



**NATIONAL HEADQUARTERS
CIVIL AIR PATROL
UNITED STATES AIR FORCE AUXILIARY
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MAXWELL AFB, AL 36112**

29 NOV 19

TO: REGION AND WING DOUs AND sUAS POCs

FR: MR AUSTIN WORCESTER, CAP/DOU

CC: MR JOHN DESMARAIS, CAP/DO; CC, CV, CS, DO, DOS, DOV, DOUs (et al)

RE: 1st QTR FY 2020 sUAS PROGRAMMATIC UPDATE

ALCON:

To keep everyone up to date, this is our quarterly update on what is going on in the CAP sUAS Program from a National Perspective. Copied in are all the DOUs or POCs (those doing the DOU job but hold a higher position in the chain), that I currently have – **and this (and all the other updates) is posted on the CAP website.** I have also copied in our National sUAS Team. These are your community peers. Please share this with the UAS community within your region, wings, etc.!!!

As an update CAP now has over 1,550 FAA registered airframes. These include operations aircraft, the STEM kits that are required to be registered, and any other AE/CP sUAS airframes that are also required to be registered. CAP is by far the largest civilian owner/operator of public safety sUAS in the nation.

Note: Items in BOLD is new material in the update!

OPERATIONAL STUFF

The NYWG is was the first wing to reach full operational capacity! **They have now been joined by OHWG and NDWG. Great job everyone!**

As a reminder, the only Part 107 waivers that may be obtained below the HQ CAP level are Low Altitude Authorization and Notification Capability (LAANC) airspace waivers - everything else MUST be done by HQ. If you have an operational need for one, please contact the NOC.

Since the last update, CAP sUAS teams supported FEMA Urban Search and Rescue team deployments in both Puerto Rico and along the east coast during the Hurricane Dorian response, conducted a 2 week mission to collect imagery of critical infrastructure for recovery operations in Puerto Rico post Hurricane Maria, performed two separate SAR missions in a corporate status in South Dakota, and a "Red Cell" team began its C-sUAS support mission to the active duty USAF.

CAP has obtained an InstantEye Mk3 Gen4 aircraft for each CAP region. Once Instructor Pilots have been trained by HQ they will be assigned to the Region for placement. These will be region assets and maintained as one. These are the aircraft that do not require a special waiver from the OSD for use on federal missions (although NORTHCOM still has to approve the mission).

A nation-wide waiver has been submitted, through channels, to the Office of Sec of Defense/ Chief Information Officer for us to be able to conduct SAR, DSCA, and UAS training for those missions.

Until further notice, AFAMs will only be approved for the C-sUAS (“Red Cell”) missions and certain emergent situation on a case-by-case basis. **The sUAS AFAMs (other than the C-sUAS) require the approval of NORTHCOM and this can be an involved process. We have, however, established a precedence with NORTHCOM & AFNORTH for these federal support missions. Each wing now has an annual sUAS "C" training mission. Just a reminder: sUAS flights in training may NOT be conducted under an AFAM number (a "T" number). You MAY, however, move personnel, equipment, and vehicles under a "T" number and then conduct operations under the “C” mission.**

When you are flying a CAP Endurance Quad, F800, and/or the E384 for flight training that doesn't require the use of a camera system; please remove the camera and, if applicable, the gimbal before flight. Doing so will reduce the potential damage and costs to repair should an incident occur.

We ask that everyone not modify, add, or subtract from the aircraft, programs, applications, etc. associated without airframes and their associated tablets, computers, and equipment without the authorization of the CAP/DO. We are trying very hard to standardize our equipment across the board so that deployment of our teams is consistent across the nation. This includes software updates. We also want to test updates for compatibility to our systems before pushing them to the field.

The draft CAPR 70-1U completed its “Napoleon Corporal” stage. Certain changes have been made and it is heading to the Region Commanders and CAP Department Heads for their review and approval and the new FAA requirements for recreational flying added. The draft 66-1U (sUAS Maintenance Regulation that will receive a 70 series number) has been sent to the sUAS National Staff for review/ comment. It is my goal to have both of these completed and approved NLT 1 June 2020. In the meantime, they are on the CAP website in draft form and are required to be complied with in the form they are in.

We have been working closely with FEMA and their GIS/remote sensing folks. The OPLAN for a national and regional level UAS response to a major all hazards event. A web briefing and slide deck is available for this at: <https://www.gocivilairpatrol.com/programs/emergency-services/education-and-training/operations-training-webinars>.

CAP will continue to support the FEMA Urban Search and Rescue Program during their deployments into FY2020. Because of the arduous environments that are usually present during these deployments/events, some additional training & positional requirements may be needed... This is huge! Stay tuned...

Legislation currently pending before the U.S. Congress would ban the use of Chinese produced sUAS for federal entities, and concurrently ban the procurement of Chinese produced sUAS with federal dollars (including grant dollars). This has the potential to

significantly impact our fleet, which is 60%+ DJI (a Chinese based firm). Considering that DJI owns ~80% of the commercial sUAS market in the U.S., this has the potential to change the way everyone does things.

We are currently researching for procurement several U.S. produced sUAS for suitability to replace our DJI fleet. We are doing this in cooperation with our HQ CAP UAS Engineering Team, a few select wings, FEMA, and the Argonne and Oak Ridge National Labs.

Please do not attempt repairs on your own or at the wing level unless we authorize it here at HQ. Please ship it back to us for repairs.

We consider propellers consumable items and expect an occasional ding or break.

When entering your mishap/incident/accident into SIRS, use the following procedure:

For drone mishaps, the member should go into SIRS the same way they report any mishap and click on "File New Mishap." From the "Select type of mishap" dropdown menu, they select "Aircraft" and fill in the rest of the initial information. Please put "This is a drone mishap" at the beginning so there is no confusion.

When they move on to completing Part 2 ("Update New Mishap) they can select the "Aircraft Information" tab. Then...

- 1) Select the wing that owns the drone and then go to the dropdown menu titled "Select Tail Number." For every wing, the first tail number listed is "drone." They select that.
- 2) Enter brief description of the damage.
- 3) Select A99 as the purpose of flight (we don't analyze that data, so it won't matter).
- 4) For phase of operation, select "Ground – Ground Handling." That will get rid of all the fields for weather, airport, runway, etc. so operators won't have to worry about those fields.

Then, you can enter all the information on the location, the type, the registration, etc. in the initial description and mishap review.

To clarify. Suspension of sUAS Flight Privileges, commonly called grounding, does not ground the pilot from our traditional fixed wing program, unless the Wing/CC does so specifically under CAPR 70-1.

TRAINING:

The latest updates to the SQTRs are **posted on the CAP website**. They are now version 7. Highlights: The number of hours for initial PIC time for UASMP have been reduced to match generally accepted practice for competency. The requirements for imagery processing for UAST has been removed (it's required for UASMP).

Personal sUAS may be used for training. BUT! - CAP is not responsible, nor will we repair/replace personal airframes damaged or destroyed in training. Those airframes must be airworthy and properly registered with the FAA.

SQTRs still aren't uploaded nor 107 tracking into eServices. **I have been advised, they will go live on 6 Jan 2020.** IT is extremely overloaded CAPwide, and they are doing the best they can. I'll keep you up to date. In the meantime, we are using paper copies of the draft SQTRs, CAPF 5U and CAPF 91U.

Initially, while there are very limited numbers of instructors and check airmen, Members can videotape their CAPF 5U and CAPF 91U check rides and submit those videos to the CAP/DO, DOA, or DOU for evaluation and approval and endorsement for Instructors, Check Airmen and Check Airmen Examiners. This does not apply to those wings that have approved Check Airmen. DOUs will be granted SET status once they have completed their 5U and 91Us. We'll grant, on a case by case basis, SET status to members without the 1-year experience until we build enough cadre of sUAS SETs (this is already permitted by regulation).

Please use the training material in this link as this is the national standard and curriculum. Please do not insert Wing specific requirements currently. We'll allow Wing supplements through the correct processes once the CAPR 70-1U is fully approved

<https://www.gocivilairpatrol.com/programs/emergency-services/small-unmanned-aerial-systems-operations/suas-training-material/>

AEROSPACE EDUCATION:

The FAA Reauthorization Act of 2018 (Pub. L. 115-254), Section 349 has now defined requirements specifically for recreational flying of remotely piloted aircraft (RC and sUAS). Until the required safety testing and Community Based Organization requirements are in place, the FAA has issued interim policy guidance regarding recreational flying. For those that need fixed site approval for recreational flying within/underneath Class B, C, D, or Surface E bubbles, please contact me and we'll work with you to get those authorized. **The FAA has now enabled recreational LAANC authorizations in those areas that Part 107 pilots have been able to obtain them previously.**

I strongly encourage you all to reach out to your local Academy of Model Aeronautics (AMA) remote control airfields and work with them, so you have a good place to train and proficiency fly your equipment! There is a national level MOU between CAP and the AMA in which we agree to support each other... I've never been less that very well received with any AMA field I've ever approached.

As always if you have a question or need, please ask or reach out to me at aworcester@capnhq.gov or 334-953-3180. I'll get back to you ASAP!



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