901 - Unmanned Aerial Systems (Drone)	
	Helena Fire Department STANDARD OPERATING PROCEDURES/GUIDELINES
TITLE: Unmanned Aerial Systems (Drone)	**SECTION/TOPIC: Hazardous Materials**
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These SOPs/SOGs are based on FEMA guidelines FA-197	

1.0 POLICY REFERENCE

CFR	
NFPA	2400 Standard for Small Unmanned Aircraft Systems (sUAS) Used for Public Safety Operations,
MCA	46-5-109. Limitations on unmanned aerial vehicles.
HFD	SHMRT UAS Policy (3/1/22)

2.0 PURPOSE

This policy is to provide guidance to officers of the Helena Fire Department (HFD) in the use of Unmanned Aerial Systems (UAS).

3.0 SCOPE

This SOP/SOG pertains to all personnel in this organization.

4.0 DEFINITIONS

Digital Multimedia Device (DME): Digital Recordings of images, sounds, and associated data.

Remote Pilot in Command (RPIC): A person exercising control over an unmanned aerial system.

Unmanned Aerial Systems (UAS): An aircraft intended to navigate in the air without an on-board pilot. Also alternatively called Remotely Piloted Aircraft (RPA), Remotely Operated Vehicle (ROV) or drone.

Visual Observer (VO): A person assigned to assist with the safe operation of the UAS

5.0 PROCEDURES/GUIDELINES & INFORMATION

A. UNMANNED AERIAL SYSTEMS TEAM
   The Helena Fire Department (HFD) may utilize UAS to support other elements of the HFD and other emergency services agencies, by providing safe and efficient aerial observation perspective on fires, hazardous materials events, and other emergency public safety incidents and deployments as described herein. UAS deployments will be accomplished efficiently and safely while respecting the law and the privacy of the community.

B. PILOT QUALIFICATIONS
   Pilots in the UAS Program must have one (1) year of service with the HFD. Pilots on the team will be selected by a process approved by HFD Administration. Once selected, pilots must acquire and/or maintain a valid FAA Remote Pilot/UAS Certificate before serving as RPIC of any departmental aircraft.

C. SUSPENSION and/or REMOVAL

   Pilots may be suspended or removed from the program for any the following:
   1. Failing to maintain a valid Remote Pilot/UAS Certificate.
   2. Failing to comply with policy, laws, or case law applicable to UAS operation.
   3. Reckless or unsafe maneuvers or operation of the aircraft.
   4. Other disciplinary actions taken by Fire Administration

D. TRAINING
   All pilots must maintain proficiency as a RPIC as determined by the Operations Chief. Each pilot must perform at least one training flight or UAS deployment per month to maintain proficiency with each aircraft utilized by the team and any related equipment.

E. EQUIPMENT
   UAS Pilots, during departmental UAS deployments, will only use aircraft platforms and equipment approved by the Operations Chief.

F. DEPLOYMENTS
   Approval from a Battalion Chief or Chief Officer is needed prior to UAS deployments. UAS operations will be in accordance with FAA regulations, FAA Certificates of Authorization (COA), and any FAA waivers. This can include but is not limited to proper notification to and monitoring of Air Traffic Control if operations are within controlled air space. Deployments can include, but are not limited to:

   1. Search and rescue operations.
   2. Fireground operations, both structural and wildland events.
   3. Major motor vehicle crashes operations, fires, hazardous materials deployments, fire investigations and documentation thereof.
   4. Requests to support other agencies.
   5. Public relations or photo flights of fire personnel/operations.

G. MUTUAL AID REQUESTS

Requests for UAS operations outside of Lewis and Clark require the approval of an HFD Chief Officer.

Mutual aid requests from other agencies within Lewis and Clark County require permission from the Battalion Chief.

H. LIMITATIONS AND PROHIBITIONS

1. UAS units will not be utilized for traffic enforcement or any direct surveillance of an individual or group of people
2. Personal use of a department UAS is **prohibited**. Unless specifically authorized by a Chief Officer of the department, the use of a personal UAS for a deployment or training is also **prohibited**.
3. The UAS may not be equipped with weapons of any kind.

I. OPERATIONS

1. The RPIC is directly responsible for and is the final authority over the operation of the UAS. RPICs have absolute authority to reject a UAS deployment based on weather, aircraft limitations, physical condition, etc.
2. Due to the nature of fire department UAS deployments, the minimum crew on fire department UAS deployments will be a pilot and a VO. It is preferable the VO is a UAS pilot; however, the RPIC may designate a VO who is not a pilot. It is the responsibility of the RPIC to brief the VO prior to any UAS operation. Requests for drone deployments made to assist police operations/investigations or search and rescue events may not necessitate the use of a VO.
3. The VO will assist the pilot in maintaining visual awareness of the airspace and advise the pilot of any imminent hazards including other aircraft, terrain, power lines, trees, structures, and/or adverse weather conditions. The VO shall handle radio communications between the UAS team and ground units/dispatch. The VO shall remain alert for suspicious persons or activities on the ground and coordinate response by ground units.
4. The following will be completed for every flight, but are not limited to the items or order listed:
   i. Preflight inspection and resolution of any noted deficiencies.
   ii. Weather briefing.
   iii. Identification of a landing/take off zone.
   iv. Crew briefing and assignments.
   v. Post flight inspection and associated duties (equipment stowage, battery charging, etc.).
   vi. Required documentation (Pilot logbooks, airframe logbooks, evidence processing, etc.).

5. When feasible, a public notification should be conducted to advise the public of the fact that:
   i. A fire UAS is in operation.
   ii. The general location of the UAS operation.

      iii.   The purpose of the UAS deployment (i.e., missing person, fire, hazardous materials response, Special Response situation, etc.).

      iv.   Other safety information for the public at large (such as to not attempt to view the drone and remain indoors with the doors locked in the case of a hazardous materials release).

Such notifications should not delay the UAS deployment but be used in conjunction with the deployment. At a minimum, a sign will be prominently displayed near the area of operation indicating that the UAS is in operation.

6. Accidents involving a UAS will be reported in accordance with FAA requirements and city policy. In the event of an accident-causing bodily injury, the aircraft crew will be responsible for providing first aid, scene security, and notification to the Battalion Chief. It is the responsibility of the RPIC for the documentation of the incident.

J. DATA COLLECTION AND STORAGE

In order to safeguard personal privacy of citizens, collection of DME will be limited to the extent necessary for the related investigation. Evidentiary data will be provided to the case agent of the agency associated with the flight. Any recorded data taken during a fire department operation and intended to be maintained for investigation, shall be handled in accordance with Helena Fire Department and City of Helena policies, procedures, and protocols. DME not meeting the above criteria will be destroyed through electronic deletion within 10 days of conclusion of the flight.

K. AUDITING

An authorized supervisor or administrator shall audit flight documentation at regular intervals. The results of the audit will be documented. Any changes to the flight time counter will be documented.

RESPONSIBILITIES

- All members shall be responsible for knowledge of this SOP.
- The Operations Chief shall be responsible for the selection and training of approved operators.
- The Operations Chief shall ensure compliance with all data collection and storage requirements as well as auditing of all flight documentation.