



### **Drones for Disaster Response Operations**

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# Drones for being used for Disaster Response Operations

#### **Hurricanes**





**Earthquakes** 





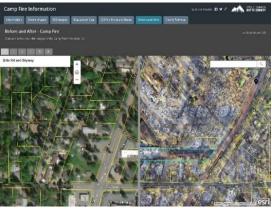
**Tornados** 





#### Wildfires









# Drones for Disaster Response Operations: Applications

### Innovative Drone Applications for Wild Fires:

- Situational Awareness
- Fire spotting
- Precision fire retardant applications
- > Aerial fire ignition
- > 2D/3D Mapping
- Search Missions
- Equipment drops
- Damage assessment
- Remediation Support









### Flight Restrictions

Drone flight prohibited over emergency and rescue operations (hurricanes, wildfires, etc) by Temporary Flight Restrictions (TFRs) issued by FAA HQ, the ATO Service Area or ARTCC Manager under provisions of 14 CFR Part 91.137(a)(2). (Ref: JO 7210.3CC Chapter 20)

To fly in a TFR, pilots must apply through the FAA's expedited approval process known as the Special Governmental Interest (SGI) process. May be requested by various entities (regional directors of the Office of Emergency Planning; Civil Defense State Directors; civil authorities directing or coordinating air operations associated with disaster relief; civil authorities directing or coordinating organized relief air operations)

Even with TFRs in place, the FBI has observed a trend of UAS operators interfering with wildland fire response activities either through negligent or intentional operation of drones, which have impeded emergency management efforts, causing greater critical infrastructure and economic losses.

Report such incidents to the appropriate Air Traffic Control facility or FAA Regional Operation Center (ROC), as well as the **local FBI field office**. <a href="https://www.fbi.gov/contact-us/field-office">https://www.fbi.gov/contact-us/field-office</a>

**Federal Aviation** 

Administration

## Emergency UAS Approvals

(Ref: JO 7210.3CC Ch. 21)

System Operations Security leads the Air Traffic Organization's (ATO) role to protect the United States from Air Domain related threats and hazards in the disaster response arena.

Special Government Interest (SGI) Program for UAS:

- Public UAS and, in select cases, civil UAS operations may be needed to support activities which answer significant and urgent governmental interests, including emergency and disaster response operations.
- These operations are authorized through UAS SGI Addendums.
- Requests for UAS SGI operations are processed as either a COA addendum, modification, or a Part 107 authorization and granted through the SGI process managed by System Operations Security, and applied under the authority of their System Operations Support Center (SOSC).





### Emergency UAS Approvals

(Ref: JO 7210.3CC Ch. 21)

#### Request and Approval Process:

- Submit a completed "FAA REQUEST FORM FOR EXPEDITED SGI WAIVER OR AUTHORIZATION FOR UAS OPERATION" to the SOSC via email at 9-ATOR-HQ-SOSC@faa.gov.
- Form is located here: <a href="https://www.faa.gov/uas/advanced\_operations/emergency situations/">https://www.faa.gov/uas/advanced\_operations/emergency situations/</a> then via the link for "Emergency Operation Request Form".
- Confirm receipt of the request with the SOSC via phone at (202) 267–8276.

The SOSC office and email (9-ATOR-HQ-SOSC@faa.gov) are staffed/monitored 0600-2400 Eastern Time. For all emergencies, please follow up any email with a phone call to 202-267-8276, which is answered 24/7.





### FAA Law Enforcement Assistance Program

Special Agents from the FAA's Law Enforcement Assistance Program (LEAP) are you point of contact for federal, state, local, tribal, territorial, and international law enforcement agencies. LEAP special agents can provide information on drone enforcement and registration matters.

Contact a LEAP agent a <a href="mailto:UAShelp@FAA.gov">UAShelp@FAA.gov</a> or by phone at 1 844-FLY-MY-UA







# Recent FAA Legal Interpretation for PAO Ops

Memorandum From AGC-200 Dated Nov 12, 2021:

"We are of the opinion that all entities that qualify for Public Aircraft
Operations under the statute are able to conduct training flights designated as
PAO when they are conducted for purposes of training their own crewmembers
in the operation of the aircraft, the equipment on it, and the conditions
expected for PAO operation."

Memo can be found here: Public Aircraft Training Flights - 2021 Legal Interpretation (faa.gov)





### Drones for Disaster Response Recap

#### **FAA Enabling Drones for Disaster Response**

#### **Innovative Solutions**

- Drone As First Responder
- COVID-19 Test Site Monitoring
- Tactical Beyond Visual Line of Sight



#### 24/7 Public Safety Assistance

### **Emergency Public Safety Operations**

Already have a COA, but need additional authorities

Need to fly in a Temporary
Flight Restriction (TFR)?



Need to fly in controlled airspace?

If you checked <u>any</u> of these boxes, call the FAA System Operations Support Center (SOSC) at 202-267-8276

https://www.faa.gov/uas/getting started/emergency approval/

#### **Dedicated Public Safety Team**

#### **Expertise from across the FAA:**

- Office of UAS Integrations (AUS)
- Flight Standards (AFS)
- Airspace Security (AJO)
- Law Enforcement Assistance Program (LEAP AXE)







### **Useful Links**

FAA UAS Integration Office/Public Safety and Government website: <a href="Public Safety and Government">Public Safety and Government (faa.gov)</a>

FAA's "Drones and Wildfire Digital Toolkit": <a href="https://www.faa.gov/uas/media/FAA">https://www.faa.gov/uas/media/FAA</a> drones wildfires toolkit.pdf

CISA and DHS resources on UAS security/response strategies: <u>UAS - Critical Infrastructure | CISA</u>

Domestic Security Alliance Council Website: <a href="https://www.dsac.gov/">https://www.dsac.gov/</a>





# Questions?











