

“Riveting Reading”

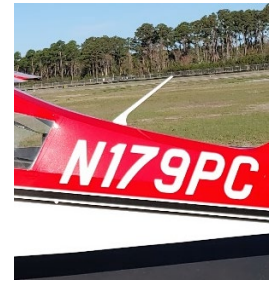
**Civil Air Patrol
North Carolina Wing
Aircraft Maintenance**

May 1 '22 Vol #54

By Lt Col Martin ‘Stryker’ Heller



April showers included some airplane cleaning. NC-170 / KSUT members scrubbed ‘Sandy.’ Glad no one was dyslexic & accidentally washed a similar tail number on the ramp that day. Cadet TSgt Raymond Rooks (Left) cleans the Becker antenna and underbelly.



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

1. Motivational Quote: *“It is easier to beg forgiveness than to seek permission.”* St. Benedict of Norcia, circa 525. Also, the USAF Company Grade Officer & Senior NCO’s unofficial motto.

1a. NCWG Director of Operations (NCWG/DO) Comments: What makes an airplane fly? Money. Come help us spend some of it during AOB week May 16-20 at Harnett Regional. Nothing beats the feel of a great landing. “Stay safe, stay sane.” 🧡 Lt Col Urbanek 🧡

1b. April Highlights: For the month, NCWG flew ~**305 hrs**: about 157 hours less than of March’s 462 hours. NCWG again supported, albeit a smaller, US Army air traffic control training operation. It was the same sized tower; just less airplanes. And not too many sorties as the weather didn’t cooperate. **N908CP** came back on line after strong passing winds had pilots refusing to fly her. The Glider should be returning to service as you’re reading this (if you read really slow), after her annual which included, among other repairs, all new control surface skins.

1c. Top Hour Flying Aircraft/Squadrons: NC-019/KAVL should hit **100 hours** between **N99885**, **N99832** and **N963CP**. NC-048/KRDU - **N819CP** and **NC-082/KINT – N405CP**, **30** and **26** hours respectively. **NC-145/KLHZ-N938CP** and **N7360C** both flew nearly 20 hours. Unfortunately, did to maintenance, weather or aircrews, **4 aircraft flew less than 10 hours each**. May numbers should be better with a five-day, US Army AOB mission mid-month.

1d. Top (Hours) Pilot for April: (as of 29 Apr) Since these numbers are a little early, the totals should change: **Gary Shelley, NC-057 13.9 hrs**, **Robert MacPherson, 13.6 hrs**, **Cliff Herring Jr, NC-171, 12.5 hrs** & **Rylee Emaus, NC-124, 11.1** top the leader’s board. But don’t count out, **Benjamin Bashinski, NC-019, 6.6 hrs** who has a full day of orientation rides planned for 30 April. **The Top ‘C’ Hours pilot currently is: Ernest Williams, NC-160** with 3 hours.

2. Maintenance Month in Review: Brunswick Airworks (formally Cape Fear Airworks) was approved as a CAP contract maintenance facility which includes the **Elon Aviation** facility up in Burlington. Other [great news](#) is that **Total Flight Solutions** just added a paint shop at Halifax. **N819CP** is their first airplane and going in o/a Monday.

2a. Aircraft in Annuals:

N716CP, ‘Caroline’ has reached engine TBO, flown to KLHZ on 12 April and had its 100-hour inspection along with the [engine change](#). Also, a [taxiway light](#) was replaced as well as the [left main tire](#). Normally, the propeller and governor would also be overhauled but that was recently done last year. The aircraft should be home any day now.

N963CP: ‘Gumby’ needed a [new landing light](#), and its [exhaust pipe](#) has a hole in in; at least its outside the cowling. N963CP is due for a [propeller governor rebuilt](#) and its [biannual corrosion protection](#).

N437BA (glider): CAP’s glider working group levied some new tracking requirements on gliders to in addition to the annual requirements, these issues were researched and uploaded into AMRAD. The [control services were reskinned](#), [pitot static lines replaced](#), [canopy lock and front seat issues](#) also resolved. N437BA is coming out of annual; ‘soon.’

2b. Other Maintenance Issues: NCWG fleet [oil changes](#) included: **N726CP** and **N99885**

A lot of issues this month. Seems Lt Cols Bailey, Davis and I answered more calls than the Suicide Prevention Hotline after a State of the Union address. **N405CV's** sun-deflection shield finally wore out & another was bought. **N98426** got its magnetometer replaced. **N726CP's** electrical over charging issue re-appeared and the voltage regulator was changed out. Overcharging will cook the battery; hence both the digital readout and the warning light. **Benevolent NHQ** purchased SAR enabling programs for the Garmin GTN 650 units. **N7360C, N908CP & N98426** are getting upgraded at **KLHZ** as the new SD cards just arrived. **N741CP** flew to **KBUY** to have its propeller overhauled. Another one of our G1000 aircraft's Comm 1 seemed to lose its listening capability. It still transmitted though; similar to some people. We should have asked the obvious, but finally someone did and found the volume was turned down. Glad it was found before moving the aircraft to maintenance. **N179CP** got its roll servo replaced. **N819CP** needed new navigation tail light, taxiway landing, and beacon lights. Is it fair to say there wasn't a bright bulb left in that aircraft? **N726CP** had issues turning left; apparently, some binding issues due to dry pullies. A little lubricant went a long way. **N99832** needed a new flap motor. **N908CP** finally got its aileron pushrod replaced. As we know, parts take longer to arrive. **N99885** has a static wick installed as one had deplaned. Finally, **N4813C** got a cup holder (\$12 from eBay).



Missing Access
Panel under tail

2c. Hasty Pre-Flights? A little birdy told us a squadron wasn't doing a complete job with pre / post flights. Actually, not the bird, but the nest he built in the horizontal stabilizer. While pilots may point fingers at maintenance, the last 100-hour inspection was four score minus seven hours ago. Not sure what type of fowl built it, but it was a pretty smart bird to hitch a ride instead of flying north after winter. We do know that a 'Phillips' clawed, blue breasted, old buzzard reinstalled the fabricated replacement access panel. As a lesson learned, please remember to check the underside of the aircraft when conducting your pre-flight.

2d. NCWG's Next Airplane: Most pilots are wondering when NHQ will be providing the C-182 promised when NCWG traded N358CP to UTWG (& subsequently retired N9930E). Considering **N7360C** has a new instrument panel, **N716CP** got a rebuilt engine installed, a paint job and all new fairings are coming for **N819CP**, along with all the parts listed above in green, NHQ has already bought us all the pieces for a new airplane. It's the cost of doing business with the region's oldest airplanes; average age is older than all our cadets. Even our C-206 is older than many of our Lt Col's but is in better shape than most. Just a shout-out to our esteemed NHQ leaders who still owe us an airplane (or 2?).

3. Aviation Maintenance Support Information:

3a. New CAPF-71: As mentioned, the CAPF-71 was upgraded; more like put on steroids – see attached. Because it is some much more work, NCWG has changed its policy to only require it twice year; in April and October's first week reporting. Save the current Form 71 (tab 2 of the AIF). Crew chiefs will still use the new automated end of month checklist on our NCWG website: <https://ncwg.cap.gov/directorates/operations/aircraft-maintenance/amo-end-of-month-reporting>. And, you might have heard this 100-times, remember to sign off the items in the AIF tab 3 (VOR & Fire Extinguisher).

3b. SOAP (Engine Spectrometric Oil Analysis Program): I notified all of our maintenance shops (cc: crew chiefs) to use NCWG's ac-maintenance@ncwgcap.org email on their oil analysis submissions. Once received, we'll forward a copy to the crew chief to print and put in engine logbook (per CAPR 130-2). Also, I've advised the shops of the NCWG standard oil change qualities: **7 quarts for a C-172, 8 quarts for a C-182 and 10 quarts for a C-206**. It'll be about a ½ quart less on the dipstick as some oil will get stored in the oil filter. No sense overfilling and having that excess oil covering the bottom of the fuselage. Speaking of SOAP: CAP only does it during the 100-hour; and after engine or cylinder break-ins. But not normally at the 50-hour oil change. Penny-wise and pound foolish? With ~560 airplanes, 2-6 times/year, it's a lot of pennies we're talking about. Just another CAPR 130-2 maintenance policy we learned.

3c. What's in the bag? NCWG has, what should have been considered, a commendable logbook tracking program. We not only keep our logbooks in a 'to go' bag, but we also a virtual copy on a shared drive. But how do we know we haven't misplaced one/some along the way? The new CAP Form 71 (are you loving it yet?), item 1.i. requires accounting for all aircraft logbooks since new. How would you know? I'll be working with the crew chiefs to develop a luggage tag for each logbook bag. This way there will be an inventory...which will change as you need more logbooks. Speaking of which, we do have some blank ones when you/maintenance shops needs another.

3d. GPS database cycle 2204 including terrain and Safe Taxi's current cycle started 18 Apr. Your G1000 display should be all white, not yellow, with the current databases loaded. As always, remember to tell AMRAD about it.

3e. Stop me if you heard this: All aircrews members should all get their NCWG vehicle driver's license. It's your **plan 'B'** if the plane/pilot/weather prevents you from returning home. Most locations we fly to has a CAP vehicle; free for the taking, if you have a NCWG Driver's license. Yes, there is learning, as our vans are top heavy & cadets could be passengers. Find more information in Attachment 1 of Jan 2022's Riveting Reading-Vol #50; available on our NCWG/Ops/Mx page.

3f. Clean Machines: NC-170 washed and waxed N179CP. NC-048 scrubbed N819CP just before it goes to the paint shop. NC-082 washed N405CV & NC-023 cleaned N908CP at the end of March. This leaves N262CP & N741CP as **overdue**. In May, the aircraft needing cleaning include: N727CP, N938CP, N726CP & N7360C.

4. Real Aviation Entertainment: Your reward for reading this far, if you haven't heard about the Red Bull airplane swapping stunt, is a Paul Bertorelli (AVWEB) analysis and YouTube video. It's almost 9 minutes and interesting take on the event. CAP leadership and lawyers would want me to remind you, despite having access to identical looking & painted CAP Cessna Skylanes, "don't try this at home".

https://www.avweb.com/multimedia/votw/plane-swap-gone-half-bad-faa-not-amused/?MailingID=904&utm_source=ActiveCampaign&utm_medium=email&utm_content=SubSonex-Based+Drone%2C+Plane-Swap+Gone+Half+Bad&utm_campaign=SubSonex-Based+Drone%2C+Plane-Swap+Gone+Half+Bad%2C+Wednesday%2C+April+27%2C+2022

5. Thank you all for the support & taking the time to read this Riveting Reading. All the Riveting Reading newsletters are available on the Wing website (NCWGCAP.org) under 'Members/Operations/Aircraft Maintenance.' QQ

- Stryker -

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1 Attachments

1. CAPF 71 (separate file)