

## ***“Riveting Reading”***

### **Civil Air Patrol North Carolina Wing Aircraft Maintenance**

**Nov 4, '19. Vol #24**  
*By Major Martin ‘Stryker’ Heller*

*C-185F at Lake Hood, AK (LHD)  
where >1,000 aircraft are based.  
Photo by Maj Rheta Courtney*



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

#### **1. Motivational Quote: “Airplanes bring us together, but friendship keeps us together.”**

**Paul Poberezny – Founder; Experimental Aircraft Association (EAA)**

**2. October highlights:** **NCWG had a good** FY20 start with **420 hours**; on pace with our total of 4800.0 hours in FY19. October’s top hour earners included: **KFAY (N727CP)**, **KIXA/KRWI (N9930E)**, **KRDU (N726CP)** and **KSUT (N179CP)** with 43, 42, 41, and 35 hours respectively. **KAVL (N99885) flew 60 hours** & at least doubled everyone else. Fiscal Year funding fell in place early and many squadrons took advantage of ES training. The intense Army ATC training mission the last week of the month, put the numbers on the board. The down-side is several aircraft hit the hundred-hour inspection by month’s end, while others had a host of minor issues. We’re sitting with several aircraft in the red; most should be fully mission capable before the Nov Army ATC mission.

**3a. Maintenance Month in Review:** New, 100-Hr/Annuals included **N908CP**, **N262CP**, and **N727CP**. **N819CP** had to wait for new FY funding before coming back from **KAND** with the help from **KAVL/NC-019 Flying Service**. No remarkable items in its 100 hour/annual inspection besides a bent nose wheel steering bolt. (We had two last month; they bend because someone turns the nosewheel too far with a mechanical towing device.) Turn it no greater than about 15 degrees; some airplanes have little red lines on the gear to show you the limits. Other than that, **‘Dixie’** had her fluids & filters changed/ serviced) and greased where needed. **N99832** also came home from its annual. It was waiting for its magnetos, a new artificial horizon, and new battery. **N908CP** was more involved; besides 500-hr magneto overhauls, new main tires, some stop drilling and such, she needed software updates on the G500, a replacement turn and bank coordinator (hidden behind the panel which drives the autopilot), and a lot of work on the instrument panel lights. Now, pilots won’t have to wear mining flashlights to fly at night. **N262CP** needed its bi-annual corrosion protection, a VIRB mount, a new battery, & the previously deferred, airbag-seatbelt replacement. Thus, it didn’t make it home before October ended. **N727CP** ran out of time and was dropped off as the month rolled over, **N716CP** is waiting its turn to come in, after a local recruiting event this weekend, and **N99885** is due too.

**3b. More Maintenance Actions:** **N716CP** was drinking oil like a drunken sailing ship. A quart or more an hour tells you an intervention is needed. **N4813C** had a priming plunger issue, which fixed itself (seal reseated?) and a main tire that needed replacement. **N405CV** had electrical gremlins messing with lights, headsets and such. **N741CP** needed a taxi light besides an oil change. It also is getting another

FM radio and a new windscreen shade (Read: \$100 piece of cardboard). Hopefully, someday, paint work as well, since its clear coat "ain't what it used to be". Way across the state, **N963CP's** (now called '**Gumby**') windscreen sealant, turned into dollar store mascara, and was replaced. **N99885** (now named '**Echo**') needed new brakes, and was done locally. It also needed its localized head changed out, along with a pitot static/transponder check. **N938CP** came out of KTTA **after getting a FLIR (Forward Looking Infra-red) ball install**. **N938CP** ('Max') went through an alternator, and is awaiting a new one. **N963CP** moved to KTTA **to get the other FLIR installed**. '**Gumby**' will receive a Rotheta Becker receiver so it can receive all 406 MHz frequencies. Cargo space on these two FLIR birds has become very limited.

**N179CP** has an avionics master switch act up, and was replaced. **N726CP** had several issues, strobe and landing light out, RF interference, balding tire, door seal falling off, etc... and relocated to **KSUT** as this rag went to press. **N7360C's** engine monitor became erratic, parking '**Lola**.' **N99885** is ready for its 100-hour and has a mini-list of items to clean up. Finally, **N4813C** 'Frank', was thought to be reaching engine TBO. Eagle-eye NHQ managers found transposed numbers somewhere along the record keeping and realized N4813C has 200 hours more to go. But in the replacement process, a recently rebuilt engine became available in Georgia; **N4813C** will fly there, swap engines and get its 100-hour inspection.

4a. **Administrative Updates:** CAP's agreement with Jeppesen seems to have changed. It is now unlimited updates rather than just one. The good news is update issues don't require a reset request. Realize that the data-bases are serial number coded, so you can't upload the data into any airplane but the matching tail number. Jeppesen (now Boeing) is a "gazillion" dollar company for a reason.

4b. **Aeronautical Information File (AIF) Updates:** NHQ's AIF page still shows their last update as 23 April. That said, the Form 5 process is changing and check pilots need to get up to speed by taking a course in AXIS (through the Learning Management System (LMS)).

4c. **Mission Master – "The MO's Avionics Switch":** Remember its purpose; preventing an electrical jolt on start-up to the FM radio, Becker and Viper radios. Our older aircraft may not have this switch, so all those radios need to be off, before shutdown, and especially checked, before engine start.

4d. **Flight Release Reminder:** *Please, please, please*, check to see if WMIRS released your flight before closing it out. This is especially true if you received a verbal release. I'm guilty too. Combining FY 18 & FY 19 numbers, NCWG had 6,885 flight releases with 18 that weren't. That's a 99.74 % rate; good enough for Ivory Snow soap, but not for the CAP inspection team. It's a WMIRS automated tracking system, so they didn't even have to look. Something about people's life's at stake and all.... Thank you for helping us not get a repeat write up. I'll work at it as well....

5a. **Safety Tip:** (from Asn't Director of Operations): Remember to take a one slow last walk around before getting into the airplane. We seem to always be a hurry; it's easy to miss a fuel cap off, cowl plugs, chocks, ropes still attached, removed oil dip stick, or a tow bar left on. Especially if you were interrupted, or walked away from the aircraft to do something. We don't want to damage an asset, nor your stellar reputation. Learn from others mistakes; the safety report you don't write, might be yours.

5b. **Safety / ES Tip (2):** Monitor your FM radio and remember to do that 121.5 MHz radio check before shutdown, (no matter how smooth your landing). This month, while departing from KBUY, we heard an ELT go-off as soon as we armed the G1000. Engine start, taxi and 3 minutes later, we identified and notified the FBO of the offending airplane. We advised Greensboro ATC and then the squadron aircraft

(giving o-rides) over the FM radio. They met the pilot at the airplane. Others have reported similar stories... remember 'Air 2' is our "company frequency".

**6. "Dip-Stick of the Month:** This month's coveted, dip-stick holder has been awarded to **NC-121 in Concord** because the crew chief, said the immortal words, **"This AIF needs work."** NC-121 and another (less distinguished) squadron swapped C-182s and the **Concord crew chief did a thorough end-of-month evaluation**, which includes reviewing the AIF binder. A full listing and links to attachments of AIF material is found at NCWGCAP.org on the 'Aircraft Maintenance' page under "Operations" side tab.



**7.** Thank you all for the support and 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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