

Utah Division of Emergency Management



Policy Regarding UAS/UAV use

June 29, 2015

I. PURPOSE

The purpose of this policy is to stipulate the use of Unmanned Aerial Systems (UAS) for staff members of the Utah Division of Emergency Management. (A copy of this policy must remain with the UAS in the carrying case at all times.) The purpose of a UAS for the Division is to aid in disaster and emergency management, training and for pre-planning. The use of full-sized aircraft presents safety risks and is costly. A UAS is much less costly, but as with any aircraft, also present safety risks. Emergency management and public safety are the highest priority in all the work done by members of the Division and the use of a UAS will be undertaken with that priority. Protecting public privacy will guide many of the provisions in this policy. Although full-sized aircraft have been used as photographic platforms for many years, the general public views UAS's as more invasive. This policy will be reviewed annually and updated as needed.

II. DEFINITIONS

UAS/UAV - Unmanned Aerial System/Unmanned Aerial Vehicle: A system comprising an unmanned aircraft, which is remotely controlled, usually from the ground but also from manned aircraft, by use of data links and on-board sensors.

Drone - A popular term referring to UASs/UAVs

Operator - A trained individual who controls the UAS/UAV

Visual Observer - A trained person who assists the unmanned aircraft pilot in the duties associated with collision avoidance. This includes avoidance of other aircraft, structures, vehicles, people, obstructions and terrain.

III. POLICY

A. Emergency Management and Public Safety

1. General Safety in UAS Use

a. UAS flights should be undertaken with a designated "Visual Observer" assisting the operator whenever possible.

b. Visual Observer duties include but are not limited to the following:

- Have a clear view of the area of operation.
- Be in communications with the operator either within speaking distance or with a portable radio/cell phone.
- Keep the operator advised of any possible hazards such as power lines, birds, other aircraft, rocks and hazardous weather conditions.

c. Before taking off and after landing, the UAS shall be inspected for wear and/ or breakage and shall not be operated if the inspection reveals any wear or breakage that may interfere with control of the UAS.

d. When taking off or landing, necessary care should be taken to avoid contact with pilot or other persons in the area. Before taking off, the operator shall conduct a visual and audible assessment to ensure no other aircraft are overhead or in the area to be filmed/photographed/observed.

e. If other aircraft are in the area, the flight is not to be undertaken until the airspace is clear.

f. The operator shall not operate higher than 400' above ground level within three miles of an airport or outside line of sight.

g. UASs shall not be operated directly over populated areas or over persons where loss of power could result in injury without the permission of the Director or designee.

h. UASs may not be operated outside Class E Airspace.

i. Coordinate use of a UAS with officer in charge or incident commander

j. Be aware of weather conditions

k. Monitor battery status to not reach critical levels and necessitate “return-to-home” function.

2. Wildland Fire and Prescribed Fire

UASs shall not be operated on wildland fire incidents without approval from the on scene or Incident Commander and only when:

- a. No other aircraft are assigned to the incident, or;
- b. All aircraft on the incident are on the ground and not under power
The operator shall maintain communication with operational personnel and advise on scene personnel of the flight before takeoff and after landing.
- c. The UAS is operated at least three miles away from air operations and flight paths and only in Class G airspace
- d. DEM will be proactive on social media and elsewhere to help others realize the danger of flying UAVs in a fire zone using the common hashtag #NoDronesInFireZones

3. Other Emergency Incidents

UASs should only be operated in a safe manner during other emergencies, such as hazardous materials incidents, and after consultation with on-scene authorities.

B. Public Privacy

Using a UAS to observe, record or video record specific private persons without their consent is in violation of this policy. Care should be exercised to avoid accidental filming of any private citizens. If, despite due care, identifiable private citizens are video recorded or photographed, the images or files shall be deleted as soon as reasonably possible, unless the images/video: a). appears to show the commission of a crime or b). pertains to an ongoing emergency involving death or serious bodily injury to a person that would be remedied by using the images/video. In cases as described in a and/or b, the video files shall be given to law enforcement for screening and, if necessary, disposal.

C. Training

Before operating a UAS, employees shall complete an extensive training program provided by the Division of Emergency Management.

D. Maintenance

- a. A conditional inspection must be performed during preflight and must be logged in an aircraft flight log for the first flight of each day as part of a continuing airworthiness a compliance program.
- b. Log and maintain progressive flight hours of the aircraft in the aircraft logbook to validate inspection intervals, component times, and time life items i.e.; batteries.
- c. Record malfunctions (loss of link), damage (parts that require repair to be airworthy again), and serial numbered parts that require replacement. Record serial number of the part coming off and serial number of the part going on.
- d. Every twelve months, a biennial airworthiness will be performed on all aircraft.

E. Reporting

- a. Each flight is required to be logged and information posted in two locations by the Division's primary operator, the public information officer. The log includes a Division case number, flight duration, location, how the flight assists the Division in its mission and any significant issues.
 - i. Utah Criminal Justice Information System
 - ii. Division website: <http://dem.utah.gov/news-and-events/uav-reports/>

F. Authorization

No employee may operate a UAS without a "Division UAS Operator Letter of Authorization" signed by the Director.

adapted from the North Tooele Fire District UAS Policy

