12, 2024

Fair Winds and Following Seas CAPT Doane

CDR Michael J. Crum, USN (Ret.)

ENS Crum became a Naval Aviator on January 11, 1980 at HT-18, NAS Whiting Field, Milton, Florida. ENS Crum is Navy Helicopter Pilot Designator Number R-15230.

Michael J. Crum, 69, passed away on March 2, 2024, after a short illness. He was born on March 26, 1954, in Mount Union, Pennsylvania. Mike was a loving husband to his wife, Barb, of 45 years, and a devoted father to his sons, Michael Jr., Nicholas, and Matthew. Sadly, Barb passed away in December 2023, just a few months prior to Mike.

Mike graduated from high school in 1972, where he was a standout athlete. In 1973, Mike enlisted in the U.S. Navy and attended the Naval Academy Prep School at Naval Training Center, Bainbridge, Maryland. His class was the last to graduate from NAPS at NTC Bainbridge. The school was subsequently moved to Newport, Rhode Island. Mike entered the U.S. Naval Academy in Annapolis, Maryland in May 1974 and graduated in June 1978.

Mike and Barb were married shortly after graduation and began their Navy adventure with orders to NAS Pensacola, Florida where Mike completed aviation training and was designated a Naval Aviator in 1980. Following Fleet Replacement Pilot Training in HS-1 at NAS Jacksonville, in the SH-3H SeaKing helicopter, Mike reported to HS-5 already on deployment in the Indian Ocean during the Iranian Hostage Crisis. He made three deployments as a "Nightdipper" aboard USS Dwight D. Eisenhower (CVN 69).

In 1983, Mike reported to NAS North Island in Coronado, California and began pilot training in the Fleet's newest helicopter, the SH-60B Seahawk and became a "Plank Owner" in the first SH-60B squadron, HSL-41, as an Instructor Pilot.

In 1986, after three years of Instructor Pilot duty, he reported to HSL-45 and became a Plank Owner in the second operational SH-60B squadron. He made one deployment to the Persian Gulf aboard USS Vandegrift (FFG-48) conducting Earnest Will Tanker Escort missions. Upon return from deployment, he was assigned as the squadron Maintenance Officer.

In 1989, he reported to HSL-43 and made one deployment as the detachment Officer in Charge (OIC). Upon return from deployment, he was assigned as the squadron Operations Officer.

In 1990, Mike reported to the Bureau of Naval Personnel in Washington, D.C. for two years of Detailer duty. He subsequently returned to San Diego for three more tours, Safety Officer on USS Kitty Hawk, Chief Staff Officer of COMHSLWINGPAC, and finally as an instructor at Tactical Training Group, Pacific. After retirement from the Navy, Mike began his second career as a civilian instructor at TACTRAGRUPAC providing pre-deployment training to Carrier Air Wing staffs.

Mike and Barb were the heart and soul of the Poway, California Little League for many years as all three of their boys were excellent baseball players. Mike was a great coach and Barb was the consummate League President. When Mike wasn't on the field he could be found at home in his "Man Cave" watching his beloved Dodgers, with his two Lhasa Apsos in his lap, and a beer in hand.

"The Oak" will be remembered for his dedication to our country, his family, and two successful careers. He will be deeply missed by all who knew him. A Memorial Service was held for both Mike and Barb on Monday, 25 March 2024 at the Miramar National Cemetery in San Diego, CA.

Fair Winds and Following Seas CDR Crum

CDR Alan W. Jacka, USN (Ret.)

ENS Jacka became a Naval Aviator on April 10, 1968 at HT-8, NAS Ellyson Field, Pensacola, Florida. ENS Jacka is Navy Helicopter Pilot Designation Number R-9725.

Commander Alan W. Jacka, USN (Ret.) was born on December 18, 1943 in Cimarron, Kansas. He was the only child of the late Wayne and Rosella Jacka. He made his final flight on the evening of March 15, 2024.

Alan graduated from Dodge City High School and Fort Hays State University where he received a Bachelor's Degree in Economics and Business. While there, he met the love of his life, Annette, on a blind date and two years later they married and began their 57-year adventure.

Alan joined the Navy to become a pilot and earned his wings of gold in Pensacola, FL. His first tour of duty was in San Diego, CA where he flew with squadrons HC-5 and HC-1 in Imperial Beach, CA where he proudly served as a helicopter pilot in Vietnam on USS Enterprise and USS Bonhomme Richard. After WestPac duty, he was assigned to NAS Sigonella, Sicily then back to Norfolk, VA for a ship duty tour on USS Guadalcanal. After one Mediterranean cruise, he was sent to NAS Oceana as the Search and Rescue Pilot. He was then assigned to his final Squadron, HC-6 Chargers. Next up, he performed sea trials and material inspections aboard 130 naval vessels at COMNAVAIRLANT. His last duty station was in Naples, Italy where he was delighted to report for duty as Officer in Charge of the Navy airport at Capodichino. He was a decorated veteran, retiring after 26 years of service.

Alan remained in Naples starting his career in civil service, working his way up in the Safety community to eventually becoming the Director for Safety and Health for all of Europe (CINCUSNAVEUR). While working there, he was honored to be selected to serve on the Secretary of the Navy Retirement Council. Upon returning to Hampton Roads in 2000, he continued to work at the Safety Center in Norfolk. Throughout his career, Alan received many accolades and medals of commendation.

This man loved his family and getting to know his "roots" was extremely important. He spent hours researching his family tree, which included countless vacations visiting ancestors' homes, to include those in Cornwall, England. This ancestry helped the Jacka family learn where they came from and who they were.

Alan loved many activities including flying, bird watching, car collecting, gardening, snow skiing, boating, anything involving the Chesapeake Bay, and traveling. His children were lucky enough to live in Italy, on two separate tours. He cherished his time with his entire family. He was an entrepreneur, owned several rental properties in Norfolk, an avid investor, and he treasured a fine coin (his collecting started as a young boy).

Alan will live on in the hearts and memories of Annette, his two children, and four grandchildren. His daughter Andrea, aka his "Beachgirl", (Ronnie) and their daughters Gwendolyn and Bridgette. His son Aaron (Shantell) and his son and daughter with Alan's former daughter-in-law Lorie, Nicholas and Hannah. He had four bonus grandchildren and four bonus great grandchildren. He is survived by many great, lifelong friends.

A service to celebrate his life was held April 13, 2024 at Royster Memorial Presbyterian Church, 6901 Newport Ave, Norfolk, VA.

The Burial Ceremony with Military Honors will be at Albert G. Horton Jr. Memorial Veterans Cemetery, Suffolk, VA on a later date.

It was Alan's wish that memorial tributes be made in the form of donations to Wounded Warrior Project or American Alzheimer's Association.

Fair Winds and Following Seas CDR Jacka

CAPT John "Jack" Patrick Costello II, USN (Ret.)

ENS Costello became a Naval Aviator on November 24, 1965 at HT-8, NAS Ellyson Field, Pensacola, Florida. ENS Costello is Navy Helicopter Pilot Designator Number R-8140.

LTJG Costello, as the Helicopter Aircraft Commander (HAC) of an HS-8, SH-3A Helicopter, received the Silver Star for the combat rescue of Frank Pendergast of RVAH-13 off the coast of North Vietnam, 9 March 1967. The RA-5C from RVAH-13 was off USS Kitty Hawk. It was doing a recce run just inland down the North Vietnam coast, escorted by a VF-213 Phantom when the Viggie was hit by ground fire. The crew ejected and landed in a shallow water/sand bar area where crew was soon captured. When the SAR assets, including a HS-8 H-3 appeared, the RAN pulled out a hidden pistol and shot it out with captors. The pilot (XO) Charles Putnam was killed. His body was recovered in 1988. The "RAN" LTJG Frank Pendergast was rescued by the HS-8 Sea King crew and later awarded the Navy Cross.

Captain John "Jack" Patrick Costello II, USN (Ret.) passed away March 6, 2024, surrounded by loving family keeping vigil. He was an adoring husband, loving father and grandfather, and great man to have by your side in any sort of trouble.

Jack was born in Chicago, Illinois on July 12, 1940, to the late John Patrick and Bernadette "Bunny" Costello. In addition to his parents, he is preceded in death by his sister, Mary Laura Lou Peterson.

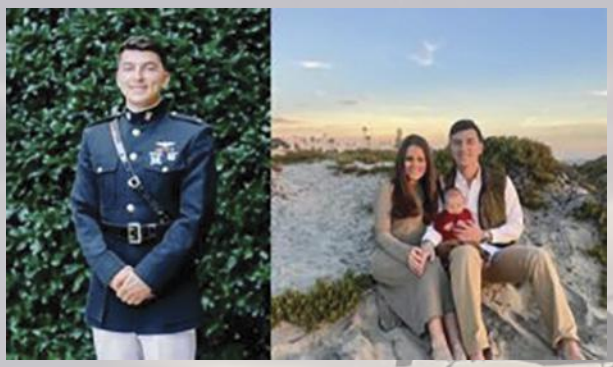
CAPT Costello was a 1964 graduate of the U.S. Naval Academy. Direct from USNA, he attended Naval Flight School in Pensacola, FL and became a Naval Aviator. Serving two tours in the Vietnam War, he earned a Silver Star for daring helicopter rescues of downed pilots. Jack went on to earn a Master's Degree in Aeronautical Engineering at the Naval Post Graduate School, Monterey, CA, and later attended the U.S. Naval Test Pilot School in Patuxent River, MD, where he tested most of the current military and civilian helicopters as well as several fixed wing aircraft, totaling thirty-three aircraft during his service. Subsequently, he became a member of the Society of Experimental Test Pilots.

Jack served 26 years active duty as a helicopter and test pilot before retiring in 1990. Following retirement, he worked in the defense aerospace industry with an extended tour in Australia that was a great adventure for Jack and Connie. He is survived by his beloved wife, Connie, of 59 years; children Laura (Clement Geitner), Sean and Casey; granddaughters Ryan, Emma Claire and Adeleine Geitner; sister Susan Dunne; nieces Julie Dunne, Jennifer Coleman, Janine Dunne, and Colleen Lamond. Funeral mass was held at St. Thomas a'Becket Catholic Church, 1421 Wiehle Ave., Reston, VA on Friday, March 15 at 11 a.m.

Fair Winds and Following Seas CAPT Costello

Capt Miguel J. Nava, USMC

From Jeff Webb, President and CEO of the USNA Alumni Association and Foundation



I am writing to share the tragic news that the Naval Academy Alumni Community has lost Capt Miguel Nava, USMC, in the crash of a CH-53E Super Stallion helicopter on Tuesday, 6 February, 2024, in California.

1stLt. Miguel J. Nava, USMC, became a Naval Aviator on July 24, 2020 at HT-8, NAS Whiting Field, Milton, Florida. 1stLt. Nava is Navy Helicopter Pilot Designator Number R-35281. Miguel was a graduate of the Class of 2017, and a member of the 22nd Company.

Miguel was a husband, a father, a son, a brother, a friend…and a Marine. We join his wife, Ryann, 5-month-old son, Luca, his brother, Nikolas, and parents Lisa and Javier Nava in mourning his loss, and the loss of his four fellow Marines from the Flying Tigers of Marine Heavy Helicopter Squadron 361 (HMH 361). Also perishing in the crash were: Capt. Benjamin Moulton, USMC, Capt. Jack Casey, USMC, LCpl .Donovan Davis, USMC, USMC, and Sgt. Alec Langen, USMC.

Our Alumni Association and Foundation Memorial Affairs Team is actively coordinating our support and response with the Naval Academy and the family, and we are sincerely heartened by the Veteran Support Organizations that have already rallied around Miguel's family and friends to be there for them at this time of great tragedy.

Miguel's Virtual Memorial Hall Page can be viewed here:

https://usnamemorialhall.org/index.php/MIGUEL_J._NAVA,_CAPT,_USMC

When we lose brave men and women who selflessly serve in the defense of our freedom, it is brutal and heartbreaking. We should pause and be reminded that our service members accept immense risks every day. When they perish, as we grieve, we must lock arms as a community and embrace their classmates, friends, and family. The USNA Alumni Association and Foundation will support the Nava Family during this difficult time and appropriately honor Miguel's service and sacrifice to his country.

Fair Winds and Following Seas Capt. Nava

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