



Shrouded in Confusion

By AM3 Steve Rutledge

Mishaps usually occur because someone fails to follow rules, resulting in preventable damage or injury and the need for a mishap report. Navy or civilian maintainers never want to face that reality; yet, I must share how a proper pass down caused me to put my Class C mishap on paper.

Halfway through our Arabian Gulf cruise, maintenance had become the same, day after day. I had done every type of job many times with no problems and with plenty of time to complete each task. Early one evening, though, things changed. I was installing the port and starboard TEF shrouds, and a mishap resulted because I failed to put in a few cotter pins. The shrouds subsequently came apart in flight, damaging the starboard trailing-edge flap and the horizontal stabilator. The steps leading up to the mishap are a perfect study of what happens when maintainers are pressed for time, simultaneously are doing various jobs, and are tired.

I started on the port side of the FA-18C Hornet and made the first in a series of mistakes. I had the wrong pin for the port TEF shroud. Unfortunately, I already was on the aircraft when I noticed this problem. Why hadn't I checked the hardware in the shop? In this case, the hardware and tools already were on the aircraft from a previous task. I simply took over the box and hardware. My second mistake was not getting a pass down from the previous maintainer. That fact led to my third mistake: I took over a toolbox I hadn't inspected, assuming responsibility for it as if I had.

More mistakes followed these three, but let's get back to that wrong pin. I realized it was too short just as my LPO walked toward me. He asked how I was doing, and I replied, "I have a pin that is too short for the outer bushing." I gave him the pin and continued my work, installing the remaining pins and cotter keys. I also put down the safety panels and installed the fasteners. I then went to the starboard side and repeated what I had done on the port side.

When installing TEF shrouds, you work from inboard to outboard—at least that's what I thought. My next mistake was simple and stupid: I didn't have the pubs with me and, for all I knew, could have been installing these shrouds improperly from the start.

My LPO returned with the right pin for the starboard side. When I went to finish the starboard side, the hangar-deck chief asked me if I would ride the brakes. I agreed to do so—another mistake because it distracted me. They wanted to put the aircraft in a turn spot, so I installed the outboard pin and cotter keyed it. However, I did not "butterfly" the cotter key, a serious error.

I gathered up my hardware, put it in the toolbox, and handed the box to an airman, who returned it to the shop. I then climbed into the cockpit and rode brakes, so we could move the jet to a turn spot. I sat in the cockpit for about 20 minutes before the hangar-deck crew was ready to move the jet. That turn took priority over finishing the job I had started.

The jet finally was respotted, but, as luck would



The missing shroud and other damage to the aircraft is visible in these photos.



A missing pin is a simple mistake that can cause huge problems.



The right hardware can mean the difference between success and failure.

have it, we were delayed for 10 to 15 minutes more, waiting to figure out the engine problem. I sat on the LEX (leading-edge extension), waiting for an AE so the low-power turn could proceed.

When the electrician showed up, we turned the aircraft for about 45 minutes. Then I got up from the LEX, ready to leave the jet. Our hangar-deck chief grabbed me and asked if I could put on the covers for the canopy and windscreen. I did so, got off the aircraft, and was ready to go to the shop. I remembered that I had to take panels 53L and 53R with me, which I happily did because the job finally was done.

My final mistake would be the most costly. We had a shop meeting that had nothing to do with maintenance; when it was over, I finally was secured. It was time to go to the rack, but I didn't tell anyone that the panels and pin still needed to be installed. I instead assumed that the person checking my tools would see the pins and panels, ask someone, and would get a pass down. As it turned out, night check didn't know anything about the job. They knew only that panels 53L and 53R had to be installed. The TEF shrouds weren't discussed.

I walked past the aircraft on my way to berthing and saw them prepping it for another turn. Maintenance wasn't on my mind; I just wanted to hit the rack! I found out about the situation when the damaged aircraft returned.

I spelled out these errors because my lapses reflect the human-factor problems that Navy personnel face on a daily basis. Day—to-day maintenance, fatigue, and a steady routine can consume you. It did with me—to the point where I wasn't thinking any more. I just was doing maintenance over and over in a fog—not a good thing in a combat environment, where it's essential to have up jets for the flight schedule. A perceived rush develops, and it builds pressure on maintainers, leading to shortcuts and hurried procedures. This happened to me, and our CDIs and QA personnel never checked the work.

I could have avoided this situation had I done a proper pass down, taken ownership of the jet, and made sure the work was done correctly and completely. Instead, I'm left with a black mark on my Navy career that I never will forget. I'm grateful the pilot was able to land safely with minimal structural damage to the aircraft. My failures are clear, and I'm working to regain my reputation and trust in my maintenance ability. I'll succeed, but it would have been easier to have done the job right...the first time. 🙏

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