



**North Carolina Wing
Aircraft Maintenance
May 1, 2018, Ed #5
“Riveting Reading”**

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To: All NCWG Operations Officers and Crew Chiefs

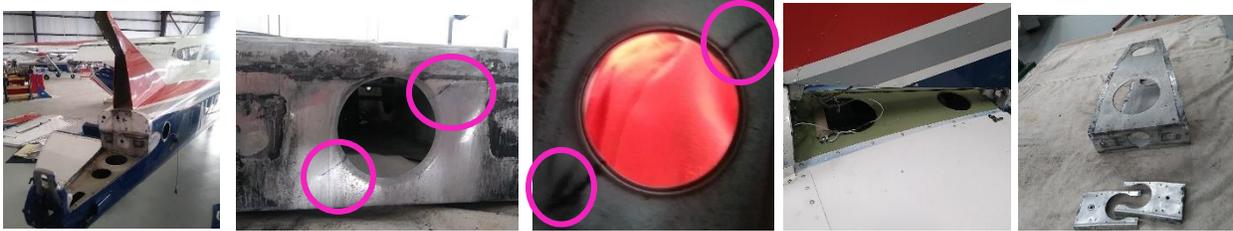
1. Why this newsletter? With 17 aircraft, there are many learning opportunities for all of us. My predecessor put all the NCWG continuity on-line. Every week I gain knowledge from the more experienced crew chiefs and mechanics. Thus, this letter tries to pass that information to others. Most of us stepped up as a crew chief to help out but ended up learning by each challenge. That’s part of this newsletter’s mission; pointing operations officers and crew chiefs to that information. But here’s the rub. As with all the other NCWG CAP email distribution lists, it only goes to individuals in an operations or crew chief position. So, if there are squadron members you think should get it, you need to forward it on (the newsletter is also available at NCWGCAP.org/Operations). Honestly, I don’t write this just to hear myself type. The newsletter contains a lot of, ‘don’t let this happen to you’ lessons learned. Read on.

2. Month in Review: March was a rough maintenance month: we knocked out several annuals, pitot static checks, N819CP had a new ELT, installed, three VIRB mounts, and finally got N358CP, the MER C-182 at KBUY up to NCWG (& Cessna) standards. April started out the same. N819CP--new artificial horizon, N908CP--a new altitude encoder, N99885--a new windscreen, N963CP and N716CP annual inspections and VIRB mounts as well. N4813C got a new center horizontal stabilizer skin (see 3b) and N716CP was/is fighting persistent electrical charging issues. N358CP came back again for a flap circuit breaker problem. Add the first 100- hour inspection for N262CP. N405CV needs series engine work (5 new cylinders) as the aircraft sat too long before CAP obtained it. Closing the month, we learned that N9930E just went through its biannual alternator and N99885 also needs an altitude encoder. Thanks go to the operations officers and pilots who did a lot of shuttling. We absolutely minimized A9 sorties moving aircrews after aircraft drop-offs & were able to loan aircraft around as needed. Funding we save in A9 missions gets to be used in maintenance parts and improvements.

3. Maintenance tidbits: Living by the maintenance facility, I get a firsthand look at problems and trends and will pass those along. Here are the latest items noted:

a. (3rd Repeat) **New Aircraft Information File (AIF) cover and layout:** So how many pages did you change out? About 15, right? If you don’t know, your aircraft’s AIF needs some work. You can find the links to all* the printable pages in the AIF on the NCWG Maintenance page below. Expect to print out every page that says, ‘updated.’ (*except the AIF coversheet in WMIRS) <https://www.ncwgcap.org/index.cfm?fuseaction=page.display&pageID=80> .

b. **Man-handling the tail-feathers:** You know how people push down on the tail to reposition the aircraft on the ramp? And do you also know that others say “don’t do that.”? The photos below show why. (It over-stresses the horizontal stabilizer). Let’s stop doing that. The tail you save, might be your own. (N4813C now has a new horizontal center stabilizer skin.)



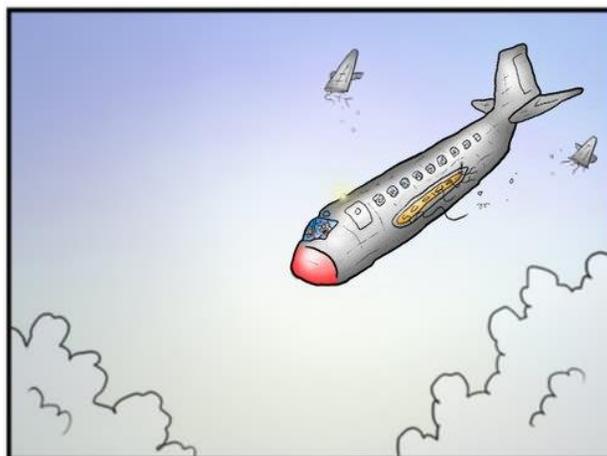
(Above: Vertical stabilizer, rudder, elevator and horizontal stabilizer removed. Center section showing the crack on both sides; #4: New center support skin installed; #5, old piece on bench.)

c. **Semi-annual cleaning:** Overdue for some if you haven’t washed the aircraft lately. As a reminder; just use Dawn soap to get grease off. It’s a lot cheaper than Extreme Simple Green and less harsh. The regular Simple Green is corrosive to aluminum. Despite propaganda saying Simple Green is okay if used right, the reality is corrosive agents in the paint cracks doesn’t help the longevity of our aircraft.

b. **Don’t Buckle Up:** Remember not to buckle the seatbelts with airbags when putting the airplane away. While we want to have the planes look clean, buckling the seatbelt arms the airbags. A really good jolt can deploy them even if all the switches are turned off. Pretty pricey replacement (x4) if that happens in our newer aircraft.

4. Thanks for taking the time to read this and keep somewhere for your continuity. Riveting Reading can also be found on the NCWG Maintenance Webpage. If you have questions, you can reach me at 703-732-3264.

— Stryker —



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"Well, ladies and gentlemen, we skimped on maintenance a tiny bit, and look what happened: our wings fell off, and we're going to crash. We've learned from this experience, and we'll apply what we've learned to improve the flying experience for our future passengers."