

Call when Needed UAS Operations Schedules (8/12/19)

When a CWN UAS team arrives on an incident, data objectives and daily operations schedule must be developed. Methods and timeframes for information/data sharing should be agreed upon. The UAS team should be assigned to the AOBD or designee and all mission requests should be prioritized, approved, and communicated by this position.

CWN UAS can support IMTs in several ways. The two most widely used capabilities are tactical situational awareness for the Operations section and logistical mapping for the Planning section.

All CWN UAS have dual camera systems (daylight/RGB and thermal/IR) capable of monitoring fire activity in real time or later use for mapping. A new method to develop orthomosaic products has proven effective for precision perimeter mapping and fire effects analysis.

Key UAS Capabilities and Data Products

- Day or night operations
- Heat signature mapping (geopdf)
- Fire perimeter mapping (point/line/polygon)
- Real time situational awareness (tactical EO/IR) gimbal
- Orthomosaic production (aerial still image collection and stitching with specialized software)

Considerations for UAS schedule development include:

- Desired products (tactical vs. logistical)
- CWN UAS are available for a 12 (consecutive) hour period
- Inversion vs. VFR daytime conditions
- Day and night operational periods
- Aircraft assigned to the fire including ATGS ,Helicopters, Airtankers and Leadplanes

Operations Schedule Alternatives

- Day shift: (0600-1800 or similar)
 - There is an inversion and manned aircraft are available but can't fly due to visibility
 - There is limited ATGS coverage for fireline situational awareness or limited helicopter coverage for logistical missions such as mapping.
- Night shift (2000-0800 or similar)
 - Night fire operations are scheduled and situational awareness from an aerial resource is desired
 - There are adequate manned aircraft to provide daytime SA and mapping services.
 - There is a need to track fire activity at night
- Swing Shift (1200-2400 or similar)
 - There is a daytime inversion or limited manned aircraft to support daytime operations
 - Limited night monitoring is required