

Aviation Maintenance Requires Procedural Compliance



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Aviation Safety Blog
24-17



Aviation Maintenance ////////////////////////////////////

In the maintenance bay, the phrases, “We always do it this way” and “I have done it so many times already,” are heard far too often. This mindset arises from routine maintenance, where familiarity breeds a certain complacency that can lead technicians to neglect official publications, skip procedural steps or deviate from established standards. Naval Safety Command local area assessments have revealed departures from the rigorous training received in “A” and “C” schools across various commands, both O and I levels.

Established procedures are designed to safeguard Navy assets, including personnel, equipment and property, drawing on lessons from past mishaps to avoid repeating errors. In the aviation community, it’s said that many regulations are “written in blood,” emphasizing the critical nature of following established guidelines to ensure personnel safety and equipment longevity.

Deviating from prescribed procedures can lead to critical oversights or omitting necessary procedures. These deviations can lead to safety issues that will cause personal injury or equipment damage. Such incidents compromise production and mission readiness by reducing manpower and incurring unforeseen financial losses.

Technological advancements and design updates necessitate continuous updates to maintenance protocols. An Interim Rapid Action Change (IRAC), if overlooked due to non-adherence to updated publications, can significantly impact maintenance outcomes. Often, IRACs are provisionally documented through memos and not formally published until a subsequent revision is done, making current information imperative for correct maintenance execution.

Key terms from the Naval Aviation Maintenance Program (NAMP) 4790.2 series that are often underestimated include:



Aviation Machinist's Mate 2nd Class Roman Linday conducts maintenance on an F/A-18 engine in the jet shop aboard USS Carl Vinson (CVN 70) during a Multi-Large Deck Event on Jan. 30, 2024. (U.S. Navy photo by Mass Communication Specialist 3rd Class Joshua Sapien)

Aviation Maintenance

- **WARNING:** Indicates a procedure or practice that, if not correctly followed, could result in injury, long-term health hazards or death.
- **CAUTION:** Highlights a procedure or practice that, if ignored, could lead to equipment damage or destruction.
- **NOTE:** Emphasizes a specific procedure or condition.
- **Must and Will:** Denote mandatory procedures.
- **Should:** Suggest recommended procedures.
- **May and Need Not:** Describe optional procedures.

Another practice sometimes ignored is the preoperational inspection, known as the PREOP. A PREOP is a static or functional inspection performed by the activity with custody of the support equipment (SE) to ensure readiness for use. These inspections, dictated by maintenance requirement cards, are preventive maintenance and must be confirmed by the technician and supervisor signing the SE Preoperational Record (OPNAV 4790/52).

Adherence to established procedures and maintenance conducted by the book are not only best practices but are essential. They prevent rework, minimize equipment downtime, reduce resource waste and, most importantly, promote SAFETY.



Cover: Aviation Support Equipment Technician 2nd Class Amanda Givens, left, and Aviation Support Equipment Technician Airman Jens Vaske conduct routine maintenance on a tow tractor in the hangar bay aboard USS Abraham Lincoln (CVN 72) on Jan. 28, 2024. (U.S. Navy photo by Mass Communication Specialist 2nd Class Aleksandr Freutel).

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