



WINDHAM POLICE DEPARTMENT CRIME LAB

375 Gray Road, Windham, Maine 04062 • (207) 892-2525

Detective Eugene T Gallant
Evidence Technician
Officer James Cook
Evidence Technician

TO: Chief Kevin Schofield

FROM: Detective Eugene Gallant

DATE: August 15, 2017

RE: Unmanned Aircraft System (UAS)

Several years ago myself and Officer Jason Burke identified a UAS as a valuable and cost efficient way to obtain evidence from crash and crime scenes. On February 28, 2017 I presented you a proposal for starting a UAS program along with a draft policy. In June I participated in a conference call with Jonathan Reed and Steven Pansky from the Federal Aviation Administration (FAA). They provided me with information on what would be required for the Windham Police Department to start a UAS program. Below is a summary of that information:

There are three ways to legally fly an unmanned aerial vehicle (UAV) in the National Airspace System.

1. Hobbyist. This means that the UAV is being flown for hobby or recreational use only. There are restrictions on when and where a hobbyist can fly but other than that there are no certification or training requirements.
2. Civil or commercial operator. This means that the UAV is being flown for business or official purposes. Operators are required to adhere to 14 CFR part 107 of the FAA UAS rules and regulations. In short they are required to obtain a UAS pilot's license through the FAA. This allows the operator to fly but with some restrictions (prohibition on night time flights, airspace restrictions etc.).
3. Public agency operator. Operations are restricted to public agency operations only (usually public safety, police or fire). This means that if a public agency has obtained the proper certificate of authorization (COA) from the FAA, an operator can fly missions with little to no restrictions. In our case the flight would have to be for specific public safety missions (crash investigation, search/rescue etc.). Under a COA a public agency pilot could not fly for demonstration purposes or to carry out a non-public safety mission (inspecting buildings, taking aerial photos for town purposes etc.). Other than obtaining the COA there are no training or certification requirements for a public agency operator.

The FAA recommends that any agency starting a UAS program adhere to both the Part 107 pilot requirement and the COA requirement for the following reasons:

- Part 107 insures that whoever is flying the UAV is a certified pilot and properly trained thus reducing liability.
- Part 107 allows flight for non-public safety missions. This would allow for demonstrations and other non-emergency missions.
- The COA system allows for night time operations.
- The COA system reduces the air space restrictions (where and when you can fly).

We have a draft UAS policy written and the policy requires that anyone who wants to fly a UAV adhere to the part 107 requirement and be a certified pilot. The part 107 test is proctored at several locations in Maine and costs \$150.00, pass or fail. There are several options for preparing for the test including a self-study program offered by the FAA on line. Once the test is successfully completed you are given a number in which you enter into the FAA's on-line data base. You are given a temporary pilots license number with the permanent number coming about a month later. Once you have the temporary number you can start flying under part 107 regulations.

The process of applying for a COA is as follows:

1. A public declaration letter must be drawn up by the town's attorney. An overview of what the letter must include is attached to this memo.
2. The letter must be sent to the FAA for approval.
3. Once the letter is approved an account is created for the "COA on-line" system.
4. A web based application is completed for one (or all) of three possible COA's. The application is not easy and according Steve it will require his or Jon's assistance to fill out.
5. Once the application is complete it is sent to the FAA for approval. If none of the above items are sent back for revision the entire process takes between three and six weeks.

In order to start the COA process we must first have a UAV and it needs to be registered with the FAA. One of the items needed in the "public declaration letter" is the model UAV and an outline of its safety features. As a result, I propose the following:

- The Chief start the process by informing the Town Manager of our intentions to start this program.
- A meeting with the Town Manager and Town Council be arranged so we can present the above material to them and answer any questions.
- Once approved by the Town Manager and/or Town Council the following steps be taken:
 1. Review and approve the UAS draft policy.
 2. Identify the best means of preparing for the part 107 test then schedule the test. Applicants for the test to be approved by the Chief.
 3. Research and purchase a UAV
 4. Set up a meeting with the town's attorney and request they start drafting the public declaration letter. Provide the attorney with any documentation they need for the letter.
 5. Once the letter is complete forward it to the FAA and start the COA process.

Enclosures:

- *FSIMS Volume 16 (Unmanned Aircraft Systems)*
- *FAA Advisory Circular (Public Aircraft Operations)*
- *Public Declaration Letter Information*
- *Miscellaneous Public Declaration Letter Information*
- *COA Definitions*
- *UAV Proposal dated 02/28/17*