

“Riveting Reading”

Civil Air Patrol North Carolina Wing’s Aircraft Maintenance

Aug 1, '19. Vol #21
By Major Martin ‘Stryker’ Heller



*“Cleanliness is next to Godliness;” more so in an airplane.
N741CP was washed while NC-305 senior members cool off.*

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

1. July’s highlights: Middle Atlantic Region – National Flight Academy started us off with three of our C-172’s flying out of Camden, SC--Not to say they didn’t fly back into North Carolina during their training. We also supported the 2-day, MD/DC/DE encampment. While early July thunderstorms helped with our drought, it dampened several weeks of flying. Aircrews had to be very flexible in getting aircraft to and from maintenance. We lost a few days on most aircraft, besides all their other planned flying activities. NCWG still managed to fly ~ 450 hours in July; only ten hours less than June. **N938CP** (*Mainly the officers of “Browner, Anderson, Lesesne, and Goldstein”*) **flew 63 hours**. **N99832, N819CP & N716CP nearly hit 40 hours; N4813C, N726CP & N98426** flew at least 30 hours.

NCWG is still #1 in the country with hours/aircraft, but not by much. Fortunately, we have almost two months to solidify our lead with the help of a US Army AOB mission in August. Except for the C-206, all of our fleet was home and operational the day before the Wing annual SAR-EX. The summer is hot, but you are only getting the heat part-time—remember our maintenance contractors are working in this heat all day long.

2a. Maintenance Month in Review: Six new, 100-Hr/Annuals: N7360C (cont), N262CP, N963CP, N716CP, N741CP, N726CP and N727CP. **N262CP** was FIFO; first in, first out. The only surprise was a seatbelt airbag harness failed the plug-in test. We swapped that belt to the rear right seat, while a replacement is on order. Not the first time this has happened and the replacement lead time is long. **N963CP** went to **KAND** for its annual; needed a new right tire and replaced all bottom spark plugs. **N727CP** is near 2,000 hours but received a 200-hour TBO extension IAW Lycoming Service Instruction 1009BD. Parts still wear including; a muffle extension pipe crack (which will go on the next engine), a leaking seal behind the propeller, and other nit-noid stuff. An astute crew member noticed the Becker wasn’t broadcasting through the ‘Aux’ selection on the G1000 audio panel (wire disconnected). **N716CP** had a loose windshield because the lower sealant deteriorated. The stuff was scrapped off and re-sealed. Other repairs included new fuel cap gaskets, some missing hardware replaced, including the pilot window latching mechanism. Most importantly for the MS/AP, they discovered why the rear left seat reclined so much... a bolt was bent, which required a larger bolt and bushing to make right. **N741CP** also had some hardware replaced, several items re-secured, water drained from the fuselage (there are drain holes), and had a VIRB mount installed. Due to the backlog, **N726CP’s** 100 hour/annual was done at Aero Services at **KLHZ**; replacing a nose wheel tire. **N7360C (Lola’s)** Wing Strut AD was accomplished and the new right elevator installed. The engine is still on vacation over in Oklahoma, but plans to return soon.

2b. More Maintenance Actions: **N405CV** had been stuck on ground at KINT awaiting a rudder trim issue. That’s the challenge of working with Jet Maintenance facilities... small aircraft maintenance isn’t their bread and butter. After 31 days, it was finally returned to service. We believe the culprit was turning the rudder trim wheel too far. If it stops turning easily, stop turning it. In fairness, it happens on many C-182s. **N9930E** has been swapping with **N938CP** between **LHZ and RDU** so both squadrons can get some G1000 time/check rides. **Lt Stone/RDU** noticed ‘*Thor*’ was due its Pitot-Static check and got done the next day from our avionics shop in **KFAY**. **N938CP & N908CP** had their oil changed. **N262CP** also had a Pitot Static check while in annual; took several days to get her home due to T-Storms & such. **N99885** had its NAV 1 head evaluated while serving as crew shuttle for **N963CP**. No trouble found and the sticky glideslope flag problem has gone away. **N99832’s** carburetor door repair last month was a temporary fix. A replacement box is awaiting its next annual. **N9930E’s**

#1 radio went on the fritz towards the end of the month, as did **N908CP's** back-up attitude indicator. August should bring **N99885, N938CP, N9930E and N4813C** for 100-hour/annuals by mid-month if not sooner.

2c. Soap Box Speech: Several squadrons washed their aircraft in the past month or two (yea!!) so almost everyone is current according to the WMIRS washing data entry block. I've learned to clean the underside of the flaps when doing the post-flight, leading edge wipe-down. That area is out of sight upon retraction, doesn't get cleaned by rain, and is the second dirtiest part of the airplane. An extra layer of wax on leading edges and this area makes bug removal a lot easier. The dirtiest area of the airplane is the oil coated belly. One easy way to check, without bending, is to look at the Becker antenna. It is supposed to be white. (As a side note, we did research into painting that antenna black but would reduce its effective range.) The front of that white 'coffee can' antenna is also 'a leading edge' and should be wiped down as well (but not waxed).

2d. Top Shelf Performance: Actually not: **Please, please, please avoid** using the top of the instrument panel as a storage shelf for headsets, checklists, or worse, kneeboards. **Those edges tend to scratch the wind screen, and even our newest aircraft has window scuff marks.** Please use the floorboard instead. For those who stick suction cups to the windows; clean those off marks after removing your device. (Sorry, the photos of plexiglass didn't turn out well enough to print.) We stock aircraft with Prist window cleaner; just remember to use a clean, blue cloth.

2e. Don't Buckle up: As a reminder, we don't leave airbag equipped seatbelts buckled up when leaving the airplane. It arms the system, and a good jolt can set it off (Read: pricey repair). We appreciate those that leave the cockpit clean for the next crew, but this is one good habit we need to stop for our newer aircraft.

2f. Tow Bar Lock Pin: Over time, the lock pins wear out. If not replaced, they fall out, disappear, and make the tow bar useless. The quick & cheapest fix is a quarter inch diameter, 1 1/2" bolt and nut (or wingnut); but crew members aren't fond of them. You can replace the lock pin or get a round wire version. I found these in the aviation hardware aisle of Lowes (& Home Depot) for \$4 each.



3a. Admin Tidbits: Aircraft Information Files (AIF) updates: Last change was: 23 April 19. Perhaps NHQ felt implementing 'reCAPTCHA' on the eServices website, was enough pain for the month. (Humor is based in truth.)

3b. Aircraft Survival Kits: All done and delivered (unless we missed something). They expire in July 2022. Besides written on the box, we added that data column to the aircraft equipage page on the NCWG CAP Operations/ aircraft Maintenance web page.

4. "Dip-Stick of the Month:" This month's coveted, dip-stick holder has been awarded to the **NC-022, "Double Duces"** up in **Burlington**. The label was put in **N262CP** early in the month. **NC-121/Concord** earned the '*Tow Bar Lock Pin*' of the month award for reasons listed in 2f, also installed in early July.



5. Crew Chief Tips of the Month: "**Right Email for the job**": As a reminder, maintenance bills get sent to ac-maintenance@ncwgcap.org. Log book entries and end-of-month reports go to: ac-reports@ncwgcap.org. Attachment 1 has a PowerPoint presentation that was sent out in May, on photocopying logbook entries. It's a bit of work, but a very important insurance policy for us; not only in case logbooks go missing; but for doing research as well (and not having to ask you to go out to the airplane and look.)

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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NCWG Aircraft Maintenance Office

1 attachment

- How to Properly Copy Log Book Entries

CONSOLIDATED MAINTENANCE RECORDS CHANGES



1

- ## Maintenance Records
- Centralized Maintenance records on Google Drive account
 - Allows for easy access for NCWG staff when information is requested
 - Allows for a secondary location for records
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2

- ## Maintenance Records
- Required Records
 - Airframe Logbook(s)
 - Propeller Logbook(s)
 - Engine Logbook(s)
 - Avionics Logbook(s)
 - FAA 337 Documentation
 - All Weight and Balance Paperwork
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3

- ## Maintenance Records
- The above logbook entry's need to be emailed to ac-reports@ncwgcap.org with in 72 hours of the entry.
 - Documents must be an Adobe pdf file
 - No photographs please
- 

4

When scanning a logbook entry; scan the entire page of the logbook, not just the entry:
→ See Examples:

- ## Maintenance Records
- Individual file names for a log entry needs to be as follows,
 - N179CP__Engine1
 - N99885__Airframe3
 - N99832__Avionics2
- 

5

Maintenance Records

Correct Entry	Incorrect Entry
	



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