

## “Riveting Reading”

Civil Air Patrol  
North Carolina Wing  
Aircraft Maintenance

June '21. Vol #43

By Major Martin ‘Stryker’ Heller



NCWG aircraft protected by NC-019 at KAVL. – Photo by Lt Col Davis

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

**1. Motivational Quote:** “You can look for external sources of motivation and that can catalyze a change, but it won’t sustain one. It has to be from an internal desire.” —Jillian Michaels

**1a. May Highlights:** NCWG lost the use of two more aircraft; **N938CP & N963CP** (both FLIR equipped) besides having **N9930E** retired in March. **N938CP** went to Alabama for the Aero-net radio and was grounded by the FAA. **N963CP** is having engine noise issues, and we’re working options as days of trouble shooting haven’t resolved the source. These aircrafts return to service is unknown...more info below. **N98426** also is grounded awaiting a window repair. We’re not expecting the new C-182 until late next year. Still, **NCWG flew ~ 360 hours, ~30 less** than April’s 390 hours. **NC-019** hosted the annual **Mountain Fury** training, signing off 18 pilots on mountain flying while logging ~38 hours for the weekend. Cadets received flight line marshalling training as well. **NC-019** has also held a **National Flight Academy**, where cadets learned to fly, and seniors learned to flightline marshal. We also flew flights for the Air Nat’l Guard at Stanly County (**KVUJ**).

**1b. Top Hour Flying Squadrons:** **NC-048/KRDU** flew **N726CP** an amazing 48 hours; good enough for second place. **NC-019/KAVL** flew **N99885 50.1 hours for top honors** besides flying **N405CV (39.6) & N99832 (34.5)** and also having many of their pilots fly right seat for Mountain Fury or Cadet National Pilot Academy training. More accolades to: **NC-022/KBUY, N262CP (30.8), NC-171/KFAY, N727CP (25.1) NC-162/KSVH, N819CP (20.2) and NC-145/KLHZ, N7360C (20.1) hours.**

**1c. May’s NCWG Top Left Seat time pilots are:** **Capt Cliff ‘Beast’ Morris, NC-171** (again) 12.6 hours, **Lt Greg Brown, NC-145, 11.8 hours,** and **Capt Don Williams, NC-048 10 hours.** **The top ‘C’ Mission pilot was: 1<sup>st</sup> Lt Michael Pacacha, NC-160/KEWN for 4.5 hours.**



**1f. Recognize This Guy?** NCWG did. On behalf of the Operations Team, **NC-019 (Asheville) Commander, Lt Col Lincoln Carlisle** presented a NCWG Flag\* box to **Lt Col Ray Davis**, for his continued support to the NCWG missions. More than 50 members were in attendance. **Lt Col Davis** has managed 14 Mountain Fury events, several National Flight Academies, serves as both the assistant squadron operations & Stan/Eval officer along with being the crew chief for two aircraft, NCWG west region maintenance coordinator & more. **Lt Col Davis** also helped lead the effort to turn an open hangar into a CAP home with command, communications, cadet and meeting space. No wonder **NCWG** selected him as **Senior of the Year in 2016**. **Lt Col Davis** was also presented with a poster from his early CAP recruitment work while flying with the US Army Air Corps Auxiliary.

\*NC Flag was flown in all NCWG aircraft; Inscription reads, ‘Gives So Much, Asks So Little.’

**2. Maintenance Month in Review:**

**2a. Aircraft in Annuals:**

**N98426 (Sarah):** (Hold over from April) Passed the Wing Strut attachment AD inspection and was the last of NCWG’s five aircraft vulnerable to that pricey repair. The left fuel sensor was bouncing around and sent out for rebuild. Apparently younger pilots don’t appreciate needles that flick and rock. But it still does, and finding another fuel

gauge is the next challenge. The left shoulder seatbelt guide, left aileron rod end bearing, and a new top, left door, hinge pin replaced. With everything right, **N98426** left KSUT on 14 May for **KEWN**.

**N99885 (Echo):** More southpaw stuff; replaced left brake linings, repaired left rear engine baffle, replaced 3 post lights, received bi-annual corrosion protection. Inspection completed on 21 May at home station in Asheville.

**N963CP (Gumby):** **Gumby** made it out of annual; just not airworthy. An oil pressure switch was replaced, the propeller dressed and the magnetos sent out since they had oil inside. See below.

**N262CP (George)** goes in for 100 hour/annual on Tuesday, in early June at KLHZ. →→

**2b. More Maintenance Actions:** **N963CP (Gumby)** had some unusually engine related noise. Both magnetos were sent out for rebuild since they had oil inside -- Noise still remained. We thought it could still be a magneto issue so **N405CV** became a test magneto donor on a day trip out to **KAVL**. Trading magnetos didn't alleviate the problem and we thought **N963CP's** engine will be removed and sent off for teardown. That idea was just nixed and we're seeing if we can relocate the aircraft to another shop. **N405CV** got an oil change, its battery serviced & is up for corrosion protection. **Loki** will stay at **KAVL** until **N963CP** is airworthy and home.

In the meantime, NHQ directed **N938CP** travel to 79J (South Alabama Reg'l – 500NM away) for an AERO-NET installation. The NCWG operations staff advised several concerns including the fact that both NCWG Forward Looking Infrared (FLIR) aircraft will be out of service at the same time. Undaunted, our *FLIR-less* leaders directed us to press ahead due to NHQ priorities. **N938CP** was supposed to return June 1<sup>st</sup>, but some FAA concerns grounded all CAP Aero-net installed aircraft -- Stay tuned. In more local news, **N963CP & N99832** had their biannual pitot static/IFR certification. **N99832** was loaned to **NC-019** for the Flight Academy & also Mountain Fury. While there, it had its directional gyro replaced one day, the starter wire from the ignition switch fixed another day, the oil changed on a different day & the oil temperature gauge wire fixed yet another day and the day after that as well. Turns out the wire was bad in two locations. **Belle Aviation Maintenance** must have good coffee *beside great service*, as Lt Col Davis was there every day for a week or so. **N99832** went back to Winston Salem on 26 May.

**N908P** had one of its two vacuum pumps fail. Then its alternator failed too. Turns out the control tower declared an emergency and fire trucks were there to greet the landing. Nearly two weeks later, the FAA called to discuss & clarify. So, if you get met by fire trucks on landing, you might want to let leadership know. The pilot handled the flight and the phone call perfectly. BTW, the alternator was fixed at home station. Turned out to be a broken wire. **N727CP** needed an oil change and its compass housing re-glued to the windscreen. There is a special adhesive referred to as 'Compass Glue.' But that would actually be self-defeating. While waiting for the glue to dry, aircrews did a soil analysis next to the water front. In the meantime, the aircraft battery was serviced, and the idle adjusted. **N4813C's** flaps started getting very comfortable in the down position and didn't want to retract. After playing with the switch, the problem went away & the crew could not duplicate. Don't worry—the problem may return soon. **N98426** (Sarah) pilot window's hinge broke, grounding the aircraft. Pending repair as we go to press.



**2c. Whose Knees Are These?** They belong to the mechanic servicing a C-182 aircraft battery. Hidden behind the baggage area rear wall, batteries are hard to access. NCWG has requested maintenance shops service the batteries while doing the 50-hour oil change besides during the 100-hour inspection. It costs more, but less than replacing batteries at >\$500 each.

**2d. 'Weight for It:'** Last month's RR has a feature on excess pounds in the aircraft. It motivated one crew chief to weigh the material in the cockpit and baggage area: **58#s**; nearly 20 more pounds than what's on the NCWG webpage W&B. This is the second plane considered obese. So, I checked our squadron's airplane: **43#s**; pretty

close to the 40# set value. We'll be doing more checks and might be changing the default on all aircraft. Speaking of checks, with all the NHQ & USAF attention to detail, please make sure your AIF is up to speed; especially for those aircraft passing through **KSUT** or the stationed on the **KLHZ—KRDU—KBUY—KINT** threat line. →→

### 3. Aviation Maintenance Support Information:

**3a. GPS database current cycle (2105) started May 20<sup>th</sup>.** Please update both changed & next due dates in AMRAD.

**3b. What's in that Survival Kit Anyway?** Since we seal those orange Pelican cases, you might wonder what's inside. Some water, two MRE's, a minor first aid kit, a flashlight & batteries (some assembly required), even a solar blanket. But if it wasn't for this newsletter, how would you know that? Easy; just read, NCWG's Sup 1 to CAPR 66-1, 22 August 2019, attachment 2, which is found in Tab 12 of your AIF. And aren't those orange Pelican cases great? No more soggy cardboard boxes in the back of your aircraft. NCWG/ AMO tried twice in May to update the batteries & water to extend their expiration date; but both meetings cancelled. Perhaps, if there is a June Wing meeting, we will be successful; else it will happen at the NCWG summer encampment. →→



**3c. Clean Machine/Dirty Bird List:** According to AMRAD (as of 29 May) **N716CP\***, **N437BA**, **N726CP** & **N908CP** are overdue. \*Wash planned 6/1. **Recently washed aircraft include: N963CP, N99885, N99832, N819CP, & N741CP.** No additional aircraft are due in June. →→

**(Left) Seniors of NC-171 washing N4813C (Frank) at Fayetteville Regional Airport (KFAY)**

**3d. Pilot Tip of the Month:** Krispy Cream Donuts has an app that lets you know when the 'hot' light is on at your local shop. Honestly, with ~ 120 pilots, I was hoping someone would contribute something more substantial.

### 3e. Hitting the Links: (These might be useful web addresses):

NHQ/DOV also has a newsletter. See all 2021 versions at website below (& you thought my RR was long.)  
<https://www.gocivilairpatrol.com/programs/emergency-services/aircraft-operations/standardization--evaluation-newsletters>

**2021 AirVenture Notam:** <https://www.eaa.org/-/media/Files/AirVenture/FlyingIn/NOTAM/2021/2021-NOTAM.ashx>

*Some of the 2021 changes include: New ATC-assignable transition points approaching Oshkosh from the west that will ease holding and congestion. These points are at Endeavor Bridge, Puckaway Lake, and Green Lake. They will be announced on the arrival ATIS when ATC puts them into use at times of highest traffic flows. Different start and ending dates for the NOTAM. The temporary Runway 18L/36R at Oshkosh (KOSH) has been reconstructed and is now 60 feet wide. Two VORs have been decommissioned (FAH and IKK). Numerous editorial changes.*

*(By the way, AirVenture is the same week as NCWG's summer encampment at Fort Butner (NC24))*

AVWEB 24-minute segment on why aircraft engines quit: <https://www.youtube.com/watch?v=mwpzTnLC8BY>

**4. 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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