

Attachment 1: Call When Needed (CWN) UAS Information

Contractors: Four UAS Vendors have been awarded a CWN contract to support fire and resource programs. These systems are available through NICC.

- Insitu - ScanEagle
- Precision Integrated - Stalker
- Pathways 2 Solutions – Bramor C4Eye
- Bridger Aerospace – Silent Falcon

Capabilities: These systems have the ability to:

- Provide real-time situational awareness (EO/IR) at a ground terminal (ICP or other location).
- Provide map data: point, line, polygon, and imagery (stills/video).
- Fly up to 5 miles beyond visual line of site in a TFR.
- Broadcast location via Mode C (altitude encoding) transponder.
- Fly in winds up to 20 mph.
- Fly at night.
- Remain on station for 2-12 hours.



Limitations:

- There are no radios on the aircraft. Communication is maintained by AM and FM radios at the ground station. Terrain will limit the crews ability to communicate and may require VHF AM or FM repeater support.
- There are a limited number of qualified UAS Managers and Data Specialists. Trainee positions will be requested as mobilizations occur.

Ordering: These systems are a national resource and should be:

- Ordered locally, geographically, or nationally.
- Dispatched via NICC with support provided by the program manager.
- Assigned a federal UAS Manager and Data Specialist when an order is filled.
- Re-assigned via NICC/NMAC based on incident priority.

Contract Provisions:

- Maximum of 72 hours to mobilize.
- Maximum of 12 hours per day coverage. If 24-hour coverage is desired, a second CWN order should be placed.
- Vendor remote pilots are subject to established federal flight/duty day requirements.
- All data collected is the property of the Federal Government.

Mobilization:

- Once an order is placed, a vendor system, federal UAS Manager and Data Specialist will be assigned.
- The program manager will request an ECOA for BVLOS operations within the incident TFR.
- The UAS Manager will coordinate with the incident AOBD and vendor site lead to establish a takeoff/landing location (**Restricted Operations Zone - ROZ**). A ROZ is typically a ½ mile radius cylinder for the UAS to climb within to reach its assigned altitude.
- The Data Specialist will coordinate with the incident GISS to depict the ROZ on the incident aviation operations map.
- The Manager will report to the designated incident supervisor and attend appropriate briefings to determine the required services and hours of operation.

Flight Operations:

- Daily UAS priorities will be conveyed to the UAS Manager from the designated incident supervisor (Ops/Air Ops/Plans).
- The UAS Manager will coordinate with helibase, aerial supervision, and other aircraft as required to ensure a safe UAS launch.
- **The ROZ will be declared “active”** on assigned frequencies.
- The UAS Manager will report the UAS is airborne (on assigned frequencies).
- The UAS Manager will report the UAS has reached its assigned altitude (**typically 1000’ above the ATGS**) and declare the ROZ as inactive.
- The UAS crew will manage sensor tasking/data collection assignments as prioritized by Operations/Air Operations/Plans.
- The UAS Manager will coordinate with helibase, aerial supervision, and other aircraft as required to ensure a safe UAS landing. **The ROZ will be declared “active”** on assigned frequencies.
- The UAS Manager will report the UAS has landed and the ROZ is inactive.

Data Distribution:

- A live camera feed will be available at ICP or other location.
- The Data Specialist will work with the GISS to ensure incident specific data requirements (products, file format, timeframes) are met.

Additional Information:

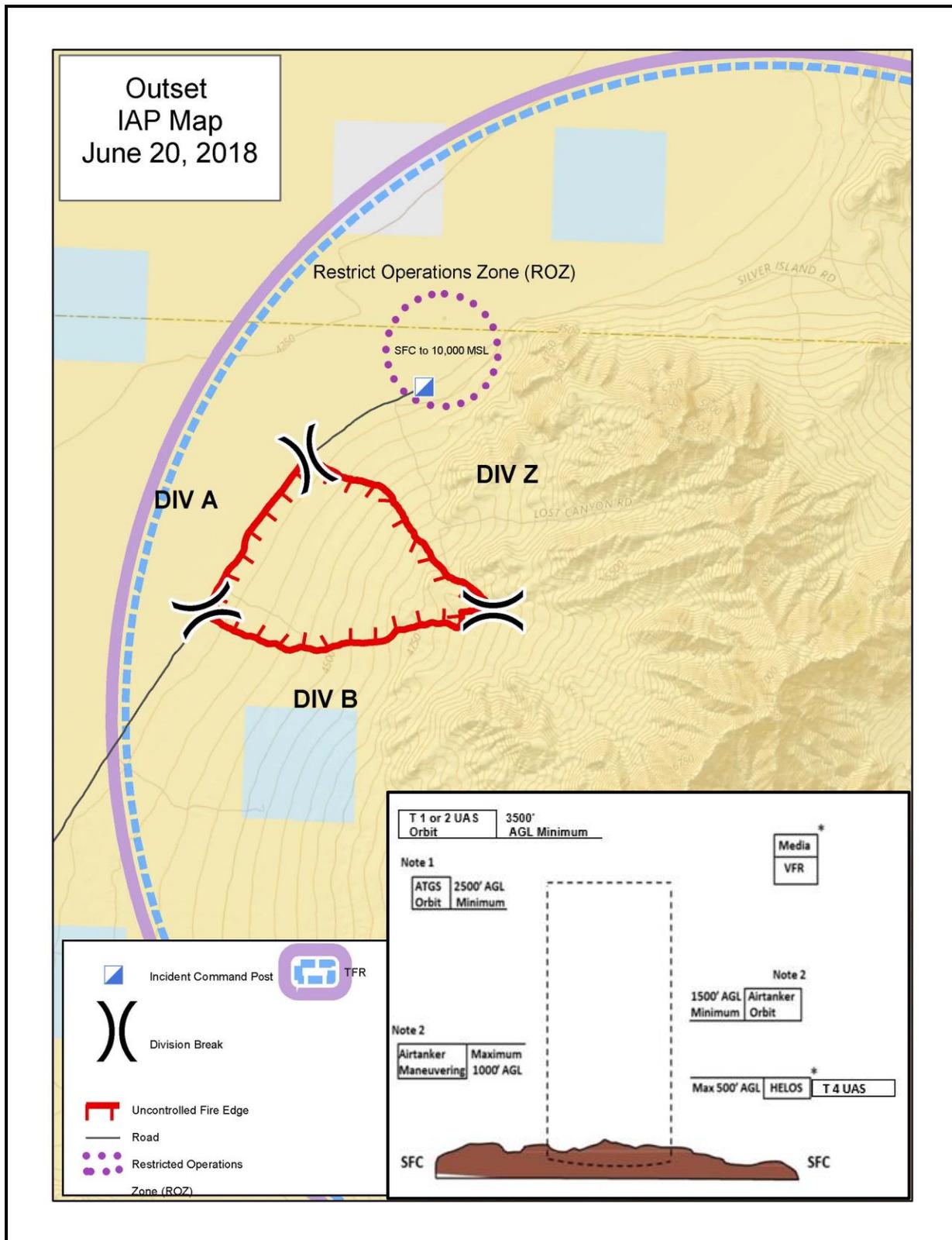
- [Interagency Fire UAS Subcommittee website](#)
- BLM UAS Program Manager: gdustin@blm.gov or 970-210-6153

Attachments:

- 1: Example Restricted Operations Zone (ROZ) Depiction
- 2: Example Data Products

Attachment 1: Example Restricted Operations Zone (ROZ) Depiction

- Type 1 or 2 UAS typically orbit the incident 1000' above the ATGS
- Type 3 or 4 UAS typically fly short (15 min) missions below 500' AGL.



Attachment 2: Example Data Products

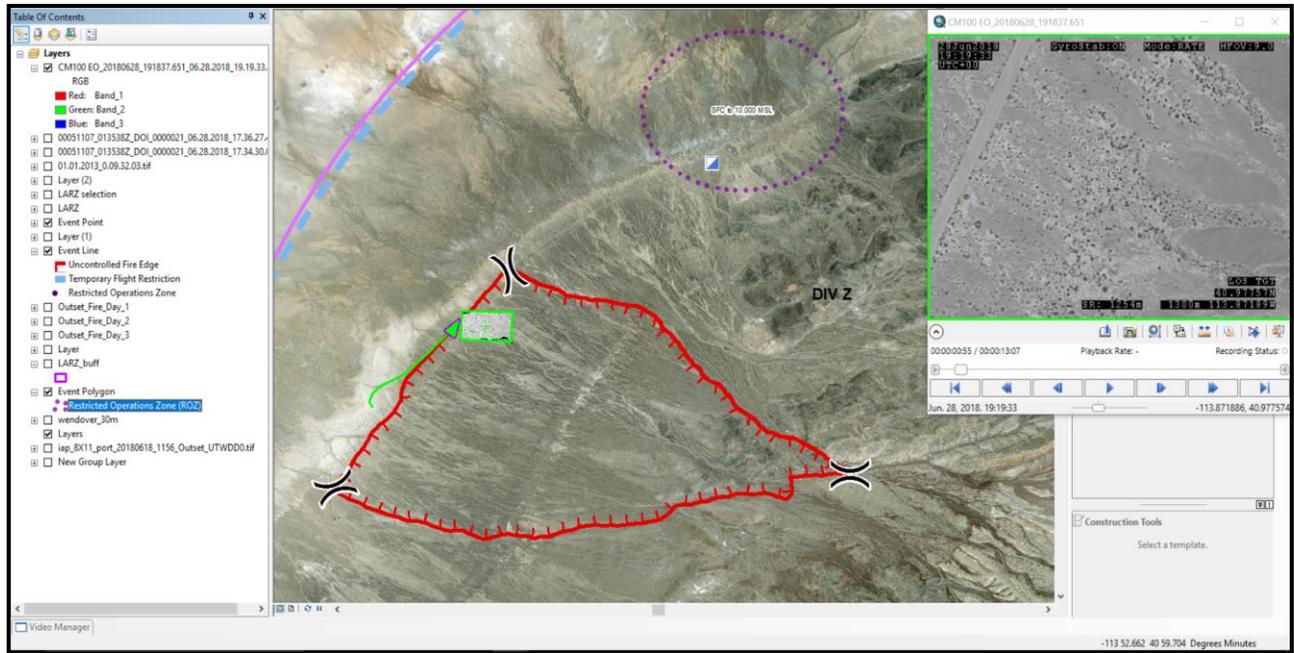


Figure 1: ArcMap screenshot of video captured from UAS being played in ArcMap using the Full Motion Video (FMV) add-in.

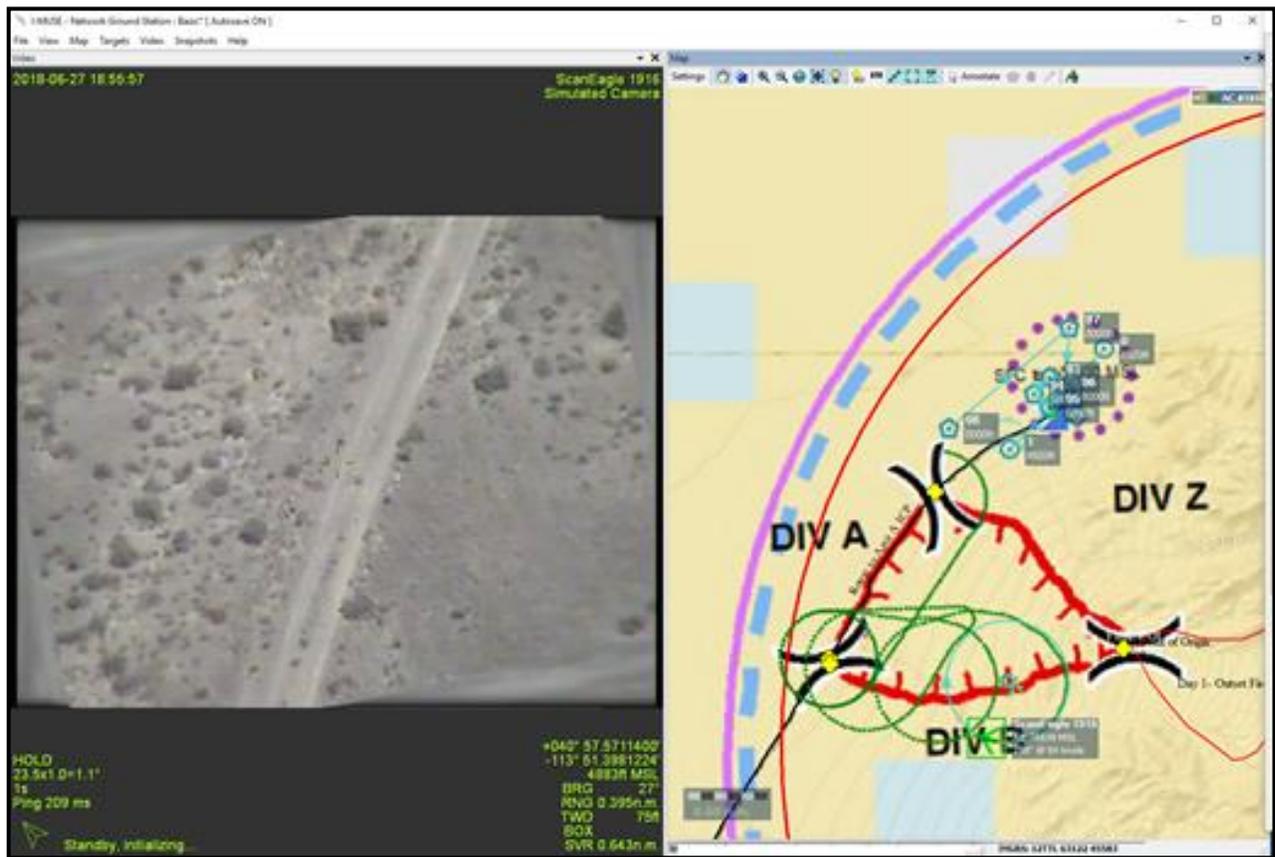


Figure 2: Screenshot of ground station display. Camera view is on the left and UAS location is on the right.