Fire Operations Considerations for Call when Needed (CWN) UAS

- UAS fly beyond visual line of sight. **A TFR is required**
- UAS are equipped with Mode C transponder
- UAS can maintain an assigned altitude based on an altimeter setting
- UAS is not equipped with AFF
- VHF AM and FM radios are located at the ground station. **Communication may be limited due to terrain.**
- UAS can fly:
  - 25-50 miles from the ground the ground station depending on the system, terrain and vegetation
  - Above the typical aircraft stack (3,500’ AGL)
  - In up to 25 kt. winds
  - At night
  - Fly for 3 - 12 hours/cycle depending on the UAS
- UAS must have line of sight contact with the ground station antenna.

**Flight Sequence**
- UAS crew will select a ground station in high terrain inside the TFR.
- Coordinates (lat/lon) will be documented and placed on the incident aviation map.
- This location is referred to as the UAS Launch and Recovery Zone (LRZ).
- Prior to all flights, the UAS Manager will coordinate with dispatch, helibase, ATGS as required.
- The UAS Manager will declare the LRZ as “ACTIVE” five minutes before launch on designated air and ground frequencies.
- Once reaching the assigned altitude, The UAS Manager will declare the LRZ “COLD” on designated air and ground frequencies and announce the UAS is enroute to its designated mission area at the assigned altitude.
- Prior to landing, the UAS Manager declare the LRZ “ACTIVE” and coordinate with dispatch, helibase, ATGS as required.
- After landing, the UAS Manager will announce “on the ground, LRZ is “COLD” on designated air and ground frequencies.

**Contractual Information**
- Mobilization takes 24-72 hours – Order through NICC
- Vendor crew is on a 12-hour daily shift
- Cost/day is fixed. There is no flight time cost.
- Daily rate ranges from $3,292-$16,788, depending on the vendor
- Established flight crew rest/duty policies apply
- Agency Crew (UAS Manager and UAS Data Specialist) will accompany the vendor crew.

**Data Products**
- Real time daylight (EO) and infrared (IR) video at displayed at ground station
- Ability to communicate coordinates of a point of interest (spot fire, etc.)
- Point, line and polygon data (mapping), or orthomosaics map data/products
- Geo-referenced video and stills (orthomosaics/3D models)

**Additional Information:** Interagency UAS Fire Operations Committee /Website
05/27/21