

Just a Scrape

By AM2(AW) John Franklin

I think everyone has heard what happens when you assume anything. As the saying goes, “You make an ass out of you and me.” It’s a clever saying and is easy to remember. Never did I believe it would apply to me, but one day, it did.

I had been an airframe CDI for a year and never fully understood the responsibility that comes with that position, until my mistake. When a maintainer becomes

a CDI, their responsibility increases, as does the trust of everyone in the squadron—officer and enlisted. As a CDI, I am responsible for the quality of work done on the jet, making sure it is safe for the pilots who will fly it and capable of achieving its assigned missions. A good general description of a CDI’s responsibilities is that we are an extended arm of QA division.

My story is simple, and my mistake almost cost me the trust of the pilots and maintenance department when I assumed, rather than inspected.

I’m a troubleshooter in my squadron and work nights. We were within a week of deploying, and that time can be very hectic at any squadron. Pilots fly a lot of hours and do field carrier-landing practices. Maintainers work hard to give ops enough jets to get all the crews carrier-qualified before we deploy. This week was routine for the troubleshooters, but airframes had an unusually heavy workload.

With our flight schedule over and being an airframer, I decided to help them with their workload. They had an aircraft on jacks to service the struts and to comply with a recent technical directive (TD). While helping with the struts and the TD, we found more work. All the tires and brakes were worn. They were within limits, but, this close to deployment, we decided to take advantage of the aircraft being on jacks and change them. I began to feel the burden of all the maintenance done that evening, both with airframes and troubleshooters.

I don’t mean to say I couldn’t handle both jobs, but somewhere during the night, I failed to stay aware of all the work.

The worn tires and brakes had been pulled off and turned in, and we were waiting for the new ones to arrive. Once they came in, I took them to the aircraft.



Navy photo by PHAN Geoffrey Lewis



Gouge on the leading edge of the stab. Notice the bare metal, length and depth of the gouge.



Bottom and leading edge of the stab. Notice the paint damage in the center of the picture.

At that same time, one of our PCs came to me and told me of a gripe on the aircraft. He said the aircraft had a scratch on the horizontal stab. Of course, a scratch can mean many things, from chipped paint to a gouge or just a mark on the jet. Hornets often have paint damage on the stabs, and this is what I thought the PC was referring to.

Using what turned out to be terrible judgment, I told the PC not to worry about the scratch and continued to work on the jacked aircraft.

The scratch turned out to be a gouge in the aluminum section on the leading edge of the stab. Once the damage was inspected, we found it was not within limits, meaning the stab should have been repaired or replaced. This type of damage has very small limitations (< .0030-inch on the leading edge). A quick visual inspection wouldn't have told me that the damage wasn't within limits, but it would have forced me to question the damage and look up the limitations in the structural-repair manual. Damage to the leading edge of the stab, a primary flight-control surface, could lead to abnormal

flight conditions, thus compromising the safety of the pilot.

I consider myself a hard-working and competent airframer. PCs come to me when they find something wrong with the jets. Almost always—99.9 percent of the time—I investigate the problem and determine what to do. This time, I didn't, and the experience taught me that every situation that comes up is unique. Just because a scratch sometimes turns out to be nothing doesn't mean it always will be that way. I should have told the PC to write a MAF, and then I or another qualified airframer would have looked at it before the next flight. This one step would have prevented us from flying a down aircraft.

I also could have asked how the stab was "scratched." As it turns out, the stab was damaged when the aft section of the FLIR pod dislodged in flight and hit the leading edge of the stab. Had I investigated the report of a scratch and examined the surrounding area, I would have noticed this section missing and realized where the damage had come from.

The Naval Safety Center gives maintainers a good analogy to explain how mishaps occur; they call it the "Swiss Cheese" model or theory. This approach states that, for a mishap to occur, all the holes in the Swiss cheese have to line up. I had an opportunity to block one of those holes but missed my chance. Luckily, no mishap occurred.

The holes lined up this time when I assumed the damage was negligible and when the damage was missed during the FLIR daily walk around of the jets the following morning, and pre-flight inspection. After the aircraft went flying and returned safely, the squadron was fortunate that the holes finally were blocked after a post-flight inspection.

This simple mistake endangered the safety of a jet and life of a pilot, and it nearly caused my co-workers and management to lose faith in my abilities. Had I taken just five minutes to grab a flashlight and examine the stab, I would have noticed the damage and would have realized it wasn't normal.

The stab was removed and repaired after only one flight. It's unfortunate that it took an incident like this one to open my eyes, but it shows how one person not taking each situation seriously could lead to an aircraft mishap. I have learned a great deal from this event. I now investigate the problem 100 percent of the time and determine what to do. I also have rebuilt the confidence of leadership in my abilities. 🦋

Petty Officer Franklin was a troubleshooter with VFA-34 when he wrote this story.