

NAVAL SAFETY COMMAND SAFETY AWARENESS DISPATCH



Fatigue-Related Mishaps

Fatigue has a sneaky way of creeping in and wrecking our day. We tell ourselves and even loudly brag about not needing much sleep, often wearing five hours (or less!) of sleep like a badge of honor. But here's a cold hard truth: Fatigue poses a significant threat to readiness and safety across the Navy and Marine Corps. <u>DoDI 1010.10</u>, Health Promotion and Disease <u>Prevention</u>, requires DoD organizations to encourage the use of behavioral strategies to improve sleep quantity and quality, prioritize time for optimal sleep hygiene and to practice fatigue prevention measures as mission requirements permit.

It's imperative we proactively manage fatigue and recognize the impact it can have on our operations. As you review the following examples, think about your own personal readiness from a fatigue perspective. Do you get adequate sleep? What strategies are in place to ensure your team can manage fatigue in the workplace?



• The Pallet Rested ... Oops, Wrong Spot.

Three Marines conducted equipment maintenance and pre-op checks from 0800 to 1300. They were told to return later that evening to offload pallets, as the aircraft they'd be unloading was delayed. While they returned around 1900, the offload didn't start until 2230. Once that was complete, the Marines then continued working, transferring the pallets to the supply compound. Around 0200, Marine 1 inspected a pallet to ensure all hooks and straps were removed from the 7-ton (heavy duty cargo vehicle) and signaled to Marine 2, who was operating a forklift, to begin the offload. Marine 1 believed the pallet was clear of all restraints, yet a single strap remained hooked to the 7-ton. As Marine 2 backed the forklift and pallet away from the bed of the 7-ton, the strap tightened, causing the pallet to tip over and impact the ground, severely damaging the content and resulting in \$100K+ worth of damage. The report attributed the mishap to fatigue and rushing and emphasized the need for proper rest when working outside normal duty hours. — *All three Marines were fatigued by the time the mishap occurred. There was a six-hour break during the day when they were not needed at work, but the report doesn't cover how the Marines used that time. If you know you're in for a long day, be proactive and get rest when you can.*

Crushed It! But Not in a Good Way.

Following a long day filled with an earlier flight, pre- and post-flight duties, along with seven + hours of non-flying tasks, a naval aviator headed to their stateroom sometime after 0130 to get some much-needed rest. After passing through the hangar bay, the pilot went to open a hatch with one hand, held the "dog" (handle) with the other and proceeded through the hatch, then went to close it. With one hand on the handle and the other on the hatch to keep it from slamming, their finger was crushed between the hatch and frame. Quickly freeing the crushed finger, the pilot headed to medical where they were treated for a fractured finger and fingernail removal. The simple task of opening and closing the hatch now added an unexpected 21 days of light limited duty to their schedule. According to the mishap report, the cumulative fatigue from a high optempo deployment diminished the pilot's situational awareness, which can complicate routine tasks. Limited visibility during darkened ship hours further contributed to the issue, causing the pilot to misjudge their hand placement on the hatch. — Fatigue management is about staying ahead of potential risks that unmitigated fatigue adds to operations. Even routine task completion can result in severe injury or loss if excessive fatigue is not recognized and addressed appropriately.

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Fatigue on Final.

A Navy pilot at the end of a long flight was on approach at 5,000 feet and wearing his oxygen mask on normal flow when he began experiencing physiological symptoms. He dropped his mask to breathe in the normal cabin air, saw no improvement in symptoms and re-applied the mask while activating emergency oxygen, quickly resolving the issue. The crew felt comfortable continuing the approach, while increasing back-and-forth communications to ensure a safe landing, which was completed without issue. After the incident, all the applicable aircraft systems and aircrew flight gear were inspected with no defects found. It was determined that the pilot had been at an elevated stress level, recently returning from an intense three-week operational exercise and was experiencing excessive fatigue leading up to the long flight. —While this incident ended without a mishap, it underscores the importance of recognizing how operational tempo can increase fatigue and compromise safety. What feels manageable at first can quickly become disorienting and dangerous. Ensure self-evaluation for fatigue is an honest assessment, as it affects the safety of others as well.

• Hand-to-"Arm" Combat.

A Sailor assigned to sentry duty was responsible for manually raising and lowering a traffic control arm to allow access to the airfield. While closing the control arm during a period of high winds, the Sailor misjudged the amount of control needed to lower it. As the control arm came down faster than normal, it slammed closed onto the Sailor's hand, pinching it in the mechanism, resulting in a severe laceration to his pinkie finger. He was transported to the emergency room, received stitches and later underwent surgery. The Sailor was placed on medical leave, followed by six months of light limited duty. He had been a member of the security team for more than a year and was fully trained in operating the control arm. —While the windy environmental conditions accelerated the control arm, the report noted the Sailor was fatigued and misjudged the changing environment. Fatigue reduces reaction time and mental clarity, hampering your ability to perform even the tasks with which you are familiar.

Key Takeaways

Fatigue clouds judgment, slows reaction time and increases the likelihood of mistakes. Good sleep hygiene coupled with effective risk management enable mission success and protection of a team's most valuable asset - its people.

- **1. Behavioral strategies for better sleep.** Sleep quantity and quality are essential for personnel to remain alert, make sound decisions and incorporate risk management principles in day-to-day activities.
- **2. Commit to quality sleep.** Aim for at least seven hours of uninterrupted sleep (as mission requirements permit). Incorporate sleep recovery when mission needs cause reduced or fragmented sleep. If feeling fatigued while performing a critical task, immediately tell your supervisor.
- **3. Shift changes disrupt circadian rhythm.** Supervisors manage personnel shift changes properly to mitigate increased risk. Provide strategies to minimize effects of the change.
- **4. Optimize sleep environment.** Temperature, light and noise—if you can manage it—are key factors in getting quality sleep. Practice deep breathing and relaxation techniques to help you drift off.

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