

Importance of Flight Line & Flight Deck Safety



By Senior Chief Naval Aircrewman (Helicopter) Aaron Hutchinson
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Flight line and flight deck operations within the Navy and Marine Corps are intricate and demanding, requiring a keen focus on safety to ensure personnel well-being and successful mission execution. Flight line and flight deck safety extends to aircrew and maintenance personnel. Adhering to protocols during flight and maintenance operations is essential. Regular training and continuous improvement initiatives help reinforce a safety culture encompassing all aspects of flight operations. This article highlights the critical importance of safety on the flight line and flight deck, emphasizing essential practices, protocols and measures that contribute to a safety and awareness culture.

A safety brief is a helpful tool to identify hazards and mitigate risk. Safety briefs are used in nearly every military operation and are valued tools that act as the foundation of effective operations. Conducting thorough briefings before any flight line or flight deck activity is essential and helps ensure everyone involved understands the operational scope, potential risks and specific protocols. Through clear communication and detailed information sharing, safety briefs create a mutual understanding of responsibilities and expectations. When a task is complete, concluding with a debrief helps gather lessons learned and allows personnel to provide useful feedback for future operations.

Using personal protective equipment (PPE) and conducting pre-operation equipment checks are fundamental practices that help ensure Sailors and Marines are prepared on the flight line and flight deck. Wearing proper PPE is non-negotiable. From flight deck clothing to safety vests and helmets, the correct gear provides vital protection. Additionally, regular equipment checks must become second nature to ensure tools function as intended and are ready for use when needed. Adhering to PPE and equipment protocols are simple and effective ways to prevent unnecessary injuries. Too often, unserviceable gear is used, which contributes to increased risk to operations and can injure our aircrew and maintenance professionals.

Situational awareness is another critical pillar of safety. Operating on aviation and air-capable ships introduces additional challenges due to limited space and the complex nature of Naval Aviation. Maintaining situational awareness is vital. These dynamic environments, filled with aircraft, equipment and personnel, demand a vigilant “head on a swivel” approach. Whether embarked on a vessel or stationed ashore, Sailors and Marines must know and remain aware of their surroundings, anticipate potential hazards and communicate effectively to minimize risks. The unique dangers of rotor downwash, jet blast, exhaust and propeller arches require heightened awareness. Fatigue, lack of training and complacency are among the top factors contributing to flight deck injuries. Dedicated flight deck observers play a critical role in identifying these factors and help ensure safe operations by providing real-time feedback to the personnel involved.



An E-2C Hawkeye from the “Sun Kings” of Carrier Airborne Early Warning Squadron (VAW) 116 taxis on the flight deck of aircraft carrier USS Nimitz (CVN 68) in February 2023. (U.S. Navy photo by Mass Communication Specialist 3rd Class Joseph Calabrese)

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Sailors guide an F/A-18F Super Hornet, assigned to the "Bounty Hunters" of Strike Fighter Squadron (VFA) 2, into a catapult shuttle on the flight deck of Nimitz-class aircraft carrier USS Carl Vinson (CVN 70), Aug. 25, 2023. (U.S. Navy photo by Mass Communication Specialist 3rd Class Larissa T. Dougherty)

At the most basic level, using standard operating procedures (SOP) creates a structure for safe operations on the flight line and flight deck. SOPs are the backbone of effective flight line and flight deck operations, provide guidance to work from and are developed from lessons learned. Additionally, SOPs can dictate how aircraft are parked, refueled and maneuvered. Whether establishing the safety circle around rotor blades or managing jet blast areas, SOPs provide a consistent framework for maintaining order and preventing mishaps.

In summary, the flight line and flight deck are extremely dangerous operating environments that are constantly changing and require heightened awareness by those exposed to their hazards. Flight line and flight deck safety within the Navy and Marine Corps demands unwavering dedication and a strong commitment to proactive measures. By prioritizing situational awareness, adhering to safety briefings and SOPs, using proper PPE and considering the unique challenges of aviation ships and carriers, Sailors and Marines can mitigate risks and ensure their operations' success. Embracing these principles establishes a culture of safety that transcends individual tasks and becomes an integral part of every mission's success. Remember, safety is not an option; it is a duty, a responsibility and a shared commitment that ensures everyone returns home safely after every operation.

Cover: An F/A-18E Super Hornet from the "Blue Diamonds" of Strike Fighter Squadron (VFA) 146 taxis aboard USS Nimitz (CVN 68) Feb. 3, 2023. (U.S. Navy photo by Mass Communication Specialist 2nd Class Justin McTaggart)