	UNIFIED FIRE AUTHORITY **ORGANIZATIONAL POLICY MANUAL**	
	Affiliation: Administration Policies	
	Title: **Unmanned Aircraft Systems (UAS)** Number: **100 – 330**	
	Approved: 3/12/2025	By: Fire Chief Dominic Burchett
	Last Reviewed:	By:

REFERENCES:
U.S. Federal Aviation Administration – Unmanned Aircraft Systems
CFR Title 14 Chapter I, Subchapter F, Part 107, Small Unmanned Aircraft Systems
NPFA 2400: Standard for Small Unmanned Aircraft Systems used for Public Safety Operations
CFR Title 49, Subtitle B, Chapter VIII, Part 830
UFA Policy and Procedure – Management of Photos, Recordings, and Other Electronic Media
UFA Policy and Procedure – Records Management
UFA Policy and Procedure – Privacy Practices
Utah Government Records Access and Management Act
Utah Code 72-10-12

DEFINITIONS:
AGL – Above Ground Level – the literal height above the ground over which the UA or any other aircraft is flying.

COA – Certificate of Authorization, designed primarily for public safety, is an authorization issued by the Air Traffic Organization of the FAA to a public operator for a specific UA activity

FAA Part 107 – Federal Aviation Administration (FAA) rules for small, unmanned aircraft systems (UAS), or "drones," operations cover a broad spectrum of commercial and government uses for drones weighing less than 55 pounds

Flight Crew or Team – Pilot, Observer, and any other personnel directly involved in UAS functions

Observer – A trained individual who assists the UA pilot in ensuring safety, and facilitates communications between the pilot and other individuals during operations

Pilot – Person who controls the UAS/UA

Pilot in Command (PIC)– Pilot or Lead Pilot if more than one pilot is operating at the same time, who is responsible for all UAs operating safely and responsibly during a flight

UA – Unmanned Aircraft

UAS – Unmanned Aircraft System – This includes the UA, the controller, hardware, and software used to operate the UA, record, and transmit data

PURPOSE:
The Unified Fire Authority (UFA) Unmanned Aircraft Systems (UAS) Policy provides the standards by which the UAS program will be administered within UFA and its divisions. This includes, but is not limited to, the handling of data obtained during training and missions, the operation of UAS, and compliance with local and federal regulations governing the use of these systems. Strict adherence to this policy will provide for the safe and effective operation of a UAS.

LEADERS INTENT:
To clearly define the conditions and parameters under which authorized divisions from UFA will operate and deploy a UAS within the UFA's jurisdiction and mutual aid communities as a supplement to pre-planning, training, incident hazard assessment, incident command, and incident operations. The development of this policy and procedures incorporates knowledge of FAA regulations, to include concepts of Operational Risk Management (ORM), Crew Resource Management (CRM), Aviation Training Operations Procedures Standardization (ATOPS) and stakeholders.

POLICY:
1.0 The UAS is an operational tool to be used by authorized UFA personnel in response to "all-hazard" and other mission-oriented scenarios, which may include:

1.1 Structural Fires – determining fire involvement, roof/ structural integrity assessment, personal accountability, exposure vulnerability, confirmation of extinguishment, etc.

1.2 Wildland Fires – determining the fire "head", fuel types and amounts, direction of travel, rate of spread, exposure hazards, personnel safe zones and escape routes, operating as an airborne "safety spotter", assist with determining divisions assignments, personnel accountability, and safety.

1.3 Hazardous Materials Incidents – determining the incident type (i.e. spill/ leak/ vapor release, energetic device), product/ agent involved, establishing, and evaluating operational zones (i.e., hot/ warm/ cold zones), assessment of spread, determining areas of evacuation and refuge.

1.4 Injured Persons or Missing Person Search – search and locate lost or injured persons, determining best access to the person by rescue personnel, assess visually and verbally the person lost/ injured.

1.5 Damage Assessment (from natural or man-made events) – provide situational awareness of area affected, severity of damage, assist with defining objectives and prioritize operational assignments, determining best route for access into an area.

1.6 Pre-Planning – assist with planning, mapping of events, training, and incidents. Information may be used to develop mitigation strategies.

1.7 Information Outreach – producing public education, documenting events, and production of documents and videos.

1.8 Fire Investigation – photography and video of area affected to assist with origin and cause determination, and evidence documentation.

1.9 Accident Investigation – photography and video of accident scene to assist with potential cause and evidence documentation.

1.10 After Action Review – assist with post-incident analysis, safety reviews, and facilitate training of lessons learned.

1.11 Training Events – provide for Pilot and Observer training, documenting training events that personnel are participating in and reviewing conducted training.

2.0 The intended use of the UAS is to provide greater situational awareness to incident commanders thereby enhancing firefighter safety in response to and mitigation of emergent situations and incident types unrelated to citizen monitoring or surveillance.

2.1 The purchase of a UAS must be included in the Division's approved budget plan. Upon acquisition, the Division Director shall notify Risk Management to ensure the asset is added to UFA's insurance coverage.

2.1.1 Purchase of a UAS must be in accordance with Utah Code 72-10-1202.

2.2 The UAS will only be operated by authorized trained, and licensed (FAA Part 107 or higher) employees (Operator and Observer) of the UFA.

2.2.1 The Division Director is responsible for ensuring that the Pilot in Command (PIC) holds a valid license to operate the UAS.

2.3 The UAS will be used primarily for UFA-related purposes. The UAS could be used as part of mutual aid or automatic aid agreements and may operate outside of UFA's geographic boundaries when dispatched to assist another fire department or other public safety entity.

2.4 The UAS will **NOT** be loaned to any other department or agency. However, if dispatched or properly requested, the UAS may be operated by approved UAS team member(s) and utilized in accordance with the provisions of the COA (once in place) and this policy.

2.5 For UAS flights during live incidents, the PIC will request that dispatch add the UAS to the existing incident. Documentation will include incident number, launch time, and recovery time.

2.6 Upon a mutual aid request made by another agency's Incident Commander or representative an UAS flight team (Operator and Observer) will deploy to the requesting agency's incident. Upon arrival, the UAS flight team will perform a pre-flight assessment of the incident environment to ensure the proposed operation is within the UFA COA and/or FAA Part 107 regulations as well as this policy.

2.6.1 Upon completion of the arrival assessment the PIC will inform the incident commander or department representative if the flight crew will or will not be able to assist.

2.7 On incidents, the UAS will only be deployed upon the request or approval of the Incident Commander.

2.8 The Incident Commander cannot countermand a PIC's determination to not fly a mission, however, the Incident Commander or Safety Officer can countermand a PIC's determination to fly a mission.

3.0 Prohibited Uses

3.1 Recording or transmitting images, sound, or video of any locations where persons would have a reasonable expectation of privacy as declared in local, state, and federal constitutions, laws, statutes, and regulations.

3.2 Use for monitoring or surveillance of persons for law enforcement purposes.

3.3 Operations violating FAA Regulation Part 107 or other applicable regulations, including operations within restricted airspace without authorization. This includes areas with Temporary Flight Restrictions (TFR) until communications have been established with the Air Traffic Control or general air traffic via radio.

3.4 When the Pilot or Observer cannot always maintain visual contact with the UA.

3.5 If the UAS has been tagged for maintenance, repairs, or otherwise grounded.

3.6 Conditions exceeding the capabilities and limitations of the UAS or Pilot.

3.7 High-risk missions where the risk of flying is greater than the benefit of using the UAS. Risks may include hazards to individuals or property, including those ground based and airborne, and loss of control.

3.8 Using the UAS and support equipment for personal or commercial use.

3.9 Weaponized use of the drone.

4.0 UAS Pilot in Command

4.1 The UAS will only be operated by personnel trained in its safe and effective operation. UAS Operators must have, at a minimum, a FAA Part 107 license, and have already become familiar and trained with the UAS system and demonstrated operational proficiency by thorough evaluation.

4.2 The PIC will be ultimately responsible for the operation and solely responsible for input of commands of the UAS during flight. The PIC will also be responsible for UAS assembly, flight preparations, post flight procedures, UAS disassembly/storage procedures and documenting all UAS flights.

4.3 Whenever possible, the PIC will operate within a team of two or more personnel (Pilot, Observer, Ground Station Operator, etc.). The PIC will have discretion in situations where the pilot will have visual line of sight to the UA, to perform a solo flight.

4.4 A Pilot must maintain their Part 107 license, flight logs and all necessary records to meet department and FAA requirements.

4.5 The Pilot will be trained in compliance with the applicable training requirements of NFPA 2400.

5.0 UAS Observer

5.1 The Observer will alert the PIC to any conditions (obstructions, terrain, structures, air traffic, weather, etc.) which may affect the safety of the flight.

5.2 The Observer will ensure that the PIC is not interrupted during the flight.

5.3 The Observer will be responsible for all coordination and communication between the PIC and other air or ground personnel including the Incident Commander.

5.4 The Observer will remain in close proximity and have constant communication with the PIC.

5.5 The Observer will be trained in compliance with the applicable training requirements of NFPA 2400.

6.0 Safety

6.1 The FAA Part 107 sets forth rigorous flight safety standards that the Pilot will adhere to before, during, and after each flight.

6.2 The UAS will be inspected for wear and/or damage before and after each flight. If the PIC discovers a safety issue, they will notify the IC, refuse the flight, and request that another UAS be sent to the incident.

6.3 In the event of an in-flight emergency, the situation will be broadcast by the PIC and/or observer to all involved ground personnel via direct voice or two-way radio communications. The broadcast will indicate the nature of the emergency, any immediate action plans/directives and /or request for resources.

6.4 All personnel involved with the mission will have ready access to a mode of communication which can quickly summon additional fire/EMS/law enforcement services should they be needed.

6.5 The number one priority in all UAS operations is the safety of persons and, secondarily, property. When the operation of the UAS compromises the safety of people or property, the operation will be immediately halted. No further flights will be conducted until the potential hazard to people or property can be sufficiently mitigated.

7.0 Deconfliction of Aircraft within Operational Air Space

7.1 All UAS flights will be grounded upon arrival of approved manned aircraft entering the operational air space.

7.2 Deconfliction will be initiated by the PIC of the UAS. Upon being informed of manned air traffic entering the operational airspace the PIC will drop the UA to less than 50 feet AGL (or as low as local flora and topography will allow) and immediately navigate the UA to a safe landing site. If safe to do so, this should be a site where the UA can be rehabbed.

8.0 Data Security and Records Management Plan

8.1 All data collected during operations will be subject to existing UFA policies regarding ownership, record storage, retention, dissemination, and privacy practices.

8.2 Prior to being authorized to operate and deploy a UAS, UFA Divisions will submit a plan to the Administration and Planning Assistant Chief. The plan will detail how they will establish and maintain an internal records management program where records are effectively and efficiently managed throughout the records lifecycle in accordance with UFA Records Management policy.

9.0 Operational Oversight

9.1 Operational oversight will rest with the Division Chief, manager, or supervisor where the current UAS belongs (i.e., Emergency Management, Information Outreach, etc.).

9.0 Medical Factors

9.1 Physical illness, exhaustion, mental/ behavioral health problems, etc., can seriously impair judgment, memory, and alertness. If a Pilot or Observer is suffering from any of the above, they should “stand down” when these conditions are expected to affect their ability to perform flight duties. The supervisor is to be immediately informed, and the Pilot or Observer is prohibited from the deployment or exercise.

9.2 Pilots and Observers will comply with UFA Policy 900-420 Drug and Alcohol Testing / Drug Free Workplace.

9.2.1 No member of the flight crew can act or attempt to act in their capacity within 8 hours after consumption of any alcoholic beverage.

10.0 Collision or Crash Procedures

10.1 Determine if an injury or death occurred. Assess the extent of damage resulting from the crash or collision. Call for appropriate resources to render aid to injured persons, mitigate property damage, and law enforcement or other governing organizations if necessary.

10.1.1 Immediately notify the Section Chief of the member who supervises the flight crew and/ or to whom the UAS is currently assigned to.

10.1.2 Immediately notify the Safety Officer or person on-call for Safety.

10.1.3 UFA employees will be subject to post-accident testing, in accordance with UFA Policy 900-420 Drug and Alcohol Testing Testing/Drug Free Workplace.

10.2 A serious UAS crash or collision will be reported to the National Traffic Safety Board (NTSB) expeditiously as possible when any of the following are met.

10.2.1 A death results from the collision or crash, either immediately or within 30 days of the incident.

10.2.2 A person suffered a serious injury which is defined as any injury which:

10.2.2.1 Requires hospitalization for more than 48 hours, commencing within 7 days from the date of the injury was received.

10.2.2.2 Results in a fracture of any bone (except simple fractures of fingers, toes, or nose).

10.2.2.3 Causes severe hemorrhages, nerve, muscle, or tendon damage.

10.2.2.4 Involves any internal organ.

10.2.2.5 Involves second or third-degree burns or any burns affecting more than 5 percent of the body surface.

10.2.3 An incident where any of the following occur:

10.2.3.1 Flight control system malfunction or failure.

10.2.3.2 Inability of any required flight crewmember to perform regular flight duties due to injury or illness.

10.2.3.3 In-flight fire

10.2.3.4 Aircraft collision in flight

10.2.3.5 Damage to property, other than the aircraft, estimated to exceed $25,000 for repair (including materials and labor) or fair market value in the event of a total loss, whichever is less.

10.2.3.6 Release of all or a portion of a propeller blade from an aircraft, excluding release caused solely by ground contact.

10.2.3.7 An aircraft is overdue and is believed to have been involved in an accident.

10.2.3.8 Any other reportable accident as per FAA rules and regulations regarding drone use.

10.2.4 You can report the crash by contacting the NTSB's nearest regional office. This information can be found on the NTSB contact page or call the NTSB's 24-hour hotline at 844-373-9922.

10.3 The FAA will be notified within 10 calendar days of the crash or collision when the following occur:

10.3.1 Serious injuries

10.3.2 Loss of consciousness

10.3.3 Property damage of at least $500

10.4 File the report through the FAA DroneZone portal.

- Log in to the FAA DroneZone website.
- Navigate to the Accident Reporting section.
- Submit the required details about the incident, including the date, time, location, injuries, property damage, and UAS information.

Replaces policy dated: May 27, 2022