



**NATIONAL HEADQUARTERS,
CIVIL AIR PATROL
UNITED STATES AIR FORCE AUXILIARY
105 S HANSELL ST
MAXWELL AFB, AL 36112**

21 NOV 2018

TO: REGION AND WING DOUs / POCs FOR sUAS

FROM: LT COL AUSTIN WORCESTER, CAP/DOU

SUBJECT: PROGRAMMATIC UPDATES AND INTERIM PROCEDURES

ALCON:

I wanted to get out a quick note to everyone about what is going on in the sUAS program area, so we are mostly on the same page. Copied in are all of the DOUs or POCs (those doing the DOU job but hold a higher position in the chain), that I currently have. These are your community peers. Many have extensive experience in sUAS operations. This is an outstanding group of members whom will be shaping the face of public safety sUAS operations for many years to come. CAP is currently the largest sUAS operation in the U.S. and we will just continue to grow. We expect by the end of this fiscal year, there will be more than 1000 airframes and nearly 1000 sUAS pilots in our system. Our program is involved in all three missions of CAP – ES, AE, and Cadet Programs.

OPERATIONS

Cadets can and should be participating in this program. A cadet can be a sUAS Mission Pilot at 16 years old. There is no age requirement for a Cadet to be a sUAS Technician.

Cadets may not participate in the “Red Cell” Counter sUAS Program in any capacity at this time (just like our CD programs)

A sUAS Team is considered a sUAS Mission Pilot and a sUAS Technician (The Technician was formally referred to as a Visual Observer).

For a Region/Wing to be declared as having its Initial Operational Capacity (IOC) for ES missions, it must have 5 fully qualified sUAS Teams. For a Region/Wing to be declared as having Full Operational Capacity (FOC), it must have ten (10) such teams.

The biggest mission, from an operational standpoint, we have is producing orthomosaic/georeferenced images for our customers (predominately FEMA) pre and post event. We are looking at developing an IR capability by FY 2023.

Our other large mission is the “Red Cell” – Counter sUAS mission for the Air Force (more on that later)

This program is in constant flux and change – please be flexible. Airframes, techniques, and procedures will change as we learn and find best practices. If you know a better way - speak up! The NHQ UAS team will evaluate your way and determine how to best incorporate it into our procedures/policies.

The CAP/DO (John Desmarais), CAP/DOA (Ron Olienyk), or I will evaluate wing & region programs when they tell us they can meet IOC / FOC, so we can grant them operational capacity.

There are currently no sUAS Instructor Pilots, sUAS Check Pilots, or sUAS Check Pilot Examiners in our system. That said, we have a procedure in place to designate those in the interim (see the training sections of this memo)

NHQ currently has a team that can be deployed to a site, as needed, should a major event occur until wings / regions have reached IOC.

Our goal is to have 90% of our Wings with IOC by the end of this FY, with FOC by the end of the next FY.

Most of our Wings currently have a sUAS Kit (Zeyrock trainer, Phantom 3 or 4 pro, and either an F800 Hexcopter or an Endurance Quad). I expect that the remainder of the CONUS wings will be completed in March. For the general sUAS program, the initial equipment outlay is one kit per Wing. We anticipate that we will incorporate one kit per ICP as that program develops.

A sUAS SORTIE is defined as your team’s departure from your home base or mission base (as applicable). It ends with the return to that location by the team. A sUAS FLIGHT is defined as a takeoff and landing of the sUAS. There can be multiple flights within a sortie. We will track flights within a sortie on a CAPF 109U. A sortie will be tracked in a CAPF 109. I’ve included a draft CAPF 109U in the dropbox link I’ll include below.

sUAS operations will be released by an FRO on a PER SORTIE basis. We will define an FRO’s qualifications as we go, but sUAS sorties can currently be released by a GBD / AOBD, OSC, or IC. Traditional FRO’s with a Part 107 certificate can also release sorties. We have developed a draft CAPF 99U for use until this process is established in WMIRS.

As in our traditional aviation program, we will likely permit the use of personal airframes for missions ONLY if a corporate airframe is not available (it being on the other side of the states doesn’t constitute a corporate aircraft being not available). Under no circumstances can personal airframes be used in the Counter sUAS mission.

CAP NHQ will apply for and coordinate FAA COA’s needed for operational missions. Until we say otherwise, we need to make sure these are done completely and properly to protect the organization’s interests and relationships.

We are working with two vendors in order to develop an enterprise level online solution to maintaining our sUAS Pilot and Technician logs, LAANC approvals, maintenance logs, airframes, missions, sorties, and flights. I hope to have a vendor chosen by the end of Jan.

COUNTER sUAS (“RED CELL”)

CAP has received funding from the USAF to conduct Counter sUAS training with selected base Security Forces. We will support their training by functioning as an aggressor team and flying pre-scripted routes to allow these forces to train using non-kinetic systems to defeat our sUAS. We need 4 sUAS teams per site. Each involved Wing’s CC, DO, & DOU are already aware of this program and its requirements.

This is a special access program within CAP (much like CD and “Green Flag”) with restricted and need to know information within. To participate in this mission, a member must complete a CAPF 17 have it signed by the wing commander and forwarded to the CAP/DO, DOA, or DOU for vetting and approval. Once approved, a Non-Disclosure Agreement must be signed prior to the member being granted program access.

If you are a DOU in an affected wing and did not attend the training at Edwards AFB, please complete a CAPF 17 and NDA ASAP so we can get you involved and fully up to speed.

Affected Wings will receive additional airframes and equipment funded by this program.

If you are not in an affected wing, no worries! There is already interest from the USAF and the USN to expand beyond the initial sites, we just need to prove we can do this. WE CAN! I am confident that this program will expand soon well beyond the initial sites,

TRAINING:

How do we train our people you ask?

For those Wings without a sUAS Kit and a NESA trained person, we will be conducting a special course for those Wings around the first week in March. Tentatively, we’ll be doing the course at Maxwell AFB to capitalize on the better weather that time of year. As with everything else going on in this program, this is subject to change.

Personal sUAS may be used for training. 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.

You do not need a mission number to train your people (this is a common misconception in many units).

SQTRs should be uploaded to WMIRS by the end of January (we hope). In the meantime, the draft SQTRs are in the dropbox

Initially, while there are very limited numbers of instructors and check airmen, we’ll have members 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. 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 a sufficient cadre of sUAS SETs (this is already permitted by regulation).

I have posted all of the Basic and Advanced Pilot Course slides as well as the draft forms in the following dropbox link:

<https://www.dropbox.com/sh/7wvflsayg7w5n9t/AADo0OJH3ySmzmb2ZhC3HLWwa?dl=0>

AEROSPACE EDUCATION:

Many of you are aware of the deletion of Part 336. Many believe that this restricts the RC community and requires Part 107 certification. It does not. All the deletion of part 336 does is allow the FAA to regulate the RC community which it has not yet done. We will permit operations for AE purposes under FAA Part 101. Part 107 certification will not currently be required. That said, a CAPF 5U will be required by those members performing these duties to verify they are safe to operate these airframes.

That said, the FAA now has the authority to regulate the RC community and this could change with little to no notice – we'll stay on top of this and be prepared to adjust as needed.

If you have questions regarding this program, please feel free to contact me at aworcester@cap.gov....