

“Riveting Reading”

Civil Air Patrol
North Carolina Wing
Aircraft Maintenance

July '21. Vol #44

By Lt Col Martin ‘Stryker’ Heller



It Doesn't Take Much to Become 'Uncivil'. (Left) Retired N9930E now stripped of its CAP decals for its pending sale.



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

1. **Motivational Quote:** ‘G-d helps those who help themselves... and G-d help those who don't....’ sic.. [Sophocles](#),

1a. NCWG Director of Stan/Eval (NCWG/DOV) Comments: The next CT will be July 15 at 19:00. Please mark your calendars and watch for an invitation. Subject will “Preparing for a CAP Form 70-5A Check-ride.”

1b. June Highlights: The US Army Airfield Operations Branch (Air Traffic Controller training) 23-29 June was the huge, all-aircraft plus, planned event. Realize that NCWG is down four aircraft. We all know **N9930E ‘Thor’** was sold off without a replacement in April. Remember that we’re still awaiting the replacement for **N358CP (Mesa)** traded away more than two years ago. In addition, **N938CP & N963CP** (both FLIR equipped) are still NMC. **N938CP** is down in Alabama for the Aero-net radio install but was grounded by the FAA. **N963CP** is having engine noise issues, and relocated to **KSUT**. Despite the summer thunderstorms, **NCWG flew ~ 490 hours, 127 more** than June’s 363 hours. We also flew flights for the Air Nat’l Guard at Stanly County (**KVUJ**), besides our normal operations and training.

1c. July Forecast: Three of NCWG’s C-172s are being lent for two weeks to MAR’s Nat’l Flight Academy at Camden, SC. (KCDN) from ~8 →25 July. NCWG won’t be flying cadet orientation rides summer encampment as Fort Butner is far from an airport. Instead, another, all-airplane AOB mission is occurring 26-29 July at KRCZ & KMEB.

1d. NCWG/DO Recognition: On June 19th, **Lt Col Matthew ‘Lobster’ Urbanek** was presented with a traditional Director of Operations shadowbox. He was quite surprised, especially as this box is normally a going away gift and he hadn’t been informed. (JA) Being Juneteenth, he realized he is now free to volunteer his time. The shadowbox contains patches of all functional areas under his purview including: Operations, Stan/Eval, Emergency Services, Aircraft Maintenance, Orientation Rides, and Glider Ops. Since the UAV program does not yet have a patch, a X-Mas tree ornament was used to represent that function. Besides the Wing coin, it displays a North Carolina flag which had been photographed with every NCWG assigned aircraft. On the back of the shadowbox is the photo record for proof. Don’t worry, **Lt Col Urbanek** isn’t going anywhere soon.



1e. More Recognition: A big shout out to **Lt Col Chris ‘Chihuahua’ Bailey** and his team for all the planning, coordination, logistics, and operational issues for the US Army AOB mission this week. Also, to **Major Patricia Moody** who takes command of **NC-082** but gives up the Wing’s cadet orientation ride program. That position is now available; one doesn’t need to be a pilot to manage the program.



1e1. The 23-29 June AOB mission Statistics:

Total Flights: 124 Canceled Flights: 68 Aircraft Involved: 18 Total Flight Hrs: 301 Volunteer Personnel: 107
Total Aircraft Cost: \$27,620.40 TTL Fuel Cost: \$13,447.57 Total Cost: \$41,067.97 Ave Cost/Flight Hour: \$ 136.44

1e2. Top Hour Flying Squadrons: Your crew chief is able to tell you how many hours your squadron flew. After all the crew chiefs submit their monthly reports, the NCWG/DO compiles them on the CAPF 18. About the 3rd week of the month, you can see the whole wing at: <https://www.capnhq.gov/WMIRS/Utilization/WingMonthlyReport.aspx>. One can also see how they are doing for the year, hours in mission types, who flies more or less than your unit, etc.

June flying was significant: Rough numbers show **NC-019/KAVL flew about 88 hours: N99885 60.3 hrs** as N963CP only got 3.1 on a move from Belle Aviation to Cape Fear Airworks. NC-019/NC-082/KINT flew another 45.3 hours on N405CV. NC-022/KBUY flew 40 hrs on N262CP /NC-023 – 38.5 hrs on N908CP / NC-305/KECG – 37.8 hrs on N741CP / NC-121/KJQF – 37 hrs on N716CP/ NC-170/KSUT--36.9hrs on N179CP/ NC-082/KINT-- 33.6 hrs on N99832/ NC-171/KFAY flew 30.7 & 22.8 hours on N727CP & N4813C respectively/ NC-145/KLHZ flew 28.9 hrs on N7360C & KEWN/NC-160 flew 28 hrs on N98426. Only one functional airplane didn't hit but close to NCWG's 20-hour goal.

1f. Junes' Top Left Seat time is found in WMIRS: <https://www.capnhq.gov/WMIRS/Reports/PilotSummaryReport.aspx>. Downloading to Excel, you can also see who flew the most 'C' Hours. If you flew left seat for the time period you selected, it will list you. Another more important report is the mission participation. You can download your air or ground sortie history, as early as FY2015. This can help you earn the 'cadet orientation ride ribbon (50 cadet seats) or Homeland security Ribbon (10 AOB sorties). Even if you're not a pilot, it will show every sortie that you have been listed, no matter the role...even as a passenger. Lots of filter & sort options (WMIRS is a giant database). Save the info as an excel spreadsheet to track your history. Without digging into who spent a lot of time in the right seat on the AOB missions, the following pilots stood out.

Pilot	Squadron	A Hours	B Hours	C Hours	Total Hours
Herring Jr, Morris C, Capt	MAR-NC-171	14.5	8.7	0	23.2
Shelley, Gary M, Capt	MAR-NC-057	18.8	4	0	22.8
Moore, Jason D, Capt	MAR-NC-143	0	14.4	0	14.4
Phillips, John R, Major	MAR-NC-023	8.5	5.6	0	14.1

2. Maintenance Month in Review:

2a. Aircraft in Annuals:

N262CP (George): Nearly at 1,000 hours, the magnetos needed overhaul, new master and avionic switches, a look at the autopilot which tends to fall off line, seal around the left seat window, and an IFR certification.

N99832 (Spartacus): Arriving on 30 June, **N99832** just had some trim touch up issues, & maybe a new DG.

2b. More Maintenance Actions: N405CV: "Loki" had its corrosion protection, a seatbelt untwisted, its battery serviced and its propeller dressed. Later it had its yoke trim switch fixed as it has intermittent operation when using nose-up trim, & the right window won't latch. The #4-cylinder temperature gauge stopped working and will be fixed next annual. **N726CP:** Oil change went quick but the (getting really hard to find) strobe light kept **'Betty'** on the ground a few days due to the KOEL. **N98426 (Sarah)** had its window hinge repaired. Later, **N98426's** G500 went on the fritz and was replaced up at Triangle North. **N908CP (Flo)** had one of its two vacuum pumps fail, got fixed as part of an early oil change and also the biannual corrosion protection we deferred since at the last 100-hour the flaps, cowling and ailerons were painted. We also discovered the auxiliary power supply jack was wired backwards, blowing several of those plug-in USB adapters. Two days later, the nose strut seal failed, so **'Flo'** returned to KSUT for rebuilding the next day. **N819CP Tow Hook status:** The new tow hook, and (old) sideview mirror are at KSUT waiting for **'Dixie'** to make it down; sometime after the AOB missions. **N4813C's (Frank)** flaps got stuck down again. American Aviation opened a maintenance shop at **KFAY** and they cleaned and greased the flap tracks. Since they couldn't duplicate the problem on the ground; the crew chief flew it as a proficiency flight and they worked fine.

What wasn't working was the clock. Our crew chief discovered a blown fuse saving CAP from wasting a few hundred dollars on a replacement...simply awesome work by **SMSgt Paul Van Wagner**. Later, **N4813C** had an oil change just in time for the AOB mission. **N4813C** windscreen is leaking a little -- something for its next 100-hour inspection. But then the flaps issue resurfaced...tbd. **N741CP's (Bleu)** rear window leaked badly in the heavy rain. It was resealed along with an oil change. **N437BA** (glider) received new tow ropes. **N99885 (Echo)**, **N716CP (Caroline)** and **N179CP (Sandy)** also had oil changes during/after the AOB. So that's at least seven oil changes this month on NCWG aircraft.

N963CP (Gumby): *Maybe it should be renamed "Grumpy" for all the noise it's been making.* The consolidated maintenance facility at Asheville, did more trouble-shooting, and changed out the pushrods on two cylinders. The noise changed, but didn't go away. Another FAA ferry permit later (the first one expired and can't just be extended), Asheville pilots flew N963CP to KSUT for a different set of eyes to trouble-shoot. Checking the 3-hour-old oil turned up brass flakes. We're awaiting the metallurgy report which tells us what part is made from brass & then press on.

3. Aviation Maintenance Support Information:

3a. GPS database current cycle (2106) started June 16th. *Please* update both changed & next due dates in AMRAD.

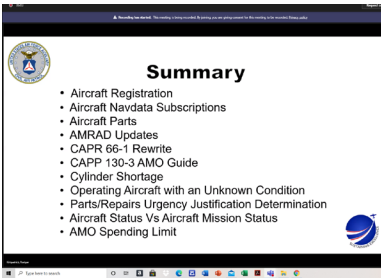
3b. Clean Machine/Dirty Bird List: AMRAD aircraft data shows when the crew chief last updated AMRAD for the aircraft wash & he/she should update its next due date. It can be found manually in AMRAD, or by those who have 'Aircraft Maintenance' tab which reports on nearly everything. We grounded two aircraft this month as AMRAD indicated these aircraft hadn't been washed in more than 12 months. One of those did get washed, but the other one actually had been, but no one updated AMRAD. Both have been returned to flying status. In perhaps unrelated news, photos below show a huge turnout for **NC-121 pilots washing N716CP at KJQF.**



3c. Survival Kits: Since many kits don't 'expire' until 31 July 2022, we'll replace the water and batteries on those kits that pass through KSUT, or during other opportunities, extending their expiration date 3 more years. →→

3d. NCWG Special Missions Calendar: New product is found at: <https://ncwg.cap.gov/directorates/operations>

3e. Pilot Tip of the Month: The FAA has created a series called, 'From the Flight Deck' where they show hotspots and other potential taxiing issues at various airports. None are in the Mid-Atlantic Region yet, but the series is done well. In true FAA form, the list is a news release: https://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=25940 But the actual information is in an interactive map format: https://www.faa.gov/airports/runway_safety/videos/.



3f. CAP AMO Quarterly TEAMS Meeting: On June 22, NHQ/LG hosted a 90-min, quarterly aircraft maintenance meeting. You're more than welcome to attend future meetings. Links to previous meetings, the new CAPP 130-3 (everything you wanted to know about being an aircraft maintenance officer, but were afraid to ask), other resources and aircraft sales are on the NHQ/LG webpage at: <https://www.gocivilairpatrol.com/members/cap-national-hq/logistics-mission-resources/aircraft-management>. That link is also on the bottom of the AMRAD webpage (which you'll find in eServices, under 'Logistics.')

3f1. Some Key Information Covered in the June 22, Quarterly AMO TEAMS meeting:

- i) **CAP received six new aircraft from the factory.** NCWG's new C-182 is in the next buy; maybe here in Aug.
- ii) **Aircraft Registration: Don't** update the Aircraft Registration block on AMRAD to show the date on the new aircraft registration when you get it. NHQ uses that block to show the date they sent in the registration renewal back to the FAA. Instead, **just update the 'registration due' date** as that is not automatic field.
- iii) There is a piston shortage. Every new cylinder, whether Lycoming, ECI or Superior uses a Lycoming piston. So not only for new aircraft, but engine field repairs, and rebuilding engines will take longer. NCWG isn't due to change an engine for 2→3 years, but never know when we'll need a cylinder; expect longer lead times.
- iv) With the new CAPR 130-2, (supersedes CAPR 66-1) expected out in August, AMO's authorization without asking permission raises from \$500→\$750. We were explicated told that *'we can't use it to buy fuzzy dice.'*
- v) **Parts:** Short version: Parts are scarce, thus harder to come by and have longer lead-times, NHQ/LG doing all they can, and using PMA instead of Cessna parts is more than fine. Sometimes, our vendors have sources NHQ doesn't see, and often okay to use.
- vi) **Becker-less:** New C-172s coming from the factory won't have a DF search system, but C-182s & C-206s do.

3f2. Some Key Information covered in the meeting that is actionable to you:

- i) AMRAD now has separate glider page format. We're working to repopulate the old and record new data.
- ii) The Aircraft Maintenance Officer training pamphlet, CAPP-130-2 was published in April & available on-line.
- iii) AMRAD 'AMF' (Aircraft Maintenance Facility). If you need to add one while entering a discrepancy, and aren't positive what shop will fix it, you can use the 'UNKNOWN' choice available in the pull-down menu.

3G. Used CAP Aircraft for Sale: NHQ/LG advises "We will not be sending out notifications of CAP Aircraft for sale in the future. If you would like to receive notifications of all future CAP Aircraft that are made available for purchase as soon as they are offered for sale, please go to our Aircraft Broker's website [Fresh Aircraft Sales \(https://www.freshaircraft.com/\)](https://www.freshaircraft.com/) and add your email to the link at the bottom for prompt notification. At this time there are two CAP Cessna 182R models available for sale on their website. We (NHQ) will be adding a 172N and another 182R in the next week or so..."

4. Miscellaneous:

4a. National CAP Conference (Aug 12-14, '21): It costs money even to put on a virtual conference. **If you don't register by 12 July**, you might have a registration fee. <https://civilairpatrol2021.pathable.co/register-here>.



This is not 'Line up & Wait' according to FAA definitions.

4b. FAA names changes: An FAA committee recommended changing the terms 'Cockpit' to 'Flight Deck', 'Airman' to 'Aviator' and 'Unmanned Aerial Vehicle' to 'Un-crewed Aerial Vehicle' in order to promote women participation in flying. <https://www.businessinsider.com/faa-recommends-airlines-remove-words-cockpit-airman-for-gender-neutral-2021-6>. Of all the problems facing the FAA, I'm glad this seemed to be the most important to resolve. Women aviators should now rush in. Honestly, I tell a lot of bad jokes, but I can't compete at this level.

5. Thank you all for the support & taking the time to read this. Riveting Reading is available on the Wing website (NCWGCAP.org) under 'Members/Operations/Aircraft Maintenance.' For questions, call 703-732-3264. →→

- Stryker -

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