

# MAINTENANCE MANAGEMENT

## One Squadron With a Great Tagout System

By AMCS(AW) Carl Whatley

Maintenance departments often need to communicate when an aircraft doesn't have hydraulics or brakes and when it does have an open fuel cell. They also want to notify all shops when an aircraft shouldn't have electrical power applied. Sailors often get hurt when these warnings are not available. On a survey, I found a P-3 squadron that uses a safety tagout form that I want to share with the fleet.

Squadrons handle this problem in different ways, but very seldom do we find a system with a written and approved SOP. This particular squadron recognized the need to include tagout procedures when they used ORM to review routine but hazardous tasks. They knew a failure to communicate a hazardous condition could lead to injury, death or damage to aircraft or property. This squadron developed "Standard Operation Procedures for Aircraft Warning Placards" that are serialized and in quadruple format. This form requires them to press

hard with a pen because the document is carbonized, but these extra copies serve a good purpose. The top three copies are paper, and the bottom one is sturdy card stock that attaches to the aircraft. That placard has "warning" imprinted with big, bold, red letters and also contains the workcenter, JCN, date, remarks, workcenter supervisor's name, maintenance-control supervisor's name, and aircraft side number. Copy one goes in the ADB, copy two goes in a warning-placard file box. Copy three is copied and given to each workcenter. The last paragraph of their SOP has a warning that notes, "Disregarding warning placards can cause injury or death to personnel and may damage equipment. The maintenance control or ISIS supervisor will coordinate maintenance in areas where warning placards exist." This system is a simple fix to a problem that has done damage in the past.

*Senior Chief Whatley is a maintenance analyst at the Naval Safety Center.*

## Class C Mishap Summary

By ADCS(AW/SW) Gary Dennis

From August 22, 2003, to Nov. 25, 2003, the Navy had 24 Class C's that involved 27 aircraft. The damage total was \$1,102,971.

- An EA-6B maintenance technician fell off the port side of the aircraft while checking seats for an activated emergency distress beacon. The maintenance technician lost his handhold on the aircraft because he was holding a flashlight in his right hand while attempting to reach his handhold with his left hand. Poor decision making was the cause of this incident. Failure to consider or employ available and adequate risk controls. The cost of this incident: a little embarrassment and a bruised backside.

- An EA-6B maintainer in a different squadron fell from the pilots boarding ladder while cleaning the forward canopy. The cause still is under investigation.

- The JBD lifted an aircraft that was taxiing to a catapult. The damage includes two drop-tanks, door 10L, door 30L, and a former. Total cost: \$20,000.

- An F-14's wing struck the flight deck while it was being lowered to the hangar on elevator No. 3. Several slats and other pieces of were damaged. This incident cost \$39,497.

- A Tomcat was being towed from elevator No. 4 area to the fantail. About 40 knots of wind blew across the deck, and at least one aircraft on the fantail was turning. Turning the F-14 to get around a sheave, the crew allowed starboard wing struck the port aileron and trailing-edge flap of a nearby Hornet, causing nearly \$100,000 in damage to each aircraft.

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## New Calibration Manual Hits the Street

By ATCS(AW/SW) David D. Clark

The new NAVAIR 17-35FR-06, *Facility Requirements for Navy and Marine Corps Calibration Laboratories*, has been released. It supercedes the NAVAIR 17-35FR-01, 02, 03, 04, and 05 series manuals. This new version compiles the old manuals and offers new updates and changes to calibration-facility requirements. The new pub currently is available to all cal labs with an account at the METCAL website (<https://metcal.corona.navy.mil>). If you download the manual, make sure the CTPL is notified so the pub can be added to your workcenter's technical-publication list. This manual is not available from the NATEC website.

The updated pub includes overall laboratory-

design requirements and environmental controls, including particle contamination and the usual humidity and temperature requirements. The calibration-area tables have sections for AC and DC, physical and mechanical, dimensional and optical, including fiber-optic standards. The appendices cover applicable instructions, MIL standards, and references for calibration. They also provide general and utility requirements for ships and mobile maintenance facilities.

I recommend all cal labs obtain and read this manual to make sure the new procedures and requirements concerning calibration facilities are reviewed and implemented.

*Senior Chief Clark was an analyst at the Naval Safety Center. He recently transferred to USS Harry S. Truman. His brother, ATCS(AW/SW) Brian Clark, is our new analyst.*

# TOOL CONTROL

## Getting a Tool-Control Mindset

By AECS(AW) Todd Thompson

Working within the tool-control program (TCP) is like trying to find Waldo: With so many puzzle pieces on the board, how do you find your way? Well, the NAMP will get you on the right track. However, if you still have questions about the program and how it affects you and your work center, contact your Wing, TYCOM, or even your friends at the Naval Safety Center ([www.safetycenter.navy.mil](http://www.safetycenter.navy.mil)).

My colleagues and I have found many commands around the fleet are missing or just are not adhering to the basics of the TCP—as it so plainly is stated within the NAMP. These eight discrepancies most often are found during our safety surveys:

- Maintainers are not annotating MAFs with proper tool-container number when the task is assigned.
- Tool containers are not maintained in a clean, FOD-free condition.
- Inventory lists do not identify tool sets, multi-piece tools, and tools too unsuitable for etching.
- Multi-piece tools with a locking nut are not peened properly, spot welded, or locked into posi-

tion to prevent a FOD hazard.

- Tool-container shortage lists are not used properly.
- TCP Coordinator is not involved as much as possible.
- Consumables (such as acid brushes, safety wire, razor blades, and electrical tape) are not accounted for as tools.
- Commands with broken tools are not treating the missing pieces as missing tools.

These problems are easy to control and to track, but you need an active program with good participants to make it work. Many of these issues simply need an emphasis on training. To be effective, the TCP—like any program in the Navy—requires strict compliance to the stated processes, procedures, and responsibilities. If we want to deter fleetwide repeat discrepancies, we also need full accountability throughout the chain of command. Tool control is like FOD; it takes an all-hands effort to succeed, and every person must work for that success.

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For more info...

OPNAVINST 4790.2H, Volume V, Chapter 13 gives all the details necessary to understand and to have a successful tool-control program.