

## ***“Riveting Reading”***

### **North Carolina Wing Aircraft Maintenance**

**July 1, '19. Vol #20**  
*By Major Martin ‘Stryker’ Heller*



*Before & After photos of N727CP's seats. Lt Col Davis coordinated*

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

**1. June's highlights:** The second week of June was another Army AOB training mission; although the rain vastly hampered that effort. NCWG Summer Encampment followed a few days later. But as they say, ‘Can’t stand the heat, stay out of Stanly County.’ Maybe they don’t say that out loud, but the blistering temperatures terminated cadet orientation rides after their second flying day. Mid-Atlantic Region’s Nation Flight Academy followed but didn’t really start until about the last day of the month. **N99832, N98426 & N726CP** are supporting it in Camden, SC (CDN). So, June flight hours were much lower than hoped, around 460 hours. That’s 30 hours more than May, but 240 hours less than last June’s phenomenal 704 hours. Still, it was a lot of work. **Ashville (NC-019) lead the way with 51 hours on N99885 and 45 hours on N963CP.** Do the math; AVL flew >20 percent of NCWG hours in June. Honorable mention goes to **Raleigh (NC-048/N9930E)** and **Concord (NC-121/N727CP)** with almost 40 hours on their aircraft. **Fayetteville (NC-171/N4813C)** had nearly 35 hours, and that included 3 days of NMC. To be fair, **Elizabeth City (NC-305/N741CP)** also had ~35 hours. The good news is that NCWG is still #1 in hours/aircraft; but not by much.

**2a. Maintenance Month in Review: 100-Hr/Annuals:** **N7360C’s (Lola)** challenges didn’t end. NHQ decided to rebuild the engine instead of replace it. The engine was crated up and sent away to Oklahoma for repair. (photos next page). In the meantime, a new service bulletin (SEB 93-5 for Cessna 206’s) came out regarding the “Lower Forward Door Post and Strut Fitting Inspection and Modification.” Sure enough, Lola’s was cracked and needed repair (No, it doesn’t affect C-182s for those who asked). Also, after pulling the engine, some ‘tunnel cracks were found & repaired as well. Its right elevator and trim tab are also being replaced. NHQ considered retiring **N7360C.** But even with its issues, our C-206 is in great shape, & a replacement aircraft is more than 10 times the cost of the repairs, if you can find one. Thus, Lola is staying!!

In related news, **N262CP, N963CP, N716CP, N741CP, N726CP and N727CP** were expected due for their 100-hour inspections but the shortened Summer Encampment flying season/wild weather slipped maintenance to the right. **All but N726CP** (which went to MAR-NFA) went into annual by month’s end or will, the first week in July.

**2b. More Maintenance Actions:** **N963CP** had its oil changed on the last day of May; significant since **NC-019** flew so many hours in May and June, it needed another 100 hours/annual 30 days later. **N179CP, N4813C, N99832, N819CP, N99885 & N9330E** also had oil changes. **N727CP** had its front seats re-upholstered as foam was showing (photos above). **N9930E** (Thor’s) number 2 radio (KX-155) was switched out so the aircrew could actually see the digits (see May “RR” edition for history). **N99885** needs a new VOR/ILS Nav head and **N99832** swapped its #2 KX-155 radio too; seems 34-year-old avionics doesn’t hold up. Just before the trip to maintenance as crew chase for **N262CP**, the carb heat door came off; and was reattached while at KSUT. Another day, **N99832** lost a door hinge pin. **Crew Chief Lt Andrew Mabe**, not only spotted it, but had spare AN415-2 hinge pins, and put one in each of KINT’s aircraft. **N716CP** replaced its ELT battery. **N819CP** had some high oil temperatures; seemed to be worn wires on the gauge; fixed at the same time as the oil change...so we thought... problem re-appeared and NHQ ended sending them a new temperature gauge. **N405CV** air aborted on the way to Summer Encampment due to a runaway rudder trim issue. It’s been sitting for more than two weeks awaiting local maintenance to look at it. **N4813C** had a brake fluid leak, got its oil changed a few hours early to fix the chaffed brake hose simultaneously.



(Above: C-206's engine; now you see it, now you don't. N99832 door hinge pins and location)

**3a. Admin Tidbits:** Aircraft Information Files (AIF) updates: Last change was: 23 April 19 with new mission symbols. As a reminder, the National CAP Operations webpage(s), full of good guidance, is found at: <https://www.gocivilairpatrol.com/programs/emergency-services/aircraft-operations>

**3b. Sat, 20 July is NCWG/ES exercise day.** All CAP aircraft and vans are expected to participate.

**3c. Jeppesen Distribution Manager** has been updated: For those operations personnel who didn't do the GPS update this month, be aware you'll need to update the program. Passwords remain the same.

**3d. Please Feed the Electronic Beast:** WMIRS is CAP's know all, data system. More than just logging flight times, be sure to keep the maintenance work, discrepancies, and aircraft location up to speed. It's our 'go-to' source for fleet status, & if your aircraft is NMC, or relocated, it needs to show it. It's also our memory for repairs, as some problems re-appear. Most folks are good at this; but we need everyone to help.

**3e. New Aircraft Checklists:** Lt Col Bailey finished distribution of the smaller, nicer, spiral bound checklists.

**3f. Aircraft Survival Kits;** (repeat) Many kits have already been rebuilt with fresh batteries and MRE's. They are being distributed as aircraft cycle through maintenance at KSUT, or as opportunities arise. The new pelican cases are smaller but deeper than the cardboard boxes. The kit weight is 10-pounds, a 2-pound increase. Some of those cardboard cases were pretty dilapidated. **All but N819CP, N405CV and N741CP should have them.**



**3g. Aircrew In-Flight Guide:** As a reminder, CAP's National Emergency Services (NESA) Academy published a handy aircrew guide which includes operating instructions for some of the CAP equipment on board, among a whole host of good information. You can download and save a .PDF version to your iPad. 2013 is the latest version and is found at: [https://www.gocivilairpatrol.com/media/cms/Inflight\\_Guide\\_2013\\_14A2613AC3F47.pdf](https://www.gocivilairpatrol.com/media/cms/Inflight_Guide_2013_14A2613AC3F47.pdf)



**3h. Lost and Found:** Still looking for the owner (cadet?) who left this ring in a NCWG aircraft a few years back. Also, a hat was found in one of the airplanes from encampment (probably not kosher to wear). Let me know if one of these are yours and some details (i.e., tell me what plane it was left in.)



**4. "Dip-Stick of the Month:"** NC-048 at Raleigh and NC-162 at Statesville are this month's winners. The **Boys from Raleigh**, for flying ~40+ hours in May & in June. The **Statesmen** for hoop jumping to get N99832 to MAR's National Flight Academy. The NC-048 label was put N7360C's fuel stick. NC-162's was mailed to their hangar.



**5a. Crew Chief Tips of the Month:** We only know the CAP processes that someone took the time to teach us (and we remembered). On occasion, an email indicates additional help is in order. You may know this already, but if not: **Aircraft Logs:** One can see and modify the monthly electronic logs by tail number in the Reports

function, under the Support module of WMIRS. Another useful tool is the WMIRS Current Mission's 'Advance Search'. The default view of WMIRS has current missions. But if you need to find a closed mission, click on the ">Advance Search" line on the top of the current mission sorties page. You can filter and search under many parameters. Also, for those wondering where to find the Glider Wing Runner Course completion report, its built into the Cadet Orientation report under 'WRC', right next to the Aircraft Ground Handling (AGH) column.

**5b. The Ladder of Success?** There seems to be a divide in the NCWG about the ladders purchased for the aircraft. C-182 aircrews are usually very happy to have them. On the other hand, C-172 aircrews; especially with the older (P) models don't like the challenge of getting the ladder through the baggage door. When I test fitted them, I used an 'R' model (i.e., N908CP). S-models have an even larger baggage door.



The challenge is for **N99832, N99885 and N98426**. A solution is quite simple; change out the 44-quart plastic box for one or two smaller ones. E.g., a 29-quart box could hold the wet stuff.... Oil, funnel, water bottles, damp rags, etc.... A 15-qt box could hold dry stuff, (e.g., paper towels, headsets). Not only will this make moving the ladder easier, but may prevent the excess junk in the truck collection (read: weight), that ends up there. You can get both boxes for about \$15 total locally. You wouldn't want to break an airplane (or yourself) because the ladder was too hard to remove.

**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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