

## ***“Riveting Reading”***

### **North Carolina Wing Aircraft Maintenance**

**Apr 2, '19. Vol #17**  
*By Major Martin 'Stryker' Heller*

*Aircraft at Operations Meeting*



To: NCWG Commanders, Operations Officers, Crew Chiefs & Aircrews;

**1. March highlights:** Finally, the schedule & weather allowed the annual Operations Meeting to occur (see 3b). We also flew a 10-day, Army training mission which served as their controllers' practical exam. In March alone, I estimate we'll have flown **~680 flight hours**. That's almost double any of our first five months; **Feb: 334.3, Jan: 375.5, Dec: 190.2, Nov 338.2 & Oct: 359.6 hours. NCWG has flown nearly 2,300 hours in the first half, FY19. KFAY flew >140 hours; KRDU, KINT and KAVL locations each flew more than 90 hours. KSUT flew more than 50 hours using theirs and other's airplanes.** Operations had to move some airplanes around; including assigning N908CP to maintenance as a loaner (to KFAY). This allowed us to get hours on the airplanes, balance the wear and still keep the Army missions going. Plus, factor in more than 3/4<sup>th</sup> of NCWG fleet needing some maintenance work. **Several maintenance shops, and especially, the HQ CAP Logistics Directorate, are unsung heroes in allowing us to meet our flying obligations.** They did everything but sell blood to immediately get us parts and priority shipping. Without their support, NCWG could not have sustained our aircraft bombardment on the US Army ATC facilities.

**2. Maintenance Month in Review:** We're done with the C-172 magneto service bulletin; **N4813C** received two new gears first week in March. All six NCWG C-172s needed part replacements; some a little more work. Details in attachment 1. In other news, **N963CP's** door hinge turned out to be a little more; a door handle spring also needed to be replaced. **N98426** failed a magneto check; cleaning some plugs and re-timing the magnetos fixed her right up-- we thought. A few days later, we had to recover her by fixing the magneto on the ramp at KRDU during the weekend, as well as bleed the right brake system. **N7360C** started taking in water in the baggage area; and some Temporary Aircraft Preventative Enhancements were made, while **Lola** got an oil change. Longer term solutions will occur on its next 100 hour/annual. Speaking of which:

**2a. 100-Hr/Annuals:** 11 of 17 NCWG airplanes became due this month: **N741CP, N938CP, N727CP, N716CP, N262CP, N819CP, N98426, N9930E, N99832, N963CP and N908CP.** **N179CP** was only spared due to two weather aborts and NC-170 using other aircraft to shuttle aircrews home. Some of these aircraft also received their bi-annual corrosion protection or pitot-static certification at the same time. Not all planes have come out maintenance at the time of this writing: Those that are home included: **N741CP** needed #2-cylinder work and was back on line just a few days later. Same goes for **N938CP** on the #1 cylinder; an exhaust valve was also sticking. Its Becker backlight was out, so the unit got a trip to Florida for the repair. We returned **N938CP** to service sans Becker to support the Army mission. The Becker returned; when **N938CP** passes back through, it will go in. **N819CP** needed a new fire extinguisher, and turned around quickly. **N262CP** airbag seatbelt buckles failed inspection, but was able to be returned to service awaiting replacements. (Yes, maintenance tests for that too.) **N716CP** had been going through a lot of oil, but at least its ADS-B is putting out traffic. If not always to the MFD, it does by Blue-Tooth to your Foreflight program. The level 2 diagnostic and reconfiguration seem to have worked. KFAY aircrews should notice the lack of nose wheel shimmy. They may not notice some gasket replacements and exhaust pipes being re-secured; but now the pilot seat reclines once again. **N908CP** went west to KAND due to oversaturation at KSUT. There was a separate plan for **N99832**; but it needed too much work to go to a non-consolidated maintenance facility. She 'lined up and waits' at KSUT.

**2b. More Items:** **N99885's** Low Vacuum light was in-op. She also got a new ELT battery. **N98426's** problems continued as the carburetor accelerator pump was 'kaput.' It shouldn't take 6 primer strokes to start the aircraft (and/or fire, whichever comes first). **N9930E** is finally getting its long-awaited fairings. **N7360C** had some fuel

issues and needed a new fuel pump. With expedited parts and service, *Lola* was only grounded for six days. **N4813C**'s turn coordinator wasn't, and then its left door hinge gave out, the later grounded her as well. **N99885**'s artificial horizon got the leans. **N938CP** has some FM radio issues, and had its TDFM136 changed out. Finally, perhaps feeling left out, **N405CV**'s pilot did some soul searching and found his 'soles' on the upper rudder pedals during landing. Two tires later, we remind you we already have learned this lesson; "keep heels on the floor during approach and landing." Please give maintenance a 'break,' and don't rub the tires flat.

**2c. G1000 Battery Woes:** Crews have complained of the G1000 standby battery failing the 10-second test. This is usually caused by one of three problems. First; battery could be bad. Second; cold outside air temperature takes its toll. During flying, the battery charges up. Third; the system was not 'armed.' If one runs the G1000 off the master/avionics switches and doesn't arm the G1000, the aircraft will not recharge the G1000 battery. Passing the battery test is not an VMC requirement. Of course, we wouldn't miss that on our checklists...right?

**3a. Admin Tidbits:** Aircraft Information Files (AIF) updates: A March 5<sup>th</sup> WMIRS Critical read item requires pilots flying G1000/GFC700 autopilots review the new emergency procedures checklist and watch a video at: <https://vimeo.com/321309420/dd3cf0c744>. It lists actions when it appears you have run away autopilot/trim.

**3b. Operations Meeting:** The annual all-plane (~12) and aircrew get together occurred at KRWI on March 23.

**Top Honors: Capt Cliff Herring, NC-0171 flew 223 hours in FY 2018** making him one of CAP's top pilots. For perspective, he flew >75 hours more than the NCWG second place finisher and more than double then the 6<sup>th</sup> place hour earner. We presented him with this trophy and he earned the callsign, '**Beast.**' We thought of at least a dozen others; the top runners-up included; '*Tired,*' '*Pan*' (as in Peter Pan – He is so fly that he doesn't land) and '*Exocoetidae*'. Pronounced, "*Exo-Co-teed,*" it is Latin for 'flying fish.'

**Lt Col Richardson, NC-007** was recognized as the Flight Release Officer – North Carolina (**#1 FRONC**). He made 401 releases; 15% of NCWG's FY2018 2662 total. Said another way, he's the busiest FRO for 7 of 12 months.



Lt Col Chris Bailey presents a unique statue to Capt Cliff 'Beast' Herring for 223 flying hours in FY18.

**3c. New Aircraft Nickname:** Even after coming out of refurbishment, **N98426** has taken a lot of our time and attention, warranting a nickname. We pursued something Alaskan, since that was the C-172's previous home. Contenders included; 'Moose,' Denali, and Kodiak. But since this revitalized, older, attractive lady pulls to the right, **N98426** has been named, '**Sarah.**' (Really.)



**3d. Emergency Kit material out of date:** We're still awaiting pelican cases to replace the outdated (or wet) emergency supply boxes. In the meantime, satchel bags have been placed in each aircraft. Recommend putting in food rations; i.e., cracker packages, etc... in there as a temporary measure. Put a few water bottles in your aircraft plastic storage box as well. Don't forget to change-out the dead batteries in the flashlight and get rid of the out-of-date stuff. This should apply to nearly every aircraft older than 2015.

**3e. New Maintenance FRO:** Lt Col Ray Davis, NC-019 (Asheville) has been added to the list of A9 mission approving FROs, besides Lt Col Bailey and myself. We know we've been a bit hard to reach lately.

**3f. Identification Tags:** Thanks for your help, we've finally collected photos of each aircraft's identification tags (below the horizontal stabilizer) clearing all but our 'old emergency food' (item 3.d. above), self-inspection items.

**4. "Dip-Stick of the Month":**



There are four March awards due to the massive activity and efforts. First, **Lt Robert Rimmer, NC-079** (Pitt-Greenville Squadron): 'Bulldog's' tremendous effort in recruiting/building a pilot base earned them an aircraft; **N819CP 'Dixie.'** They made her shine. NC-079 recently had to give her up to KSVH for lack of hours. Next; **NC-019 (Ashville)** flew both their airplanes nearly everyday of the AOB mission and had a 150NM commute (each way). Lots of logistics and arm bending to make the mission a reality. Same for **NC-171 (Fayetteville)** who's 44NM commute allowed them to fly two missions in the same plane, same day. Finally, **NC-170 (Southport)** not only offered to fly every day, but helped moved at least 10 aircraft and/or aircrews to and from maintenance during the AOB exercise. With weather affecting the 'hours remaining,' and thus aircraft availability' everyday was a constant re-shuffle of who's going where. NC-170 aircrews moved airplanes as NCWG leadership re-adjusted the schedule during known and unscheduled maintenance issues. **Lt Karl Noffke** led the squadron's "anytime, anywhere" support to the NCWG flying missions.

**5. New Ladders:**



The Wing funded and distributed ladders for each of the C-172 and C-182 aircraft, since the C-206 already had one. These 2-foot-tall folding ladder have a 300# weight limit and fit behind the rear seat. They weigh 7 #s; not the lightest ones out there, but fold up smaller than others & give better reach. **Safety note:** Don't fall. The rubber top does its job of providing traction. Trying to pirouette may cause one to lose balance. So please use the handle on the cowling for support. (Don't ask; and no, it was not me.) Some of the 1985 C-172s may need to change the size of their plastic container in the cargo area due to size. Attachment 2 shows the four safety labels which I removed.

**6.** Thanks for taking the time to read this. Riveting Reading can also be found on the NCWG Operations / Aircrew Maintenance Webpage. If you have questions, you can reach me at 703-732-3264.

*- Stryker -*

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*Still confused about how the local airport 100LL truck can save you an embarrassing phone call? (Ref January's Riveting Reading). Perhaps a different view might help.*

Attachment 1

NCWG Status on Champion Slick Magneto Service Bulletin SB11-15A

Affecting Cessna C-172 Aircraft As of: 8 Mar 19

N-Number	Year	Engine Overhauled	Based	Status	Comp Dates	Hours until 500-hour overhaul	Remarks
N726CP	2015	new	KIXA/ KRWI	Repaired w/ annual	12 Feb 19	210	Both needed gears
N908CP	1999	Apr 2012	KMRH/ KILM	Repaired w/ oil change	12 Feb 19	207	Both needed gears
N99885	1986	Apr 2017	KAVL	Repaired w/ Oil change	25 Feb 19	275 hours Since new	Needed 1 gear; Sent out for 500hr.
N99832	1985	Oct 2014	KINT	Repaired Out Of cycle	22 Feb 19	155	One new gear; other Mag gear & rebuild
N4813C	1985	Feb 2010	KFAY	Repaired w/ Oil Change	8 Mar 19	320	Both needed gears
N98426	1985	Oct 2017	KLHZ	Repaired w/ oil change	29 Jan 19	450	Both mags repaired.



Attachment #2  
Ladder Warning Labels (Removed)  
Note: Spanish language versions still on the  
insides of the ladder legs.