MECH

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MAINTAINERS IN ACTION

\+ THEIR SAFETY LESSONS

FIRE PREVENTION

Protective Equipment Items

OPERATIONAL READINESS

HANGAR SAFETY

KEY TO WARFIGHTER PROFICIENCY

Naval Safety Command Established

by Leslie Tomaino, Naval Safety Command Safety Promotions

U.S. Navy photo by Mass Communication Specialist 2nd Class (SW/AW) Weston A. Mohr

NORFOLK, Va. - Marking a significant new chapter, the Naval Safety Command (NAVSAFECOM) was established during an official ceremony at Joint Forces Staff College today, February 4, 2022. The command, formerly known as Naval Safety Center, bears increased authorities and responsibilities.

NAVSAFECOM will serve as the naval enterprise lead for non-nuclear safety standards, expertise and oversight of the Navy and Marine Corps Safety Management System (SMS). The command will operate with the requisite authorities and responsibilities to establish an SMS that provides defense-in-depth and ensures the naval enterprise is both safe to operate and operating safely.

These changes reflect the continued emphasis the Department of the Navy places on safety. By elevating the organization to a command construct, NAVSAFECOM now has the authority to establish Echelon I safety and risk management policy and the ability to conduct formal, independent assurance functions from Echelon II through unit-level commands to evaluate risk control systems and continuous self-improvement.

Chief of Naval Operations Adm. Mike Gilday presided over the ceremony and delivered remarks as the keynote speaker.

"The significance of today's Establishment can be summarized simply: a vital change to the way our Navy conducts its vital mission, a mission that is growing in importance every single day," Gilday said. "Naval Safety Command will enhance our ability to safely operate across the globe, and in turn help accelerate America's advantage at sea."

Much has changed and evolved in the Navy and Marine Corps in the last 70 years since the naval safety activity's inception, however, mission readiness remains a constant need.

Leadership seeks to enhance the Navy's and Marine Corps 'safety posture and better prepare for high-end, sustained maritime combat at sea. The deployment of a revised SMS ensures risk management, problem-solving, and critical thinking are encouraged at the enterprise, unit, and individual levels; that accountability for risk is at the appropriate level; and that assurance and regulatory processes met. As part of this change, the NAVSAFECOM will assess safety culture at all levels, from individual commands up to the fleet level.

Rear Adm. F.R. "Lucky" Luchtman, commander, Naval Safety Command, commented on the importance of the organization's journey, roles, responsibilities and increased authority. Luchtman stated the Naval Safety Command ensures the effective communication of the Safety Management System and improves understanding of its importance and relevance to the Navy and Marine Corps.

"We will empower our Sailors, Marines, and civilians by collecting their insights to bolster our safety culture," Luchtman said. "Ultimately, the Naval Safety Command will serve as a force multiplier of a just culture that incorporates risk management and accountability by all individuals, regardless of rank and position."

While the organization and its staff are proud of their rich 70-year history, they look towards the future, continuing to innovate and evolve. The establishment of NAVSAFECOM demonstrates the naval enterprise's dedicated efforts to growth, innovation and fortified readiness.

"Our readiness and strength rely on the continuous innovation and dedicated efforts of all our personnel," said Command Master Chief Jimmy Hailey. "The Naval Safety Command team is excited about the future and remains committed to helping keep our global warfighters safe."
Gilday, Luchtman and Hailey unveiled the Naval Safety Command's new seal during the ceremony. Key elements of the seal include a blue and red shield representing protection across the naval enterprise, blue for the Navy's dominance on, under and over the maritime domain, and red for the courage and tenacity of the Marine Corps. The globe behind the shield symbolizes naval warriors, wherever they serve worldwide, under the protection of safety principles.

The new command motto featured on the seal, "Enabling Warfighting Readiness," is a testament to the command's mission to preserve warfighting capability, combat lethality and enable readiness by working with its stakeholders to identify and mitigate or eliminate hazards to reduce unnecessary risk to people and resources.

"The Naval Safety Command will provide transparency into emerging risk trends and the current safety status of all commands through enhanced risk identification, communication, and accountability, as well as data collection, management, and product dissemination, which will protect our most important resource, our Sailors, Marines, and civilians whose lives we value above all else." Luchtman said.

For more information or resources from the Naval Safety Command, visit the command website at **https://navalsafetycommand.navy.mil.**

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COMMANDER'S LETTER

REAR ADMIRAL F.R. "LUCKY" LUCHTMAN

NAVAL SAFETY COMMAND

Happy spring to all of our Sailors, Marines, civilians and their families!

Last year marked a milestone in our history as we reached our 70th anniversary. When the Naval Safety Command was established in 1951 at Naval Air Station, Norfolk, Virginia, it was called the U.S. Naval Aviation Safety Activity. In May 1968, the Naval Aviation Safety Center and the Submarine Safety Center, located in New London, Connecticut, merged to become the Naval Safety Center.

This year, we marked another milestone when we officially became the Naval Safety Command, on Feb. 4. Read about the establishment of the NAVSAFECOM on page 2.

This year is off to a dynamic start as we update the Navy`s safety management system and continue to promulgate an environment that is safe to operate and operating safely.

We look forward to reading and sharing your experiences across the naval enterprise. Take note that these articles identified small issues that could have been worse without risk management. Small issues can turn into big problems, so I highly encourage learning from these articles.

Stay safe, and thank you for your service and commitment to our nation!

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Back Cover: Aviation Machinist's Mate 2nd Class Celine Dupont. U.S. Navy photo by Mass Communication Specialist Seaman Apprentice Julia Brockman

HAVE YOU FLOWN WITHOUT AN AUX TANK LATELY?

By Senior Chief Naval Aircrewman Wade Hove

I reviewed an MH-60S hazard report regarding things falling off aircraft (TFOA) involving the auxiliary power unit (APU) pump handle. The APU handle fell out of the aircraft while the unit was conducting vertical replenishment (VERTREP) operations at sea. This particular crew preflighted their aircraft during daylight hours the day before the event. They noted everything was in place and the aircraft was safe and secure for the mission. Sometime after the crew finished their preflight, airframers installed troop seats across the cabin's aft bulkhead. The crew was aware of the maintenance action, but did not complete a follow-up inspection of the area before the flight.

This detachment was on a VERTREP deployment, and the flight would be somewhat routine since they had completed this operation several times. Only two things were out of the ordinary for the crew; they would be flying without an auxiliary (AUX) fuel tank and the aft row of troop seats would be installed.

Naval Air Crewman Tanner Brow of the HSC-23 squadron seated by edge of cargo door. U.S. Navy photo by Mass Communication Specialist 3rd Class Gavin Shields

AUX tank APU pump handle position
U.S. Navy photo by Senior Chief Naval Aircrewman Wade Hove

Naval Aircrewman Jake Sampson from HSC21 seated at right cargo door without AUX tank.
U.S. Navy photo by Mass Communications Specialist 2nd Class Colby Mothershead

The crew launched the next day at 6:30 a.m. to commence operations. Unbeknownst to the crew, at some point during the VERTREP, the pump handle departed the cabin and landed on the flight deck of the receiving ship. Flight deck personnel recovered the pump handle and returned it to the aircraft at the completion of the VERTREP at 10:15 a.m.

Thankfully, there was no damage to the flight deck, personnel or equipment.

When configured with an AUX fuel tank, the APU pump handle is sandwiched between the bulkhead and the sidewall of the AUX tank, reducing environmental influences and pump handle accessibility. A retaining strap holds the handle in place using a wingnut on top and a box bracket at the bottom. This retaining system is located on the bulkhead behind the starboard cabin door, pictured above. Because this crew's aircraft did not have an AUX tank installed, the pump handle was exposed with the top retaining strap and bottom box bracket holding it in place. The aircraft had daily and turnaround inspections completed the same day as the preflight. These inspections do not require maintenance technicians to inspect the security of the pump handle itself.

The crewchief did inspect the pump handle during the preflight, noting the handle was secure in its holder. MH-60S squadrons don't routinely configure aircraft without AUX tanks or install a row of troop seats along the aft cabin bulkhead. This nonroutine configuration created a hazard; the maintenance team may not have known the APU pump handle location, and someone could have accidentally loosened the retaining wingnut while installing the troop seats.

Additionally, flight crews do not routinely recheck the security of the APU pump handle when AUX tanks are installed due to limited accessibility. This likely led to the flight crew's failure to reinspect the pump handle after the seats were installed or during the flight. Flight crews do not routinely conduct VERTREPs with an aft row of troop seats installed. During the VERTREP, the crew members sat in the aft row troop seats for nearly the entire flight.

Due to the handle's proximity to the starboard aft seat, the crew members' flight gear may have snagged the wingnut and loosened the pump handle retaining mechanism during flight. These scenarios could have ultimately caused the handle to depart the aircraft.

Nowadays, we don't often fly without AUX tanks and an aft row of troop seats installed. However, aircrew members are still responsible for managing the cabin so things don't fall out of the aircraft. We conduct the preflight, checking for safety and security, but do we check after we lift? For some, the answer may be no, and preflight may be the last time they check the aircraft before launch. Our high-paced, ever-changing environment requires time-critical risk management. This necessitates a periodic reassessment of our surroundings, to include checking the security of our aircraft, inside and out, to ensure our crew remains safe and effective. While most crew members probably look around the cabin for loose gear in-flight, they don't do a traditional security check anymore.

Once upon a time, in-flight security checks were a regular occurrence in the helicopter community. During a security check, aircrews would check circuit breakers, switches, hydraulic lines, flight controls, hatches, cargo and anything else that could cause a problem if not working properly. With the introduction of the MH-60S, flight crews inherited a reliable and safe aircraft. Over time, some crew members may have developed a false sense of security that systems and equipment are so reliable and safe, the crew no longer needs to check them in-flight. Some in our community now rely more on aircraft warning systems to notify us when something is wrong or a system is degraded.

This cultural shift is the result of complacency that may have been bred into some of our younger crewmen. Such complacency is perpetuated by some senior crewmens' failure to pass on techniques, such as the security check, developed from past experiences.

Our experiences help shape the techniques we use and the procedures laid out in Naval Air Training and Operating Procedures Standardizations (NATOPS). The saying "NATOPS is written in blood" is constantly repeated. Learning from our past mistakes is vital. As a community, it is imperative we continue to pass on best practices to our replacements. By no means am I saying all aircrewmen have lost the notion that our job has dangers or that we no longer need to check our surroundings. I am merely pointing out one possible causal factor to a common problem: TFOAs. Pay attention to all of your surroundings – especially when uncommon configurations or changes to normal tasks occur.

OPERATIONAL

READINESS KEY TO WARFIGHTER PROFICIENCY

An interview with an Aviation Maintenance Administrationman

By Master Chief Aviation Maintenance Administrationman Courtney A. Barber

It takes more than just steel, advanced electronics or even engine thrust to give operators the ability to plan operations in advance while also maintaining, planning and sustaining systems. Meet the Autonomic Logistics Information System, also known as ALIS.

The ALIS resides within the F-35 community. Like the Naval Aviation Logistics Command Management Information System (NALCOMIS), the ALIS is a single, secure information system that provides users with up-to-date information, but with more capabilities including operations, maintenance, prognostics, supply, customer service, training and technical data.

The system turns data from many sources into actionable information, enabling pilots and maintainers to make decisions affecting the overall health of the aircraft and the safety of equipment and personnel.

During an assessment in California, I sat down with Aviation Maintenance Administrationman 1st Class Kierra Adams at VFA-125 as she shared her experience working with ALIS.

U.S. Marine Corps photo by Lance Cpl. Seth Rosenberg

Barber: "How long have you worked with ALIS?"
Adams: "I have four years of experience with ALIS. I started off at VFA-101 at Eglin Air Force Base in February of 2017. Once VFA-101 was decommissioned in 2018, I volunteered to continue with the program at VFA-125. Between the two commands, I have been the program coordinator for logs and records, data analyst and Time Compliance Technical Directives TCTDs (TD program for F-35C)."

Barber: "What formal training have you received?"
Adams: "Autonomic Logistics Information System Management and Supervision – C-555-2019; Autonomic Logistics Information System Database Administrator/Analyst – C-555-2023. The on-the-job training was honestly the most useful. From my experience, it takes six months to fully understand the functions, the ins and outs of ALIS. I was completely comfortable with the system a year after being in the program. Being prior NALCOMIS makes it a bit harder to let go of what you're accustomed to; however, those who have only known ALIS may have a different experience than I do."

Barber: "How does ALIS contribute to aviation safety?"
Adams: "ALIS is a program that maintains the entire history of aircraft components and assets. Because of this, hard cards are not a requirement for logs and records. Also, instead of submitting a 'software maintenance tracking system' ticket when a system error occurs, we contact our ALIS admin, Lockheed Martin's on-station system administrators or submit an action request within the ALIS system. When new TCTDs come out, they are loaded into the system and automatically generate work orders for the applicable air vehicle or asset.

ALIS makes aviation safety a lot easier when it comes to tracking and accounting for type maintenance man hours (TMMH), tracked components and flight hours. ALIS gives maintainers a warning before signing off a work order when the TMMH does not match the crew size. The maintainer can then go back into the work order and correct or adjust the hours. Canceled/Completed/Outstanding JCNs, component removals/installations, TCTDs and scheduled inspections are automatically recorded on the air vehicle/component's Electronic Equipment Logsets (EELs). There is also an option to upload pertinent paperwork into work orders and the EEL. When used, this system option validates nondestructive inspections, depot level modifications and work order back-fits performed on assets. I can complain about how there is no option to pull man-hours for individual workers, but this does not affect aviation safety. However, we have the option to run scripts that will provide corrosion treatment/prevention man-hours and work orders, A-799 work orders and cannibalizations. These reports are broken down by elapsed maintenance time/TMMH, severity code, action taken codes, job control numbers and local control numbers (ALIS's 'work unit code" equivalent).'

The Navy is undergoing modernization across the board and a vital pillar of that is leveraging new technology. Whether working with NALCOMIS or ALIS, operational readiness at all times remains the essential key to our warfighting proficiency.

> "The Navy is undergoing modernization across the board, and a vital pillar of that is leveraging new technology."

Courtesy photo
Defense Imagery
Management
Operations Center

TRAIN YOUR LEGACY

By Gunnery Sgt. Samuel Lee

Over the past few months, I had the pleasure of visiting various squadrons to perform assessments. During these visits, I had the opportunity to meet some of the best Marines and Sailors the fleet has to offer. Some are young, new service members and some are seasoned veterans who have traveled all over the globe. As to be expected, the gap of knowledge is staggering. This is no fault of the squadron or their personnel; changeover is expected.

It has been 20 years since the attacks of 9/11, and all the Marines and Sailors who answered the call at the time of need are either at or near the end of their careers. As they leave, so does their wealth of knowledge, expertise and experiences.

U.S. Navy photo by Brian Walsh

As those Marines and Sailors exit the military and rejoin the civilian sector, their subordinates will be called upon to fill their spots, which means those fresh faces of the fleet will be thrust into the trenches, so to speak. This brings to mind the old saying, "You need to train your replacement." Though I agree with the statement's premise, I believe it can be misinterpreted. Saying you need to train your replacement makes it seem as if you have time to do so, and you are not expecting to go anywhere anytime soon. In turn, we keep taking matters into our own hands until we know we will be moving on. Now I know this isn't the intent of the statement; training should be continuous, and in doing so, you are already training your replacement.

From a supervisory and leadership role, you could use the "what's in it for me?" approach when properly training subordinates. Instead of "training your replacement," think of the here and now. Who do you want to work for or with you? A group of competent Marines and Sailors you can trust to get the job done right the first time or inidividuals who are going to get you called into the back office every week for poor performance or, even worse, who could injure themselves and others because they were not adequately trained? I don't think any of us actually want the latter, but that is what we are implying when we don't take the time to properly train our Marines and Sailors.

An incident early in my career exposed me to this exact situation. It was late spring 2003, and my squadron received orders to Al Asad Air Base, Iraq. I was a young private first class (PFC) who had just reported to the fleet about five months earlier, still wet behind the ears and soaking in everything my noncommissioned officers (NCO) were telling me like a sponge. I wasn't the only fresh face; we had at least four other young Marines who reported to the squadron around the same time.

We were a reasonably young ordnance division but had some seasoned NCOs who just came back from Kuwait the year prior. With their knowledge and experience and our eagerness to get at it, you would think we would run like a well-oiled machine. After only about a week into the deployment, we had a rude awakening.

I was on night crew and that night started like any other. The crew and I started our way to the bus stop when the High Mobility Multipurpose Wheeled Vehicle we used for arm and disarm evolutions pulled up beside us with our gunnery sergeant, or gunny in it, yelling, "Get in!" This can't be good. As we rode to the squadron spaces, one of my fellow Marines noticed some burned Marine camouflage in the back. Our gunny filled us in on what happened.

Our day crew Marines were pulling the ferry chaff and flare dispensers and performing release and control checks on the electronic countermeasure (ECM) system so we could refill the aircraft with the combat load of chaff and flare. They had one team go ahead and download the dispensers so the check crew could go behind them and check the ECM system for the new load.

When the download crew reached one particular aircraft, they could not remove one of the lower dispensers due to a stripped stud, so they moved on to the next one.

When the check crew got to that same aircraft, they set up as usual and continued with the ECM checks. With the test set installed into the other lower housing, they hooked up power and started the test. One of the new Marines who had checked into the squadron shortly after me was positioned right under the test set so he could read the results. As soon as they started the test, a flare shot out of the other lower dispenser, hitting the Marine positioned below.

Fortunately, we were next to some Army Black Hawks whose medics heard the commotion and immediately ran over to treat the Marine. For the rest of the deployment, you could see where the rubber from his boots had melted as he ran from the aircraft.

Once we arrived at the shop, we all went inside, where our officer-in-charge (OIC) and master sergeant waited to talk to the entire crew. Once again, they filled us in on what happened and updated us on his condition. The Marine survived, but he had to be medically evacuated to Germany.

Once the OIC and master sergeant left, our gunny stayed back to talk to us.

He began with a question, "How do we perform release and control checks, PFC Lee?"

I started going over the entire evolution, to which he replied, "Get to the actual step one."

I responded with, "Program flare into all the dispensers, and press flare salvo."

Needless to say, I was wrong and I could see my NCOs behind gunny drop their heads. I thought I would be in for it later, but as I found out, they weren't dropping their heads in disbelief; it was shame. Once gunny left, they came up to me and apologized, taking the blame for how I was trained and promising they would do better.

Don't wait to train. Ensure you are putting the same effort into preparing your fellow Marines and Sailors that you would expect for yourself. Sometimes we treat training as just another task or box to check so we can move on with our day. We need to remember we get what we put in, and as supervisors, the performance of our Marines and Sailors impacts lives, the mission and our legacy.

> *"Don't wait to train. Ensure you are putting the same effort into preparing your fellow Marines and Sailors that you would expect for yourself."*

U.S. Marine Corps photo by
Cpl. Dalton J. Payne

U.S. Navy photo by Mass
Communication Specialist 2nd Class
Jan David De Luna Mercado

TEF BOLT COULD HAVE BEEN CATASTROPHIC IN A SNAP

By Senior Chief
Aviation Structural Mechanic
Matthew Fain

U.S. Navy photo by Mass Communication Specialist 3rd Class Christopher Gaines

We were ramping up for another deployment, as we just got home from a composite training unit exercise. This was the second deployment in as many years. We had a pretty good run of good luck with the aircraft, as all of them were staying in an "up" status for the most part. We had one more aircraft to get up and out for a proficiency check flight before we headed out on deployment.

The jet needed a 364 and down to be completed before departing for deployment, but the aircraft had also been cannibalized, so we had a lot of work to do. A 364 day is an inspection on the aircraft. "And down" means all the day type inspections below a 364 day.

This meant working long hours to get all of the work accomplished before we were able to take the customary preparation for overseas leave before deployment – a month straight of 12 hours on, 12 hours off just to keep up with the training cycle for the pilots and the maintenance on the aircraft.

We wanted to take the best aircraft we could on deployment, so most of us didn't mind working the hours.

Once we got all the specials done, the phase inspection completed and the inspection discrepancies worked off, it was time to conduct the out-of-phase turn and rig checks, so we took the aircraft out to the line to complete the turn. Once the aircraft was on the flight line, the plane captain and the turn-qualified person did their walk-around to make sure everything was good before the turn was completed. We turned the aircraft and completed all the hydraulic and rig checks, and the mechanics completed their leak and systems checks with zero issues. The only thing left to do was cotter pin and safety wire all the bolts and nuts for the flight control surfaces.

Once all the hardware safety security was complete, quality assurance did their rig checks, verified hardware security and put their in-process notes on the maintenance action forms (MAFs).

The final process of securing all the flight control hardware was when things went off the tracks. When the aviation structural mechanics were trying to cotter pin the trailing edge flap (TEF) surface bolt; they found out the bolt was defective, so they had to get a new one. An aviation structural mechanic second class told an aviation structural mechanic airman to run back to the workcenter and get another bolt. The airman ran inside and came back to tell him they didn't have another one. At this point, the second class collateral duty inspector (CDI) reinserted the TEF bolt backward just to hold the trailing edge flap off door 68. After securing the TEF, the two mechanics packed up their tools and parts and went inside to order a new bolt. This is where things went really wrong.

For some reason, the CDI ordered the bolt on a different jet than the jet he was working on, so there was nothing keeping someone from signing off the maintenance action. Quality assurance had already put in their in-process, so it would look legitimate if someone signed off, and that is just what happened. The CDI got really busy and flustered signing off a ton of MAFs for the jet at the end of the day. During the haste and frustration, he mistakenly signed off the MAF for the TEF surface with the backward bolt.

The next morning when day shift arrived, they checked the workload and all the MAFs on this aircraft, which was scheduled for a proficiency check flight. All MAFs that would hold the jet down were signed off and everyone thought the aircraft was ready to fly. The skipper was due to fly the proficiency check flight at 10 a.m. and all was looking good as far as anyone on day shift knew. Maintenance control sent the shooters and line division personnel out to complete a daily and turnaround inspection plus a quality assurance walk-around before the flight. All personnel performing inspections came back into maintenance control and said the jet was ready for the flight. The commanding officer walked out to the jet a little after 9 a.m. to do his walk-around and go through his checklist before the flight and the aircraft passed all the checks. The skipper started the aircraft, performed his ground checks and taxied to the end of the runway, after which he uneventfully took off and was gone for about an hour.

While taxiing back to the line, the skipper called in saying the proficiency was complete and the aircraft was up. Once back at the line, the commanding officer congratulated the team out on the line for the great job they had done to get this aircraft, which was in pieces just a month before, back in the air in such a short amount of time. The skipper then came to maintenance control to tell them what a wonderful job they had done. While he was in maintenance control congratulating everyone, the day shift supervisor did a walk-around on the aircraft and noticed the bolt was installed backward and had been sheared off flush with the TEF surface.

The pieces that had snapped off were sitting in the aft wing lip.

Top and Bottom: U.S. Navy photos by Mass Communication Specialist Seaman Sophia Simmons

Somehow, the part of the bolt that was still wedged in the TEF surface hinge stayed in there during the flight. For all personnel involved, it was amazing that these Swiss cheese holes did not align for a catastrophic mishap, since the bolt that was still in there didn't have a nut or a safety aid to hold it in place. Mechanics had to change out the scissors, bolt and the TEF which caused another proficiency flight. The skipper was pretty shaken when he found out what happened because he knew how bad things could have gotten up there.

So what was going on here?

There were many issues that occurred during this near-miss situation.

• First, quality assurance should have never put an in-process on the MAF before the cotter pin was installed.

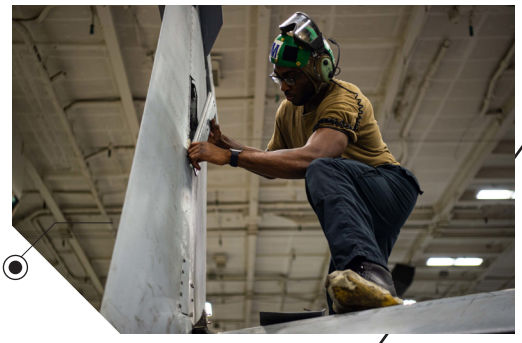
• Additionally, the CDI should have ordered the bolt on a downing MAF that addressed the worn, out-of-limits bolt against the original aircraft. If the bolt wasn't in the supply system or there would be a long lead time to receive it, the mechanics should have checked with other squadrons to see if anyone else had the bolt. If these options didn't work, someone should have notified a maintenance controller so a donor aircraft could be identified and proper paperwork could be initiated to authorize cannibalizing the bolt from a donor aircraft in the planned maintenance interval, heavy maintenance.

I know cannibalizing consumable parts is the last thing anyone wants to do, but when you are getting ready for deployment, certain conditions like this one can drive the need to cannibalize a consumable item.

There are a number of factors that must be considered when cannibalizing a consumable item and that is a whole new article. The root of the problem was improper documentation in the beginning, when the bolt was found out of limits.

This would have put the aircraft in a nonmission capable supply status, directing numerous peoples' attention to specifically check the proper installation of the bolt. It would also help support any trend studies perhaps showing excessive wear of that specific bolt. The shooters and plane captain did a walk around the aircraft before the flight and the pilot also did his walk around, but everyone, representing all the cheese layers, missed the defect.
Any of these things would have stopped this catastrophe-in-the-making from happening. As you can see, when all the holes in the Swiss cheese line up, things can go wrong without anyone catching them. This scenario also shows how rushing, failing to follow proper processes and procedures and succumbing to pressure – even if it's self-induced – and focusing solely on getting an aircraft up can lead to hefty consequences. An aircraft, a pilot and the squadron's leader, the commanding officer, could have been lost right before deployment, which would have greatly changed the momentum and readiness of the squadron. Luckily the bolt shaft did not come out and the hinge stayed intact. This is one of those scenarios where all maintenance technicians, plane captains and flight crews alike can learn something.

The moral of this story is if any one of the players in this scenario would have done their job correctly, the aircraft would have never left the ground.



U.S. Navy photo by
Senior Chief Aviation Electronics Technician Cristie Link

BATTERY LOCKERS

By Senior Chief Aviation Electronics Technician Cristie Link

Battery lockers are necessary at almost every command, whether on shore duty or at sea. For squadron commands, there are certain recommendations you can implement to make your program safer and more compliant. The following information has been compiled in an effort to raise awareness about the some of the more common battery issues Naval Safety Command assessors notice during assessments.

Typically, an aviation electronics technician from Work Center 220 is designated to maintain the program, with a representative from the command's quality assurance work center providing oversight to ensure the program is maintained correctly.

The program manager should perform an initial audit and route it to the maintenance officer 60 days after assuming the program. Subsequent audits should then be performed annually. The program monitor should provide training to the program manager while the initial audit is being performed. The battery lockers should be kept clean, neat in appearance and labeled with the command name, program point of contact and contact information.

As a reminder, squadron personnel bring these items onboard the ship for deployment, so the contact phone number changes.

A detailed inventory of the batteries contained in the locker should be placed in a binder or posted on the inside of the door. The program manager should ensure the point of contact updates and locker inventories happen every time they are required and the information is legible. Lockers should always remain locked when not in use.

Batteries that are at the end of their life span or expired should be disposed of via the designated HAZMAT work center. The batteries may only be stored in a bucket labeled for disposal for a short period.

The program manager should follow up with HAZMAT regularly to ensure these batteries are properly disposed of in a timely matter.

Common personal protective equipment items for use when handling batteries include face shields that cover the chin, chemical splash-proof goggles, approved long chemical gloves and an approved long chemical-resistant apron.

Batteries must be wrapped with masking tape in such a manner that each contact end of the battery is protected to prevent batteries from coming in contact with each other or other metal, which can cause a reaction that can lead to a thermal runaway or worse, a fire. The batteries should be labeled with the date and type of battery for tracking purposes. Do not store Lithium batteries with alkaline batteries in either the battery lockers or the disposal bucket. Conduct Naval Occupational Safety and Health training on battery safety quarterly using reference Naval Air Systems Command (NAVAIR) 17-15-BAD-1.

Common personal protective equipment items for use when handling batteries include face shields that cover the chin, chemical splash-proof goggles, approved long chemical gloves and an approved long chemical-resistant apron. Additionally, the neutralizing agents of sodium bicarbonate or baking soda, distilled water and vinegar should be readily available in case electrolytes are spilled. These items should be included in the battery spill kit near the battery lockers, which again, should be labeled with the command name and updated contact information, and locked with a tamper-resistant seal.

Most issues found during NAVSAFECOM assessments are often minor and can be fixed on the spot. Common issues include unlocked lockers, inaccurate inventories, dead batteries that are unlabeled, incorrectly labeled or not disposed of in a timely manner, and incompatible batteries packed together in storage or awaiting disposal.

Oversight of this and any other program ultimately requires follow-up by work center personnel and division leadership when performing program audits or during routing for follow-up. There is a noticeable difference when individuals take ownership and pride in their program. With the information shared in this article, any reader should be able to identify issues within their unit's battery safety program and bring it to the attention of the program manager or quality assurance representative.

References for this article include the following:
4790.2D, 17-15BAD-1 (A&B), NAVSEA S9310-AQ-SAF-010 (Rev 3), and the Battery Maintenance CSEC

U.S. Marine Corps photo by Cpl. Dylan Chagnon


Lives are at stake if
procedures are not followed!

ADDING FUEL TO THE FIRE
HANGAR SAFETY

By Senior Chief Aviation Machinist`s Mate Andrew S. Van Norman

U.S. Navy photo by Mass Communication Specialist Seaman Sebastian Minshall

"Fire!"

A passerby sees smoke rising from a hangar bay trash can. Just before the hangar smoke and fire detectors come alive with alarm, Airman Joe Navy runs to find a fire extinguisher, spots it and as he climbs over the multiple pieces of support equipment parked in front of the extinguisher, he slips and falls, knocking himself unconscious and adding yet another crisis to the already chaotic scene.

Meanwhile, in a different hangar on a different base, Aviation Structural Mechanic 2nd Class John Doe is troubleshooting a hydraulic fold issue. As he inspects the hydraulic lines, hydraulic fluid sprays into his eyes. With assistance, his coworkers help him off the aircraft to the nearest eyewash station. With frustration, they find it is buried behind boxes of recently received supply parts. As his eyes are stinging from pain, his coworkers are scrambling to unblock this important safety device to bring the Sailor some relief and save his vision. Later, upon further inspection, it is discovered this eyewash station had been inspected after the supply boxes were received. The inspector later admits he noticed the blockage, but got sidetracked and never returned to ensure the boxes had been moved.

Both of these stories are fictional accounts, but definitely not far-fetched. Multiple recent assessments performed by the Naval Safety Command have increasingly found that these important – and required – life- and health-saving devices have been blocked by support equipment, boxes, pallets, barbecue grills and even whiteboards. The majority of the time, the blockages were noticed during walk-throughs from quality assurance, command safety or inspectors themselves, but these violations were either not fixed on the spot or not addressed to the proper personnel. While it may not seem like a big deal to simply move these items out of the way during an emergency, the blockages can impede aid and add more safety concerns and potential mishaps on top of the already-mounting chaos.

As specified in the Navy Safety and Occupational Health Manual, OPNAV M-5100.23, the unit or command must ensure that emergency eyewash facilities are "located where they are easily accessible and can be reached within 10 seconds by those in need." The manual also states fixtures may not be blocked and as specified in Occupational and Safety Health Administration 1910, fire extinguishers shall be "accessible to employees without subjecting the employees to possible injury."

It is OUR job, from the newest airman in the command to the commanding officer, to ensure everyone is working in safe conditions and we address any concerns as soon as possible. Mishaps and accidents are not planned and do not wait until we are ready for them – they happen when we least expect it and they will happen when we let our guard down.

Keep your head on a swivel and look for these violations to avoid "adding fuel to the fire." Find these avoidable occurrences before they find YOU!

HOUSEKEEPING AND FIRE PREVENTION

By Master Chief Aircraft Maintenanceman Pedro Gonzalez

U.S. Navy photo by Senior Chief Aviation Machinist's Mate Andrew S. Van Norman

Over the past few months, as the Naval Safety Command visited carrier-based squadrons on Naval Station Norfolk and Naval Air Station Oceana, Virginia, we observed some squadrons kept a lot of stuff in their hangar bays where space is at a premium. In some locations, we saw poor housekeeping. Some of you may have become numb to the mess and disorganization, creating an environment where this is accepted.

"So what, I'm a little messy; fixing aircraft is what is going to keep me here!"

Consider fire prevention, for instance. In an emergency, will you have enough time to navigate through the mess to access the fire extinguisher? Maybe you will, or perhaps you won't. **What is it going to cost to learn the answer?**

Organizational influence drives the first step of the Swiss cheese model. Everyone in the unit can do something about clutter in the hangar. When underway, we have the executive officer's, "XO's happy hour." This is when there is an operational pause to clean and organize our spaces. The organization also needs to know and enforce the regulations. In the case of the fire extinguishers, OPNAVINST 11320.23 series has the requirements to maintain and inspect this equipment.

At the federal level, the Occupational Safety and Health Administration Fire Protection Standard 1910.157 (c) states, "The employer shall provide portable fire extinguishers and shall mount, locate and identify them so that they are readily accessible to employees without subjecting the employees to possible injury."

At the supervisory level, as the maintenance shift progresses, supervisors must keep track of how big the mess is getting. As the shift's end approaches, supervisors should ensure things are not left in disarray, especially if it interferes with safety-related systems such as alarms and fire suppression.

Quality assurance and safety personnel: You also have to make orderliness part of your day. If you follow a process with checks and balances, you will create an environment where physical and maintenance-related factors will not affect the practices, conditions and actions of your workforce. High-performing organizations follow these steps well, and their people take pride in their spaces and results. You, too, should take pride in what you do, and most importantly, do not accept a messy environment. Take charge of what you own, and make it better. If you do these things, your peers will soon follow your lead and eventually, the mess will go away.

> *"Take charge of what you own, and make it better."*

VP-45'S SAFETY CREW INITIATIVE MAKES WAVES ON DEPLOYMENT

By Lt. Zach Michel

When Rear Adm. John Meier reported as the commander of Naval Air Force Atlantic, he identified aviation safety as one of his top priorities, in particular, the reduction of aviation ground mishaps.

The safety department at Patrol and Reconnaissance Squadron 45 (VP-45) approached this challenge head-on and worked to create a stronger bond between the safety and the quality assurance departments, which led to the creation of the "Safety Crew" initiative in June 2021.

The Safety Crew is comprised of the maintenance turn pilot and the duty naval flight officer. Together, this crew roves the squadron spaces and flight line. While roving, they look for anything out of place that could lead to a potential mishap, such as a lack of, or failure to wear, proper protective equipment, a failure to secure ground service equipment (GSE) properly and identification of any other possible areas of concern.

These roves take place at varying times throughout the day and over the course of VP-45's 7th Fleet deployment, resulted in the discovery of more than 60 minor discrepancies, which were promptly addressed and corrected. While these discrepancies would be typically caught and addressed through VP-45's normal safety protocols, the program has allowed the VP-45 "Pelicans" to be forward-leaning and catch them sooner because of the proactive nature of the safety roving watchstanders.

Some examples include the discovery of pooling water caused by heavy rainstorms that resulted in a potential slip hazard; verifying GSE equipment is chocked after multiple aircraft moves and making sure eyewash and fire extinguishers are not tampered with or obstructed. The Safety Crew communicates all discrepancies to the quality assurance officer and maintenance control for quick and efficient resolution.

Since its creation, the Safety Crew has improved the command safety culture and bridged the gap between the topside and maintenance crews. VP-45 will be returning to Jacksonville, Florida, in the coming months and will be bringing the Safety Crew initiative home with them. Furthermore, they will encourage fellow squadrons to adopt similar initiatives, thereby enhancing the safety culture of the squadron's wing, Patrol and Reconnaissance Wing Eleven, as a whole.

U.S. Navy photos by Mass Communication Specialist Seaman Thomas A. Higgins

VP-45 SAFETY DEPARTMENT WORKING HAND-IN-HAND WITH SQUADRON DUTY OFFICE

On Aug. 31, 2021, an aviation mishap drill was conducted for Patrol Squadron 45 to assess the squadron duty officer's (SDO) ability to execute a mishap scenario. The drill commenced at 10 a.m. when Lt. j.g. Nicholas Padgett was notified by the SDO simulating a tower call that an aircraft had crashed at the end of the runway on takeoff.

After the conversation with the aviation safety officer (ASO), the SDO determined this was an aviation mishap. The SDO tasked the assistant squadron duty officer (ASDO) to help collect more information and coordinate an emergency response. The SDO then referenced the squadron pre-mishap plan. Executing the response plan, the SDO decided to classify it as a Class A mishap because there was a potential for damages to exceed $2.5 million and a potential for severe injuries and fatalities.

Within five minutes, the SDO simulated notifying the skipper and aviation mishap board members. Additionally, the SDO simulated making an OPREP-3 Navy blue voice report. The SDO and ASDO worked as a team to execute the checklist. Although there was a discussion about trying to get more personnel to help with the checklist to accomplish the goal faster, the duty team was able to effectively manage the situation. Bravo Zulu to the duty office and the safety department!

AVIATION SAFETY DIRECTORATE MAINTENANCE OFFICER

U.S. Navy photo by Catalina Magee

By Cmdr. Gary M. Shelley

Greetings from the Naval Safety Command!

I hope this issue of MECH magazine finds everyone in the fleet doing well and being safe.

I am currently the aviation safety programs maintenance officer (MO) at the Naval Safety Command (NAVSAFECOM). Before my assignment here, I was the commanding officer at the Center for Naval Aviation Technical Training Unit, Naval Air Station Oceana, Virginia Beach, Virginia, and before that I spent a good part of my career in F-14s, F-18s and F-35s as well as a couple of "I" level tours ashore and afloat and two staff tours including Commander, Naval Air Force Atlantic and Commander, Strike Fighter Wing Atlantic.

There are a lot of benefits to being the MO at NAVSAFECOM but arguably, the best one is being a team lead when we travel for safety assessments.

I get an opportunity to travel to many different commands flying different Type/Model/Series (T/M/S) aircraft and interact and provide training and mentorship to officers and enlisted members of all pay grades.

When we travel, my team gathers great insight into current safety and programmatic trends and best practices throughout the fleet, which in turn we can share in various ways.

Some of the ways we share our findings are of course verbal on-the-spot training and discussion, but we also maintain an extensive maintenance database at NAVSAFECOM where we catalog and codify these discoveries. It is there where my team of maintenance professionals really excel. They extensively analyze data and come up with topics for further review and analysis, which can later be shared as best practices and in-depth analytic studies via the NAVSAFECOM CAC-enabled website to effect real change in the fleet.

A relatively new concept at the NAVSAFECOM is to deep dive into analytics in the maintenance arena so far and is showing great promise in many areas. As I make my way to various commands throughout the fleet, there remain a few common issues that continue to be brought up regardless of base or T/M/S. Lack of communication, proper training of our people and leadership at the right level for the task have been and continue to be the top trends I am exposed to on just about every safety assessment I am part of.

So the question is, "How do we get our hands around these issues?"

As a starting point, communication is key. When we go to a good squadron that operates efficiently, there is always great communication between operations and maintenance. This is the starting point that drives the command's tempo.

Poorly managed commands usually have poor communication up and down the chain of command, and at the end of the day, our young Sailors and Marines pay the price. A command that communicates poorly will almost always have trouble aligning priorities, fixing aircraft and meeting the mission. Good communication is a huge key to the success of a command. Along with active and meaningful communication, setting aside training time for our technicians is a must! It is not arguable that training our young folks and making them future leaders ensures we are positioned for success in the future. It is imperative to establish the basic building blocks of training to develop our young force. They need it to grow and they desire to have time to do it. If a command does not carve out time for meaningful training, then a poor message that training is not important is sent and that can have dreadful effects not only in the message sent, but in the fact training wasn't conducted. Take the time to have meaningful and effective training for our people. The payback in dividends is enormous.

Lastly and very importantly, leadership at the right level for the task is a primary concern of mine, and one that my team and I see time and time again. In nearly all cases when there is a ground mishap involving maintenance, it's because the correct supervision was not present. Whether changing an avionics box, jacking or moving an aircraft or performing a low-power turn, the correct leadership at the right level must be present to ensure there are no issues. Yes, there is a difference between washing an aircraft and moving an aircraft out of the hangar. Washing an aircraft is a simpler task in most cases than maneuvering an aircraft out of an already-crowded hangar bay. These two tasks require different levels of supervision, and it's up to us as maintenance leaders to see to it that the correct person for the job is present to prevent mishaps.

The Aviation Directorate is always standing by to assist with research and answer questions. Please do not hesitate to call or email to ask for any assistance we can give. See you around the fleet!

EJECTION SEQUENCE INITIATED ... PARTIALLY

By Senior Chief Aviation Structural Mechanic Renzo Nunez

U.S. Navy photo by Mass Communication Specialist 2nd Class Brian Morales

U.S. Navy photo by Mass Communication Specialist 2rd Class Ashley Estrella

Yes, you read the title correctly - a partial initiation of an ejection sequence on a SJU-17 Naval Aircrew Common Ejection Seat (NACES). Let me explain. Shared knowledge and experiences enable us to enrich our professional expertise. It is impossible to become a seen it all, done it all-type mechanic. These shared stories make us better prepared to meet future challenges.

Since fiscal 2011, there have been six documented occurrences of partially-pulled NACES ejection control handles. In all incidents, the handles were inexplicably pulled in-flight from the seat bucket assembly detent housing.

Fortunately, full upward motion of ejection control handles was not achieved, which prevented the seat initiators from being removed and subsequently firing the seat initiator cartridge-actuated device to commence the ejection sequence.

Imagine the possible catastrophic consequences of an inadvertent ejection. The operating environment was not a causal factor. For clarity, it is important to note two incidents occurred ashore and the other four during carrier-based operations. It is no secret piloting a high-performance aircraft is task-intensive and requires intense focus. For this reason, important things like a dislodged ejection control handle may go unnoticed by pilots. In fact, only one of these six occurrences was noticed by the pilot. The other five were not noticed until the aircraft was safe on deck and the aircrew attempted to "SAFE" the ejection seat via the SAFE/ARM handle. The inability to "SAFE" the seat was the first indication that something had gone wrong.

For these ejection seats, when the "SAFE/ARM" handle is rotated to the "SAFE" position, a series of bell cranks and linkages position the rod portion of bell crank link assembly (MBEU141297) through the seat initiators crossbar (MBEU141293), creating a mechanical lock preventing upward movement of the ejection control handle. This mechanical lock is only attained when the ejection control handle is fully seated in its housing and aligned with all associated holes. The same principles hold true to the ejection control handle ground safety pin. In all these instances, pilots and technicians attempted to install the ground safety pin with no success because the holes were not aligned.

In all documented cases, the SAFE/ARM handle was set to the "SAFE" position only after the ejection control handle was reseated into the housing. To this date, how the ejection control handles became dislodged in-flight remains a mystery. Per NAVAIR Manual 13-1-36, the load required to extract the ejection control handle from the housing is 20-45 pounds. Unfortunately, only three of the six reported cases received a pull test per maintenance publications. Two pull test results were 28 pounds and 32 pounds respectively, while a third was reported as within limits at the lower-range spectrum. Although no reported numbers were provided, it is reasonable to assume they were within limits, as the ejection seats were placed back in service the same day.

These rare occurrences were so close to a potential loss of aircraft it scares me. One report states, "Even more concerning is the AME's [Aviation Structural Mechanic (Equipment)] assessment that the seat was then so close to firing that the handle could have initiated ejection with a pull from one finger."

This is danger close! According to the F/A-18E/F and EA-18G Naval Air Training and Operating Procedures Standardizations Flight Manual, it takes 20-45 pounds of pull to remove the handle from its housing and a continued pull of 30-60 pounds to pull both sears from the dual initiators. At some point during the flight, unintentional pressure exceeding 20 pounds was applied to the ejection control handle, forcing it out of the housing. The initial applied pressure was not sufficient to dislodge the sears from initiator firing pins assemblies. However, a second unintentional applied pressure could have dislodged the sears and initiated the ejection sequence.

U.S. Navy photo by Mass Communication Specialist 3rd Class Dartanon Delagarza

Just like that, one second you are in the aircraft, and the next you are strapped to an initiated cartridge-actuated and rocket-propelled ejection seat producing 4,500 pounds of thrust for one-fourth of a second.

In all these scenarios, experienced, trained AMEs rose to the challenge to set the SAFE/ARM handle to the "SAFE" position. These unexpected challenges reinforce the necessity to train our Sailors to the systems they are assigned to maintain. We strive to become subject matter experts in every sense of the term. Knowing an individual component description and operation is equally as important as knowing system description and operation.

System knowledge is what makes technicians effective. When all else fails and ejection is imminent, those who pilot our aircraft rely on AMEs to bring them home safely. The aforementioned occurrences were not ejections but still placed the pilot in a potentially dangerous situation with an ejection seat that failed to be "SAFE." Continue to impart knowledge and experience onto our newest seat mechanics.

> *System knowledge is what makes technicians effective. When all else fails and ejection is imminent, those who pilot our aircraft rely on Aviation Structural Mechanics to bring them home safely.*

U.S. Navy photo by
Mass Communications 2nd Class
Ryan Breeden

YOU HEARD ME, BUT DID YOU REALLY *HEAR* ME?

By Master Gunnery Sgt. Victor M. Sandoval Jr.

U.. Navy photo by
Mass Communication Specialist 2nd Class Cameron Edy

Have you ever received a pass down or given instruction but didn't really get the message?

I checked into the Naval Safety Command in September 2021. During this brief time, I have been fortunate to participate in many safety assessments. During these assessments, one common trend always rears its ugly head. You guessed it: communication! Communication is crucial to our everyday lives. We need these clear, open lines of communication to accomplish any task safely and efficiently.

I have been in the Marine Corps for over 24 years and did not receive any "official" training on effective communication until 2020. I attended many classes over the course of my career, whether it be military schools of instruction or professional military education where I had to stand up in front of the class and give a speech. But that was just that – it was just a speech; I did not know whether my message was getting across or being received fully. Some may assume my time in the Marine Corps and the billets in which I served prepared me to communicate effectively, but I would say they are wrong. This is just an aspect of sending and receiving information.

Just make it stop; end all the racket!

Life has a way of intruding and influencing how we receive and process data. We also have competing factors that affect the way we receive information.

With improvements to the information highway, computers, phones and social media, we are connected 24 hours a day, seven days a week. These detractors are present in our lives every second of the day and can be physical and nonphysical.

Family commitments and obligations, military duties, promotions, finances, deployments and room inspections are just some of the things that create "white noise."

This racket desensitizes us to what we receive and how we prioritize the items received. In short, I will break this down to the simplest form – two parts: the sender and receiver.

As the person sending or passing on the information, you must consider various factors when you deliver the message. Prepare before you speak so everything is clear, concise and to the point.

Keep the following in mind before you speak:

1. Who is your audience? Knowing your audience and their comprehension and skill level will determine how you organize your delivery.

2. How are you trying to send it? One-on-one communication, classroom setting, in person, online or via e-mail.

3. What message are you trying to send? Do you have firsthand knowledge of the topic you're presenting? Will the audience believe you?

4. Trim the fat. Keep it short and only use what is needed to convey the message. You want to keep your message brief because people are busy and they already have all the white noise competing for their time and attention.

5. As you present a brief, does it seem like you are telling them or selling them on the idea? Are you vested in this message? Are you just relaying the information or do you have a purpose in conveying the information? Is the message prohibitive or persuasive?

6. Follow up and follow through. There should be a way to verify the receiver understood the message completely. Determine if this will be an open dialogue with questions and answers or just a direct flow. Either way, there needs to be a way to follow up after sending your message to ensure it is received and understood.

7. Keep lines of communication open to allow the free flow, back and forth of information.

When receiving a brief or message, it is crucial to fully understand what is being conveyed and asked of you. Here are some ways to facilitate the flow of information.

1. Clear the white noise. You need to understand what is on your plate and what you can handle. Identifying detractors will help you clear the white noise and allow you to receive the message entirely.

2. Be open to the message. Keeping an open mind allows you to identify alternative ways of executing what is asked.

3. If you are unsure of the message, ask questions until you fully understand.

4. Follow up and follow through. Confirm whether there will be a delay or if the task will be completed ahead of schedule and update as needed.

5. Keep lines of communication open to allow information to flow to and from all parties.

There are many ways to assist in setting up a platform to aid with your meeting, brief or pass down. I have only skimmed the wave tops on effective communication, but knowing and applying just some of these tips helps lessen potential frustration between the sender and receiver and ensures a clear message is received.

U.S. Navy photo by
Mass Communication Specialist
2nd Class Cameron Edy

WHAT IS YOUR WORKPLACE CULTURE?

By Gunnery Sgt. Krystal Conklin

U.S. Navy photo by Mass Communication Specialist 2nd Class Jamica Ballard

The environment we create as a unit has a more significant impact than most of us might think. When Sailors and Marines dread the daily responsibility of simply coming to work, this has a potential to create an unsafe environment - not only for the unit members, but also the aircraft, ship, gear and anything else attached to the unit.

Building a positive workplace culture takes effort, but it will benefit not only the members, but also the unit as a whole. In addition to building a foundation based on our core values of honor, courage and commitment, units should also foster a workplace culture that supports and engages each member of the unit. Some characteristics of workplace culture that create a safe environment include strong leadership, innovation, empowerment, collaboration and adaptability.

Strong leaders do not simply know their own job; they have a vested interest in achieving an inclusive and empathetic understanding of each member working for them.

Allowing members to innovate can mean putting conventional ideas aside and providing a place for brainstorming and communicating new and creative ideas.

Empowering one another means each member has value and knows they are an essential part of the team – regardless of their rank or position.

U.S. Navy photo by
Mass Communication Specialist
3rd Class Jasmine Ikusebiala

Collaborating with others helps create an environment of teamwork, even outside the unit; however, both units must be willing to work together. If one unit is reluctant to collaborate, the opportunity to grow and learn something new is denied. Collaborating successfully requires setting pride and ego aside.

Adaptability includes keeping up with the constant changes occurring in and around the unit and being open to discussing how your unit can adjust to them.

Workplace culture can either strengthen your unit or undermine its objectives. In the military, we do not get to choose who comes to our work centers; however, we can set a workplace culture that encourages each Sailor and Marine to cultivate and grow their talents. This positive workplace culture is the platform for retention within your work center. A positive workplace culture creates an environment where performance increases due to the satisfaction and daily enjoyment at work. The more positive the workplace culture, the more retention within your unit.

Creating a workplace culture that encompasses all these attributes can be challenging. An excellent way to begin is to discuss what the culture looks like to everyone in the unit. A survey that takes the input of the entire workcenter can be helpful in larger sections. Having conversations about how the work center – and individuals – can improve will start to build communication and create a more positive workplace culture. Hearing feedback that may require changes or improvement may not be easy, but this is a crucial step in making sure your workplace is the type of environment that fosters training, leading and inspiring Marines and Sailors under your charge.

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U.S. Marine Corps photo by Sgt. Jesus Sepulveda Torres

U.S. Navy photo by Mass Communication Specialist 3rd Class Jarrod A. Schad

WEAPONS ELEVATOR SAFETY: A LESSON LEARNED

By Cmdr. Kyle Caldwell

U.S. Navy photo by Mass Communication Specialist Seaman Hannah Kantner

On Jan. 7 around 6 p.m., four days after USS Abraham Lincoln departed for its deployment, the weapons department had a Class D mishap. The mishap occurred while operating Lower Stage Elevator No. 5, servicing Weapons Magazine 138 Trunk, seventh to main deck, while transferring four empty LAU-61 C/A rocket launchers to the hangar bay for testing. During the operation, one rocket launcher and associated weapons munition handling unit (MHU) skid on the elevator platform snagged part of the elevator shaft, causing the rocket launcher and MHU skid to come off the platform and fall into the elevator pit. Upon further investigation of the elevator trunk, the elevator team discovered the MHU skid had made contact with the forward part of the trunk safety barriers while the elevator was traveling up. This caused the load to shift, thus pulling the MHU skid to the platform's side as it traveled past the fourth deck hatch, ultimately falling off the platform and landing in the seventh deck elevator pit.

Unaware this had taken place, the team re-dispatched the weapons elevator back to the seventh deck, causing the platform to contact the top of the MHU skid and empty rocket launcher. This caused the elevator to go into a slack rope condition due to obstruction. The elevator incurred minor damage overall, a broken light fixture and slight bending of the up and down over travel veins on the platform at the fourth deck level.

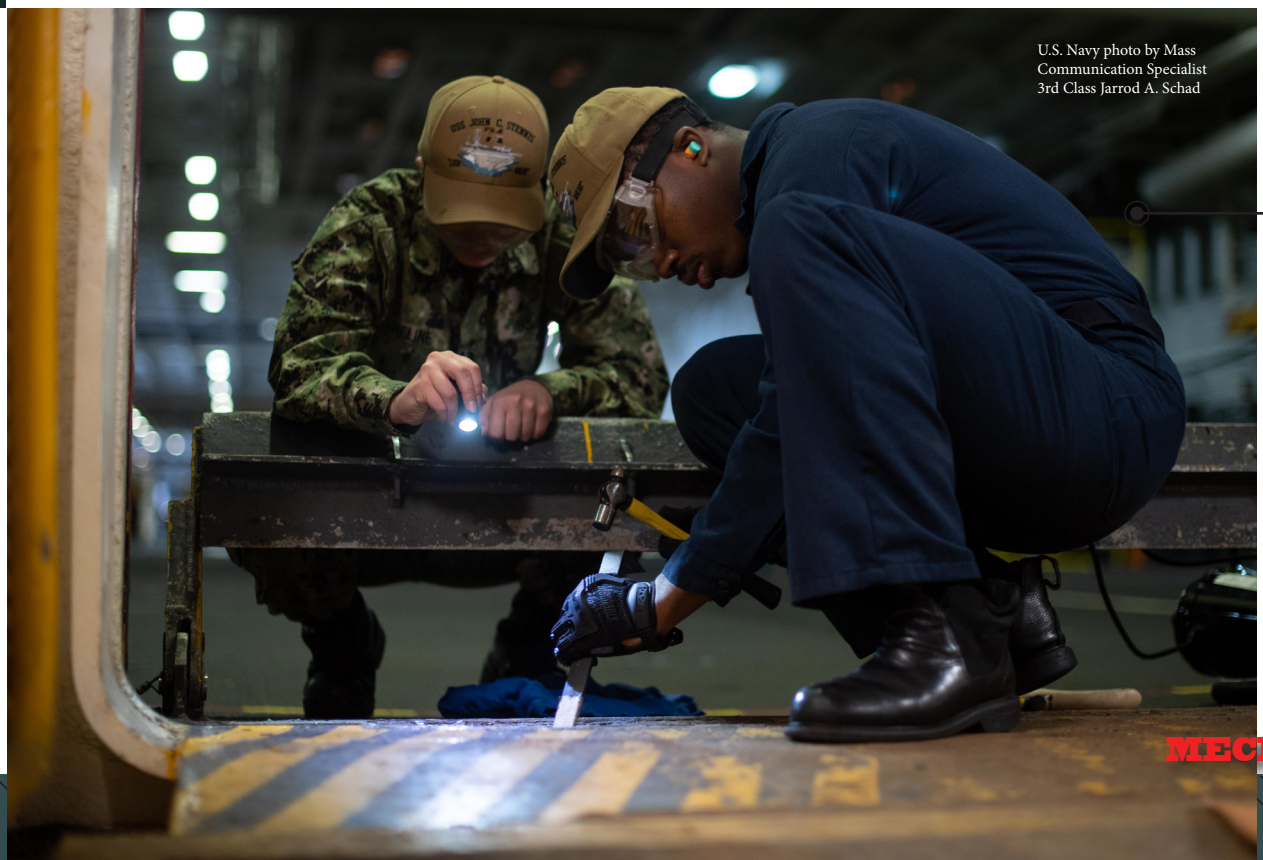
Weapons department staff were able to replace the light fixture and bend the travel veins back into position; however, the travel veins will require replacement during the next maintenance availability. None of the damage resulted in downing criteria per directives and technical manuals. The weapons elevator underwent a full systems test for all safety features and parameters and was put back into readiness condition.

This mishap consisted of patent human factors and possibly latent contributing factors during the weapons elevator operation. When operating weapons elevators, team supervisors must ensure weapons and associated equipment are within the safety boundaries of the elevator platform. It is obvious that either the rocket launchers were loaded incorrectly, or at some point during the weapons elevator operation, the rocket launcher moved out of its initial position. The sea states were heavy during the weapons elevator operation; therefore, the movement of the ship could have been a contributing factor if the skid brakes were not functioning properly. However, this is unknown due to the condition of the MHU skid once it was removed from the weapons elevator pit.

This incident could have been avoided by assessing the externalities, or ship movement, and controlling the perceived urgency of the operation. Ordnance teams underestimated the probability of equipment moving on the weapons elevator during the evolution. Moreover, loading four launchers instead of three on the elevator provided no added benefit, since two elevator runs were still required as additional rocket launchers still needed to be transported. Although maximizing weapons elevator load capability is sometimes required and necessary, adding the extra rocket launcher, although within the safety boundaries marks, increased the risk by decreasing the clearance between the rocket launchers on the elevator platform and elevator shaft.

Further damage could have been avoided with proper communication between elevator deck teams in 7-138-0-M, ordnance control and second deck elevator. Four rocket launchers were loaded on lower stage No. 5 elevator for up traffic to the second deck; however, when lower stage No. 5 reached the aft mess decks, only three rocket launchers were on the elevator. After the rocket launcher and MHU skid fell off the weapons elevator platform, it was not identified by either the magazine seventh deck team or the second deck team. No assumptions should have been made by the second deck elevator team that the seventh deck elevator team only loaded three rocket launchers on the platform. When dealing with ordnance and MHU equipment, one should never assume. If the rocket launcher was noted when it fell, it is likely most of the damage could have been avoided.

This was a huge lesson learned for the ship's weapons department. From this incident, the standard operating procedures (SOP) were revised to remove all ambiguity. The revised SOP added definitive responsibilities for the elevator operator, elevator supervisor and safety observer, to include all procedural compliance for weapons elevator operations. Moreover, the SOP included three additional enclosures consisting of checklists of procedural compliance during any weapons elevator operation. Commander, Naval Air Forces Pacific Weapons Team was informed of all SOP changes and used the ship's mishap to advise all nuclear-power aircraft carriers to revisit their SOP and compliances to ensure the safety of weapons elevator operations.



U.S. Navy photo by Mass Communication Specialist 3rd Class Jarrod A. Schad

SAILORS AND MARINES PREVENTING MISHAPS

BRAVO ZULU

Lt. j.g.Taylor Porges

While flying solo as a wingman returning to base from a day formation training flight, Lt. j.g. Taylor Porges's T-45C struck a turkey vulture at the initial for Runway 13L at Naval Air Station Kingsville, Texas. Upon hearing the thump of the bird's impact, Porges smartly cut away from the formation`s lead aircraft and reverted to training by assuming the bird went down the engine intake. Porges informed his lead that he had hit a bird, declared an emergency with the tower, pitched out of the formation, and set up for a precautionary approach. Porges then flew a flawless precautionary approach to an uneventful recovery. Post-flight inspection revealed an impact on and significant damage to the aircraft's forward avionics bay. Bravo Zulu to Lt. j.g. Taylor Porges for executing textbook procedures, demonstrating expert decision-making, and displaying superb airmanship that resulted in the safe recovery of his aircraft!

Aviation Electrician's Mate 2nd Class Rafael Lunalugo

Aviation Electrician's Mate 2nd Class Genna Shaneyfelt

While working on aircraft 168762, Aviation Electrician's Mate 2nd Class Lunalugo and Aviation Electrician's Mate 2nd Class Shaneyfelt noticed a spool of safety wire sitting inside the main landing gear compartment of the aircraft. His and her recognition of the foreign object debris hazard prevented a potential mishap and unknown aircraft damage, had it gone undiscovered.

Bravo Zulu is a naval signal originally sent by semaphore flags and in English, simply means "Well done."

Aviation Boatswain's Mate Airman Sarah Williams

During her outside walk-around, Williams noticed a potentially dangerous situation. Two aircraft were conducting maintenance turns directly across from each other in front of taxiway Echo. Her aircraft and another VQ-1 training flight were ready to start engines and taxi for takeoff. The location of the aircrafts conducting turns made it difficult for both planes to safely exit the ramp area. Williams brought the situation to the attention of the aircrew on both training flights. She voiced her concerns about the taxi route with two aircraft conducting maintenance turns and safety for their respective aircraft handlers. Williams' keen attention to detail and above-average situational awareness allowed the aircrew to find a safer taxi route solution, which prevented a dangerous situation with potential to damage multiple aircraft and injure personnel.

Aviation Structural Mechanic Airman Robert Foreman

Foreman noticed a missing rod in the port flap well drop-down panel. Upon further inspection, he discovered the rod had shifted out of place not allowing the panel to be fully hinged. Foreman found another missing rod in the flap well drop-down panel on a different aircraft. He typically finds a rod missing on all of his aircraft preflights. Foreman's keen attention to detail and above-average situational awareness prevented a potential foreign object debris hazard and things falling off aircraft. Additionally, he raised awareness of this high-failure item for all P-3 series aircraft. His outstanding performance and devotion has justly won the admiration and respect of his peers and is in keeping with the highest traditions and standards of the U.S. naval service.

SUBMISSION GUIDELINES

Please use the following guidelines when submitting articles.

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Length

Short story: 800-1,500 words
Feature story: 2,500-3,000 words
News briefs: 500 words.

Fact-checking

We ask that writers research reference materials, such as manuals and books used in their articles. Please verify your sources before attributing quotes to them. If you need us to perform additional fact-checking, please make a note of it when submitting your article.

Photos

All photos must be high resolution (300 dpi) in JPEG or JPG format.

When you email your article, use the author's name as the file name.
Example: CatalinaMagee.doc.

We look forward to receiving your great articles!