

## UAS Incident Response Pocket Guide Template

### 1. Flight Planning Checklist

- Description of operating area
- Air traffic approval needed / clearance provided?
- Identify minimum and maximum elevations in flight area
- Identify proximity to structures, above ground utilities, etc.
- Identify line of sight limitations
- Identify launch, landing, and ditch locations
- Obtain Landowner permission, as required
- Cordon required or potential crowd control concerns identified, if necessary
- Public Right of Way considerations
- Establish Communication plans
- Weather Conditions
- Others (agency specific)...
- Risk Rating Matrix score calculated (#15)

### 2. UAS Operator Mobilization Checklist

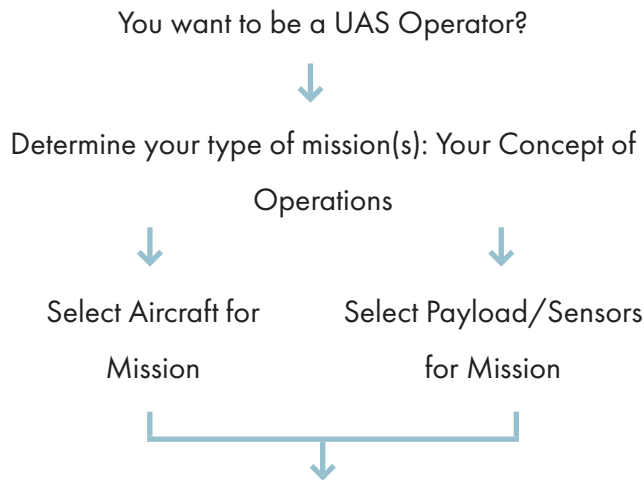
- a. Logistics
  - i. Water
  - ii. Food
  - iii. Clothes
  - iv. Etc. (Transportation)
- b. Incident order information
  - i. Who/what agency is in command
  - ii. Reporting location
  - iii. Equipment ordered
- c. Equipment / Accessories
  - i. Chargers
  - ii. Batteries
  - iii. Cables
  - iv. Etc. (Radios, Environmental Protection)

### 3. List of "Watch Out" Scenarios when using UAS in conjunction with Manned Systems

- a. Manned aircraft are unaware of UAS on scene.
- b. UAS operators are unaware of manned aircraft on scene or en route.
- c. Manned aircraft operators do not expect to have direct communication with UAS operators.



## 4. FAA Rules Decision Tree Diagram



Determine which rules meet operating needs\*

\* *Government Operators can use either*

### Public Operator Rules

(14 CFR Part 91 with a COA)

- Requires detailed ConOps and specific ATC services
- Self Certification of crew and aircraft
- Requires UAS Registration
- More work up front for more flexible access to airspace

### Civil Operator Rules

(14 CFR Part 107)

- Requires UAS Registration
- Requires Pilot Certification
- Less burdensome to fly immediately but less flexible airspace access

## 5. How to Communicate with the Public about Private UAS Use During an Incident Response

- a. Establish standard strategies for shutting down unauthorized operations

## 6. Guidance on Establishing a TFR and When/Where a TFR is Needed

## 7. Guidance for UAS Operations Near/Adjacent to Military Installations

## 8. Guide for Calculating Imagery Resolution Based on Sensor Capabilities and Platform Above Ground Heights

## 9. Matrix of Available Platforms and Sensors and their Capabilities that are available for mission assignment

## 10. Decision Tree Scenario Examples that End in Recommended Platforms and Sensors Given Various Conditions

- a. Wildfire
- b. Hurricane
- c. Flooding
  - i. Dam Breach
- d. Search & Rescue

## 11. Checklist for Hand Off of Operations to/from Manned and Unmanned Systems During Incident

## 12. Guide for Dispatchers Corresponding with Citizens Reporting Emergency Needs Detected by Private/Personal UAS

- a. What is your name?
- b. What is your contact information?
- c. What is your location?
- d. Thank citizen for their assistance
  - i. Be disarming
  - ii. Be non-confrontational
  - iii. Be complementary
- e. Provide citizen with information about legalities of their UAS operations
- f. Ask the citizen to cease operations, if necessary
- g. Provide the citizen with non-emergency contact information if they have any additional/follow-up questions



## 13. Checklist of Principles and Practices for Public Release and Protection of Operational Data Collected by UAS

## 14. Checklist of Principles and Practices for Acquiring Services and Securing Data Collected by Contracted/Private Commercial Vendor

- a. Does vendor have proof of necessary training and certifications?
- b. Are they insured?
- c. Background checks as needed for scope of operations.
- d. Possibly having a standard form / legal document for commercial vendors to sign and agree to data security, sharing, etc. before they begin operations

### I'M S.A.F.E. Checklist

**Illness** - Do I have any symptoms?

**Medication** - Have I been taking prescription or over-the-counter drugs?

**Stress** - Am I under psychological pressure from the job? Worried about financial matters, health problems, or family discord?

**Alcohol** - Have I been drinking within 8 hours? Within 24 hours?

**Fatigue** - Am I tired and not adequately rested?

**Emotion** - Am I emotionally upset?

# 15.

## Flight Operation Risk Rating Matrix

		Severity of the potential injury/damage				
		Insignificant damage to property, equipment, or minor injury	Non-reportable injury, minor loss of process, or slight damage to property	Reportable injury, moderate loss of process, or limited damage to property	Major injury, single fatality, critical loss of process/damage to property	Multiple fatalities, catastrophic loss of business
		1	2	3	4	5
0-5 = Low Risk						
6-10 = Moderate Risk						
11-15 = High Risk						
16-25 = Extremely High Unacceptable Risk						
Likelihood of the hazard happening	Almost Certain 5	5	10	15	20	25
	Will Probably Occur 4	4	8	12	16	20
	Possible Occur 3	3	6	9	12	15
	Remote Possibility 2	2	4	6	8	10
	Extremely Unlikely 1	1	2	3	4	5

# 16. Special Authorizations for Civil UAS Operators During an Emergency

- a. In case of an active or imminent emergency, Civil UAS operators can contact the Systems Operations Support Center (SOSC) to obtain a Special Governmental Interest (SGI) COA granted they meet the following standards:
  - i. They must secure support from a governmental entity participating in the response, relief, or recovery effort, to which the proposed UAS operations

- will contribute
  - ii. Proponents must provide justification sufficient to show the standard process is not feasible (e.g., urgent need to fly a response mission within 14 days or less).
- b. Qualifying proponents must contact the SOSC by phone at 202-267-8276 for assistance and a backup request should be sent to the SOSC via email at 9-ator-hq-sosc@faa.gov. Requests should be initiated with the SOSC as far in advance as practicable and the SOSC will determine if the request meets all necessary SGI criteria.