

# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

## MASP INSTRUCTIONS

**\*Pages 1-11 or through map and aerial hazard analysis page (due to extended risk assessment) require total completion for submission, review, and approval signature (mission approver signature-appropriate level line officer). Subsequent pages see instructions below\***

**Subsequent pages include:** Pilot information, flight following, frequencies, MTR's / MOA's, crash rescue /medivac, and additional appendices. Complete these pages as information becomes available. Partial completion of these pages is recommended during the submission process. (Subsequent pages shall be filled out prior to mission initiation).

## RISK MATRIX INSTRUCTIONS

Appropriate management level for operational risk decision will remain the same in the color-coded format. The number system on page (6) in the risk management scale is incorporated into the drop-down menu of risk assessment attached. Values of risk level are as follows:

Low-1    Medium-2

Serious-3    High-4

In no case will the overall risk of the mission be less than the highest specific factor. (Example: One high, one serious, and two medium threats couldn't result in anything less than a high).

## SIGNATURE'S

Signature blocks are in order of how the MASP will move forward for review and signature. Route all MASP's through the Zone Aviation Officer or delegated acting. The tan colored fields are required to be signed for at the Line Officer level. The MASP's will be routed back down through the Zone Aviation Officer or delegated acting after signature from the Regional Aviation Officer. MASP will come back in PDF for approving official to sign in signature block and risk assessment (See tan highlighted areas).

Signing: All signature boxes up to the Zone Aviation Officer will be signed in typed text. See below.

Example: /s/ John M. Smith

Regional Aviation Safety Manager and Regional Aviation Officer will sign with a link pass digital signature. Approval of risk assessment and line officer plan approval final signature will be wet signature or link pass digital signature (line officer discretion). These areas are a tan color. The mission aviation safety plan will come back to the field in PDF format for ease of link pass signatures.

## RETENTION AND FILING OF PLAN

Once the mission safety plan is approved, the plan will be maintained in the dispatch office and referenced during flight. Retention of the plan and daily briefing sheets by the forest, refuge or unit shall be one year: reference NSHO Chapter 3, Mission Aviation Safety Plans, or any other governing policies that refer to MASP retention per aircraft type.

# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

<u>Forest-Refuge-Unit:</u> National Forest in Florida	<u>District-Unit:</u> Osceola National Forest
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<b>Agency Requesting Mission</b>			<b>Anticipated Date(s)</b> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		<b>Calendar Year</b>						
FS <input checked="" type="checkbox"/> NPS <input type="checkbox"/> BLM <input type="checkbox"/> FWS <input type="checkbox"/> BIA <input type="checkbox"/> STATE <input type="checkbox"/> OTHER <input type="checkbox"/>			<b>Calendar Year</b> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> ----->		2023						
<b>Aircraft Type</b>			<b>Date Variance Acceptable</b> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>								
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; padding: 2px;"><b>Fixed</b></td> <td style="width: 33%; padding: 2px;"><b>Rotor</b></td> <td style="width: 33%; padding: 2px;"><b>UAS</b></td> </tr> <tr> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input checked="" type="checkbox"/></td> </tr> </table>			<b>Fixed</b>	<b>Rotor</b>	<b>UAS</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<b>Start Date</b>	<b>End Date</b>	<b>MASP Objectives</b>
<b>Fixed</b>	<b>Rotor</b>	<b>UAS</b>									
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
			1/1/2023	12/31/2023	Training <input checked="" type="checkbox"/> Resource <input checked="" type="checkbox"/> LE&I Mission(s) <input type="checkbox"/> Incident <input type="checkbox"/> Emr. Ops <input checked="" type="checkbox"/> Emr. Readiness <input checked="" type="checkbox"/>						

<b>Mission prepared by:</b> /s/ William Lucas	<b>Title:</b> Helicopter Manager	9/16/2022
<b>Mission reviewed by:</b> (OPTIONAL) Forest Level: /s/Byron Hart	<b>Title:</b> District FMO	9/22/2022
<b>Mission review by:</b> (OPTIONAL) Regional Level: Click here to enter text.	<b>Title:</b> Choose an item.	Click here to enter a date.
<b>Mission review by:</b> (OPTIONAL) Zone Aviation Officer: /s/ Joshua Pierotte	<b>Title:</b> Zone Aviation Officer (south)	10/27/2022
<b>Mission reviewed by:</b> (REQUIRED) RASM:	<b>Title:</b> Regional Aviation Safety Manager or Acting	See signature for date.
<b>Mission reviewed By:</b> (REQUIRED) RAO:	<b>Title:</b> Regional Aviation Officer or Acting	See signature for date.
<b>Mission-Risk Assessment approved by:</b> Forest Service Line, IC, or Ops Section Chief-	<b>Title:</b> Forest Supervisor or Acting	See signature for date.

# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

<b>Mission Supervisor:</b> UAS Pilot or UAS Module Leader	<b>Alternate Mission Supervisor:</b> Forest Aviation Officer or Zone Aviation Officer
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**\*\* Participant's qualifications and responsibilities verified/discussed during daily briefing\*\***

<b>Mission Name</b> Osceola N.F CY23 sUAS RX PSD Flights
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**Mission Description:** Note: Compliance with the operational procedures outlined in the Mission Aviation Safety Plan is required.

UAS Aerial ignition in support of prescribed fire and forest ecosystem management. These missions will consist of pre-burn recon of unit(s) and aerial ignition operations and may also include post-burn recons and smoke dispersion recons. Aerial ignition will be accomplished utilizing Unmanned Aircraft Systems (UAS). Incoming units will receive a local aviation in-briefing (Airspace, Frequencies, DOD areas, etc.) by Fire Management of the Unit, District, or Forest.

Depending on the burning conditions, aerial firing operations may be intermittent, with periods when the aircraft (UAS) may need to be shutdown. All aerial ignitions will be conducted when determined to be the most beneficial for the objectives set forth in the RX Burn Plan. Prior to any aerial ignition operations, all necessary briefings and checklists will be completed and documented. All landing areas will be approved by a qualified UAS Pilot (UASP), and all necessary positions will be occupied.

These flights will originate from the mission helibase/helispot/sUAS landing areas after each morning briefing. Ensure burn area map(s) are briefed on before flight. Reference unit burn plan for specific objectives, prescriptions, goals, firing patterns, etc.

These unmanned flights will be conducted within applicable rules and regulations outlined in 14 CFR part 107, cooperative letters-agreements, and Forest Service policy. The pilot shall determine airspace authorizations before mission commencement for waivers and approvals to conduct specific missions or flight profiles. Pilots have the final say on the conduction of flights based on current terms, conditions, or limitations of their governing agency/bureau or the agency/bureau of operational control (most restrictive applies).

**\*Simultaneous manned aircraft flights in the planned mission area may be prohibited\***  
**\*\*Use of visual observers is recommended unless required by agency policy\*\***  
**\*\*\*Obtain applicable waivers if operating outside Part 107 or COA\*\*\***

# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

## **Mission Objectives:**

Reduce hazardous fuels/fuel loading and severity of wildfires, restore/maintain ecosystems, and enhance wildlife habitat. Conduct prescribed burn operations to achieve agency objectives while generally minimizing cost per acre, limiting exposure to personnel and reducing impacts to communities.

Integrate the use of UAS aerial ignition to mitigate and reduce manned flight time at low and slow flight profiles. Determine potential for integrating UAS aerial ignition on higher acreage production on future Rx burns.

## **Aircraft Justification For Mission:**

Using sUAS for aerial ignition and imagery collection is an effective alternative to manned flights for meeting stated mission objectives and mission considerations below.

- Personnel Safety: Reduces exposure for those involved in the mission and mitigates the need for additional personnel associated with a manned aircraft mission within the RX burn unit.
- Cost-Effectiveness: Agency-owned or contracted sUAS aircraft should provide significant overall cost savings for aerial ignition and data collection (payload sensor options) versus manned aircraft.

## **Special Instructions:**

All sUAS PSD operations will be conducted in accordance with approved (or interim approval by letter-NIAC or Forest Service) aerial ignitions devices, Interagency Standards for Fire and Aviation Operations, the NWCG Standards for Aerial Ignition, regulatory letters (I.E, NIAC) as well as the Forest Service Standards for UAS Operations. UAS Pilot (UASP) will ensure that a preflight inspection of the PSD machine and sUAS are completed.

Special waivers and authorizations are REQUIRED from the FAA in order to fly beyond the visual line of sight (BVLOS) and other operations outside of part 107. These operations require a Certificate of Authorization (COA) and/or a Special Government Interest waiver (SGI) as well as additional agency training and approval. SGI's are for non-part 107 operations supporting immediate emergency response (i.e., wildfire) and require a Temporary Flight Restriction (TFR). A COA requires submission of a NOTAM (Notice to Airmen) in accordance with the provisions of the authorization. A Certificate of Authorization request from the FAA can take months to receive. Questions regarding these types of operations may be referred to your UAS coordinator.

# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

**Aircraft Information:** \*Refer to Appropriate page for UAS information\*

**\*Check all that apply, if name is unknown, add information to safety plan briefing sheet\***

**\*Leave text fields blank if unknown\***

**\*All cooperators require an annual approval letter onboard except DOJ-DHS aircraft\***

Cooperator  Click here to enter text. Agency  DOI-Forest Service

Vendor  Pending FS/DOI policy and contract Military  Click here to enter text.

Other  Click here to enter text.

**Rotor Wing:** Type One  Type Two  Type Three

**\* Additional document requirements beyond standard typing in aircraft justification and resource order\* (performance capabilities, equipment, Etc.)**

**Fixed Wing:** Single Engine  Twin Engine

**\*Document needs for turbine, twin-engine, air conditioning, high or low wing, pressurized cabin, radio package or any additional requirements in aircraft justification and resource order\***

**Aircraft Make and Model:** Refer to the safety plan briefing sheet for vendor name, make, FAA#, and model (helicopter or fixed-wing only below).

**Vendor:** Click here to enter text.

**Tail number:** Click here to enter text.

**Model:** Click here to enter text.

Unknown CWN

Unknown EU

**\*\* CWN helicopter information attained after hiring process\*\***

**\*\*Unknown or multiple aircraft in use (CWN or EU)- mark appropriate boxes, have CWN inspection sheet or copy of aircraft data card on file with MASP for aircraft data\*\***

**Procurement and Cost Information:** Check unknown if unable to provide accurate or estimated information.

**Procurement Type:** Agency Owned  
Unknown  or Co-Op (incident only-per letter)  
Vendor-Pending

**Missioned Flight Hours:** Click here to enter text.  
Unknown

**Charge Code:** Click here to enter text.  
Unknown

**Estimated Flight Hour Cost:** Click here to enter text.  
Unknown

**Estimated Miscellaneous Cost(s):** Click here to enter text.  
Unknown

# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

**\*\*Mission risk assessment completed prior to mission approval\*\***

**\*\*Risk assessment hazards shall be re-assessed prior to mission engagement\*\***

**\*\*See appropriate management level for approval and dynamic flowchart decision-making tool\*\***

Mission Risk Assessment Matrix Scale				
	Severity			
Likelihood	Negligible IV	Marginal III	Critical II	Catastrophic I
Frequent A				
Probable B			<i>Serious 3</i>	<i>High 4</i>
Occasional C				
Remote D		<i>Medium 2</i>		
Improbable E	<i>Low 1</i>			

# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

Severity and Likelihood Scale Definitions			
Severity		Likelihood	
<b>Catastrophic</b>	Fatalities and or loss of the system.	<b>Frequent</b>	Likely to occur and continuously experienced.
<b>Critical</b>	Severe injury and or major system damage.	<b>Probable</b>	Will occur several times and occur often.
<b>Marginal</b>	Minor injury and or minor system damage.	<b>Occasional</b>	Likely to occur sometimes and will occur several times.
<b>Negligible</b>	Less than minor injury and or less than minor damage.	<b>Remote</b>	Unlikely to occur, but possible. Unlikely, but expected to occur.
		<b>Improbable</b>	So unlikely, assume it will not occur. Unlikely to occur, but possible.

Appropriate Management Level for Operational Risk Decisions		
Risk Level	Fire	Mission (non-fire)
<b>High</b>	Incident Commander or Operations Sections Chief	Line Officer/Manager
<b>Serious</b>	Incident Commander or Operations Sections Chief	Line Officer/Manager
<b>Medium</b>	Air Operations Branch Director	Mission Aviation Manager
<b>Low</b>	Base Manager	Helicopter or Flight Manager

# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

SAFETY MANAGEMENT SYSTEM ASSESSMENT AND MITIGATION								
System Being Evaluated: sUAS-PSD Operations		Pre Mitigation			Mitigation	Post Mitigation		
Sub System(s)	Hazards	Likelihood	Severity	Risk Level		Likelihood	Severity	Risk Level
Aerial Hazards	Collision with another aircraft	Remote	Catastrophic	Serious-3	The remote pilot will utilize a visual observer (VO), scanning the area for air traffic and other hazards to aviation. The remote pilot will file a NOTAM as per agency/FAA policy. Flights within TFRs will be coordinated with the controlling authority and participating aircraft. The remote pilot will give way to manned aircraft. Deconflict with local dispatch.	Improbable	Catastrophic	Medium-2
Aerial Hazards	Collision with personnel or vehicles	Occasional	Critical	Serious-3	The remote pilot will conduct a pre-flight briefing, which will include flight patterns and safe observation/parking areas. The remote pilot will not fly the sUAS over personnel or vehicles.	Remote	Critical	Medium-2
Aerial Hazards	Collision with fixed or other aerial hazards (trees, towers, birds)	Probable	Critical	High-4	The remote pilot will conduct a survey of the operations area prior to flight operations. Utilize a visual observer (VO), review aerial hazard maps.	Remote	Critical	Medium-2
Aerial Hazards/ Equipment	Aircraft flyaway (loss of control)	Occasional	Critical	Serious-3	Aircraft, personnel, and ATC having jurisdiction over the airspace will be notified with the last location, heading, speed and approximate battery/time remaining on the sUAS. The crew actions to recover the sUAS will be relayed as well.	Remote	Critical	Medium-2



# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

SAFETY MANAGEMENT SYSTEM ASSESSMENT AND MITIGATION								
System Being Evaluated: sUAS-PSD Operations		Pre Mitigation				Post Mitigation		
Sub System(s)	Hazards	Likelihood	Severity	Risk Level	Mitigation	Likelihood	Severity	Risk Level
Communications	Unclear on assignments or unclear briefing. Miscommunication from air to ground. Poor communication such as non-standard wording etc. Loss of communications.	Occasional	Critical	Serious-3	PLDO/FIRB to perform a complete briefing. Use clear text and proper nomenclature in all communications. Utilize read-back to ensure instructions are understood. Follow established firing commands. Suspend all operations until communications can be restored.	Remote	Critical	Medium-2
Aircraft Equipment	Aircraft loss of link with ground control station	Probable	Critical	Serious-3	sUAS will be programmed with proper parameters to return to home and land.	Occasional	Negligible	Low-1
Personnel	Injury caused by spinning propellers	Remote	Critical	Medium-2	Preflight briefing will include safety precautions when working around sUAS with motors running.	Improbable	Critical	Medium-2
Environmental	Adverse Weather (wind, thunderstorms, etc.)	Probable	Critical	Serious-3	Remote pilot will obtain a current forecast and ensure the aircraft is flown within approved parameters. The crew will monitor weather conditions periodically during flights.	Remote	Critical	Medium-2
Environmental	Night operations – difficulty seeing sUAS and landing areas	Occasional	Critical	Serious-3	The sUAS will have an agency approved illuminated launch and recovery area.	Remote	Critical	Medium-2

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SAFETY MANAGEMENT SYSTEM ASSESSMENT AND MITIGATION								
System Being Evaluated: sUAS-PSD Operations		Pre Mitigation			Mitigation	Post Mitigation		
Sub System(s)	Hazards	Likelihood	Severity	Risk Level		Likelihood	Severity	Risk Level
Aircraft Equipment	Battery fire	Occasional	Critical	Serious-3	Batteries will be stored in approved containers. A fire extinguisher will be available on site.	Remote	Critical	Medium-2
Human Factors	Operating aircraft outside of published parameters	Occasional	Marginal	Medium-2	The remote pilot will ensure the aircraft is operated within policy and the provisions of the aircraft operations manual.	Remote	Marginal	Medium-2
Mission	Inability to identify the fireline location. Impact on people and animals in the proximity of the burn	Occasional	Critical	Serious-3	Ensure adequate recon to identify fireline. Use GPS technology to aid in boundary identification/restriction. If appropriate, have ground personnel light fireline. Complete pre-burn notifications. Stop firing operations if necessary.	Remote	Critical	Medium-2
Human Factors	Failure to follow policy and procedures. Sense of urgency/time pressure or mission pressure. Lack of familiarity with others working on the operation.	Occasional	Critical	Serious-3	Confirm policy and procedures are identified, understood, and followed. Ensure not placing undue pressure on others. Conduct daily briefings, utilize standardized procedures, practice CRM, and limit rotation of personnel- if possible, to maintain CRM.	Remote	Critical	Medium-2

# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

SAFETY MANAGEMENT SYSTEM ASSESSMENT AND MITIGATION								
System Being Evaluated: sUAS-PSD Operations		Pre Mitigation				Post Mitigation		
Sub System	Hazard	Likelihood	Severity	Risk Level	Mitigation	Likelihood	Severity	Risk Level
Mission Planning	Military training routes, military operating areas, and general aviation traffic.	Occasional	Critical	High-4	Consult up-to-date materials to identify routes. Ensure dispatch is appropriately using de-conflicting procedures. See and avoid general aviation traffic.	Remote	Critical	Medium-2
Aircraft Equipment	PSD malfunction-fire in machine attached to aircraft. Improper installation. Improper or lack of maintenance.	Occasional	Critical	Serious-3	Emergency procedures covered by Remote Pilot, V.O. and Burn Boss/Ignition Specialist in the pre-burn briefing. Emergency release operations tested before flight. Inspect and test machine prior to use. Assure proper installation. Follow policies on maintenance.	Remote	Critical	Medium-2
<b>Final Assessment:</b> Low-1 <input type="checkbox"/> Medium-2 <input checked="" type="checkbox"/> Serious-3 <input type="checkbox"/> High-4 <input type="checkbox"/>		Prepared By: Joshua Pierotte				10/27/2022		

# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

Map Of Mission Area: Depict aerial hazards in this map if known. If map or supporting documents do not fit page format, attach as an appendix. Attach the addendum to the end of the MASP.

## Aerial Hazard Analysis:

Missions may be conducted out of the Lake City Airport or the Lake City Tanker Base. All new pilots coming to the Osceola National Forest should be given a briefing by the local fire staff, Flight Manager, or Helicopter Manager. When the briefings have been completed, the participants may commence flight operations. Refer to the Aviation Hazard Map and MASP for MTR number and contact information for the scheduling activity. Common aviation hazards are General Aviation (GA) traffic, powerlines, and radio towers. Public flying UAS may be in the area as well. FICC should be contacted to deconflict airspace prior to operations.

# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

**Aircraft Performance Planning:**

The pilot is responsible for the accurate completion of load calculations or PPC (military performance planning). Trained personnel shall ensure that aircraft scheduled are capable of performing the mission(s) safely and within the capabilities of the aircraft selected. The helicopter or flight manager shall ensure that manifests, load calculations, weight & balance are completed properly using accurate environmental and aircraft data. Reference NSHO chapter 7 or chapter 70 of the Military Use Handbook for additional information.

**Personal Protective Equipment:** \* Always refer back to current ALSE, NSHO, and manual direction\*

Type of Operation- Check applicable boxes that may apply to mission or mission	Personnel protective equipment requirements
<input checked="" type="checkbox"/> <b>Rotor Wing Ground Operations Including UAS</b>	Fire-resistant clothing, hard hat w/chin strap or SPH-5 flight helmet or other approved model, fire resistant and/or leather gloves, all leather boots, eye protection, hearing protection. *Refer to appropriate guides or policies for UAS PPE pending mission*
<input type="checkbox"/> <b>Rotor Wing</b>	Fire-resistant clothing, SPH-5 flight helmet or other approved model, hard hat w/chin strap, fire resistant and/or leather gloves, all leather boots, eye protection, hearing protection. Additional personnel restraints needed in the helicopter pending type of mission. * Refer to appropriate guides or policies. * Charter flights, (non-agency controlled mission), shall comply with 14 CFR 135 requirements.
<input type="checkbox"/> <b>Doors Off Flight(s)</b>	Personnel will remain seated and inside fuselage during all flights, approved secondary restraint harness for doors off flights (only for PLDO, HRAP, HRSP, Aerial Photography, IR Operator, ACETA Gunner, Cargo Letdown, Short Haul Spotter, Cargo Free Fall Operations-type 3 helicopter) * Refer to appropriate guides or policies*
<input type="checkbox"/> <b>Cargo Free Fall Operations</b>	Fire-resistant clothing, SPH-5 flight helmet or other approved model, fire resistant and/or leather gloves, all leather boots, eye protection, hearing protection. Additional qualifications, compliance with rotorcraft manual, and approved restraint requirement apply. * Refer to NSHO chapter eleven for additional details or other agency guides and policies. *
<input type="checkbox"/> <b>Fixed Wing</b>	Refer to current IASG, ALSE, and 5700 manual directions for PPE requirements.

# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

**Helicopter, Fixed Wing, or UAS Pilot Information:** \*Fixed wing: Use "other" box, and state approved mission(s) \*\* National Guard, DOJ, DHS, and Co-Op pilots do not require this section, refer to current agency or cooperative letters for information and guidance\*\*

<p><b><u>Pilot Name (P1): PIC/Primary</u></b> Click here to enter text.</p>	<p><b><u>Pilot Phone Number:</u></b> Click here to enter text.</p>
<p><b><u>Pilot Name (P2): Co-Pilot/Relief</u></b> Click here to enter text.</p>	<p><b><u>Pilot Phone Number:</u></b> Click here to enter text.</p>
<p><b><u>Pilot Carded For Mission:</u></b> Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Charter Pilot <input type="checkbox"/> 135 Certificate and FAR's Apply</p> <p><b>** Use of charter pilot requires regional forester approval**</b></p> <p><b>Check all boxes that apply to pilot(s) carding below:</b></p>	<p><b><u>Pilot Card (P1) Expiration Date:</u></b> Click here to enter a date.</p> <p><b>FAA-UAS Lic. #</b> Click here to enter text.</p> <p><b><u>Pilot Card (P2) Expiration Date:</u></b> Click here to enter a date.</p> <p><b>FAA-UAS Lic. #</b> Click here to enter text.</p>
<p>Low-Level Recon &amp; Survey P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>Helitack-Passenger Transport P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>External Load (Belly Hook) P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>Water-Retardant Delivery P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>Longline VTR (150') P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>Snorkel VTR <input type="checkbox"/> Mirror <input type="checkbox"/> P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>Mountainous Terrain Flying P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>Aerial Ignition (PSD) P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>Aerial Ignition (Torch) P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>Rappel Operations P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>Cargo Letdown P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>Snow Operations (Deep Snow) P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>Hoist P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p><b>UAS P1 <input type="checkbox"/> P2 <input type="checkbox"/> Check and complete next section</b></p>	<p>Designated "Pilot Trainer" P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>"Trainee Only" Pilot P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>Short Haul LE <input type="checkbox"/> SAR <input type="checkbox"/> P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>Float Operations (Fixed) P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>Platform Landings-Offshore P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>Vessel Landings P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>Night Vision Goggle Operations P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>ACETA Net Gun (All ACETA) P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>ACETA Eradication P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>ACETA (Herding) P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>ACETA Darting-Paintball P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>STEP P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>Other <input type="checkbox"/> P1 <input type="checkbox"/> P2 <input type="checkbox"/></p> <p>Click here to enter text.</p>

# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

## UAS Section:

### Procurement:

Public- Agency Owned or Cooperator       Commercial- Contract

Comments- [Click here to enter text.](#)

### Aircraft Information: \*Attach addendum page if running multiple aircraft\*

Fixed-Wing      UAS Make – Choose an item.      UAS Model – Choose an item.

Rotor-Wing (VTOL)

Carded for Mission -  YES     NO

Card Expiration Date - [Click here to enter text.](#)

Registration #- [Click here to enter text.](#)

Aircraft Color Scheme - [Click here to enter text.](#)

### Crew: Other Than Pilot: Pilot(s) information found on Helicopter and Fixed-Wing Pilot Information Sheet

UAS Crew Leader –	Contact Number -
UAS Data Specialist (1) -	Contact Number -
UAS Data Specialist (2) -	Contact Number -
UAS Visual Observer (1) -	Contact Number -
UAS Visual Observer (2) -	Contact Number -
Additional Crew -	Contact Number -
Trainee Pilot/FAA UAS Lic. # -	Contact Number -
Trainee Pilot/FAA UAS Lic. # -	Contact Number -
Trainee Pilot/FAA UAS Lic. # -	Contact Number -

### TFR Information:

**NOTAMS can be utilized as needed in accordance with policy requirements and FAA guidelines. TFR's cannot be requested for mission flights.**

# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

## Airspace Authorization:

Part 107     107/LAANC     SGI Waiver     COA     FAA/DOI MOA

**Authorization Comments – UAS Pilot will make the determination for LAANC (Low altitude authorization and notification capability) and NOTAM submission and coordinate with dispatch.**

## Lost Link and Flyaway Procedures-Protocols:

**If lost GPS signal, the pilot will return aircraft to launch in "manual" mode. If this is a lost controller link, the aircraft will initiate an auto "return to launch." If both lost and "Flyaway" occurs, note location, the direction of travel, time, and estimated battery life.**

**Notify Local dispatch who can then notify the FAA.**

**Notify local airports if applicable.**

**The pilot in command will File a SAFECOM and notify the Regional UAS Program Manager.**

## Special Consideration-Safety Concerns-Comments Section:

**CRM will be utilized during all UAS operations. (Decision making, Assertiveness, Mission Analysis, Communication, Leadership, Adaptability/Flexibility, Situational Awareness.**

**If other UAS are used that are not listed here, the make/model, reg. # and agency card information will be recorded and attached to this plan. Operations will utilize only agency approved and carded UAS. The pilot must be carded for that aircraft/mission.**

**If multiple UAS are utilized within the same airspace, deconfliction will occur locally between UAS pilots along with dispatch. Coordination and flight following with multiple aircraft of different types (i.e., helicopter and UAS) will be done locally using effective communication and deconfliction techniques, with local dispatch center, and using Automated Flight Following (AFF) or other approved tracking system. UAS will ALWAYS give way to manned aircraft.**



# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

**Flight Following And Frequencies:**

**\*Confirm frequencies during the briefing prior to flight\***

**\*FAA Flight Plan (chartered aircraft non-agency controlled mission) no frequencies required\***

**\*Chartered 135 operator is responsible for communications and flight plan\***

Flight Following Method:    AFF <input checked="" type="checkbox"/> Radio (Local or GACC aircraft desk) <input checked="" type="checkbox"/> FAA Flight Plan: (Agency-owned or agency contracted aircraft mission) <input type="checkbox"/> FAA Flight Plan: (Charter aircraft non-agency controlled mission) <input type="checkbox"/>		
FM Receive: 171.500 Olustee Repeat	FM Transmit: 164.8000	RX: No Tone TX: Tone 7 167.9 Digital-\$68F
FM Receive: 167.9875 A/G/ 17	FM Transmit: 167.9875	RX: No Tone TX: No Tone
FM Receive: 166.5625  R8 Fire	FM Transmit: 166.5625	RX: No Tone TX: No Tone
AM Receive: 122.125	AM Transmit: 122.125	No Tone

**\*\*Manager or Mission Supervisor will coordinate Temporary Flight Restrictions (TFR) if needed\*\***

**Military Training Route(s) (MTR'S) or Military Operating Area(s) (MOA'S)**

**Mission supervisor, alternate supervisor, or delegated manager shall confirm deconfliction in these routes and areas prior to the flight with dispatch or other approved local methods. Deconfliction will be addressed during the aviation safety plan briefing.**

MTR-MOA	Route Legs-Altitudes	Activity	Time	Time Zone
VR Routes: 1001, 1002, and 1003	1500 AGL and below	Hot <input checked="" type="checkbox"/>  Cold <input type="checkbox"/>  N/A <input type="checkbox"/>	Start: <a href="#">Click here to enter text.</a>  Stop: <a href="#">Click here to enter text.</a>	UTC <input type="checkbox"/>  Local <input checked="" type="checkbox"/>
IR Routes: 023 and 019	1500 AGL and above	Hot <input checked="" type="checkbox"/>  Cold <input type="checkbox"/>  N/A <input type="checkbox"/>	Start: <a href="#">Click here to enter text.</a>  Stop: <a href="#">Click here to enter text.</a>	UTC <input type="checkbox"/>  Local <input checked="" type="checkbox"/>

# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

<b>Crash Rescue/Medivac Plan</b>	
<b>General Instructions (in the event of an incident):</b> <span style="color: red;">Mission site duties and actions to be coordinated through dispatch in accordance with local search &amp; rescue (SAR) and emergency crash rescue plan(s). These items will be discussed and recorded during the daily safety briefing.</span>	
Specified crash rescue duties will be assigned to ground operations personnel each day before flights of any kind. Crash rescue and first aid equipment will be located near the helicopter operations site, and equipment's location made known to all personnel. Information and instructions will be sent/received through the local dispatch office or communications.	
EMT(s) on-site:    YES <input type="checkbox"/> NO <input type="checkbox"/>	
<b>Names:</b> Click here to enter text.    Click here to enter text.    Click here to enter text.    Click here to enter text.	
First responder(s) on-site: YES <input type="checkbox"/> NO <input type="checkbox"/>	
<b>Names:</b> Click here to enter text.    Click here to enter text.    Click here to enter text.    Click here to enter text.	
Available medivac helicopter(s)?                      YES <input type="checkbox"/> UNKNOWN <input type="checkbox"/>  <span style="color: red;">*Unknown: Select if medivac helicopter is not to be ordered for the mission or incident before need. The helicopter will be requested on-demand through the dispatch process. Dispatch will provide medivac ship call sign or tail number, including capabilities and contact information. *</span>	
Medivac helicopter on-site?                      YES <input type="checkbox"/> NO <input type="checkbox"/>	
Level of care medivac helicopter personnel can provide:    ALS <input type="checkbox"/> BLS <input type="checkbox"/> Unknown <input type="checkbox"/>	
FAA Tail #(s) <small>Click here to enter text.</small>	<b>Contact Information:</b> <small>Click here to enter text.</small>
Hoist/Rappel/Extraction Capable?    YES <input type="checkbox"/> NO <input type="checkbox"/>	
Check all that apply:    Hoist <input type="checkbox"/> Rappel <input type="checkbox"/> Short Haul <input type="checkbox"/>	

# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

Additional medical information attached? YES  NO

<b>MEDICAL FACILITY</b> Shands of Jacksonville 655 West 8 <sup>th</sup> St. Jacksonville FL	<b>Name/Location/Helipad Information</b> Shands of Jacksonville	<b>Helipad</b> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Latitude N 30 29.95'	Longitude W 081 39.94'	Contact 904-244-0411

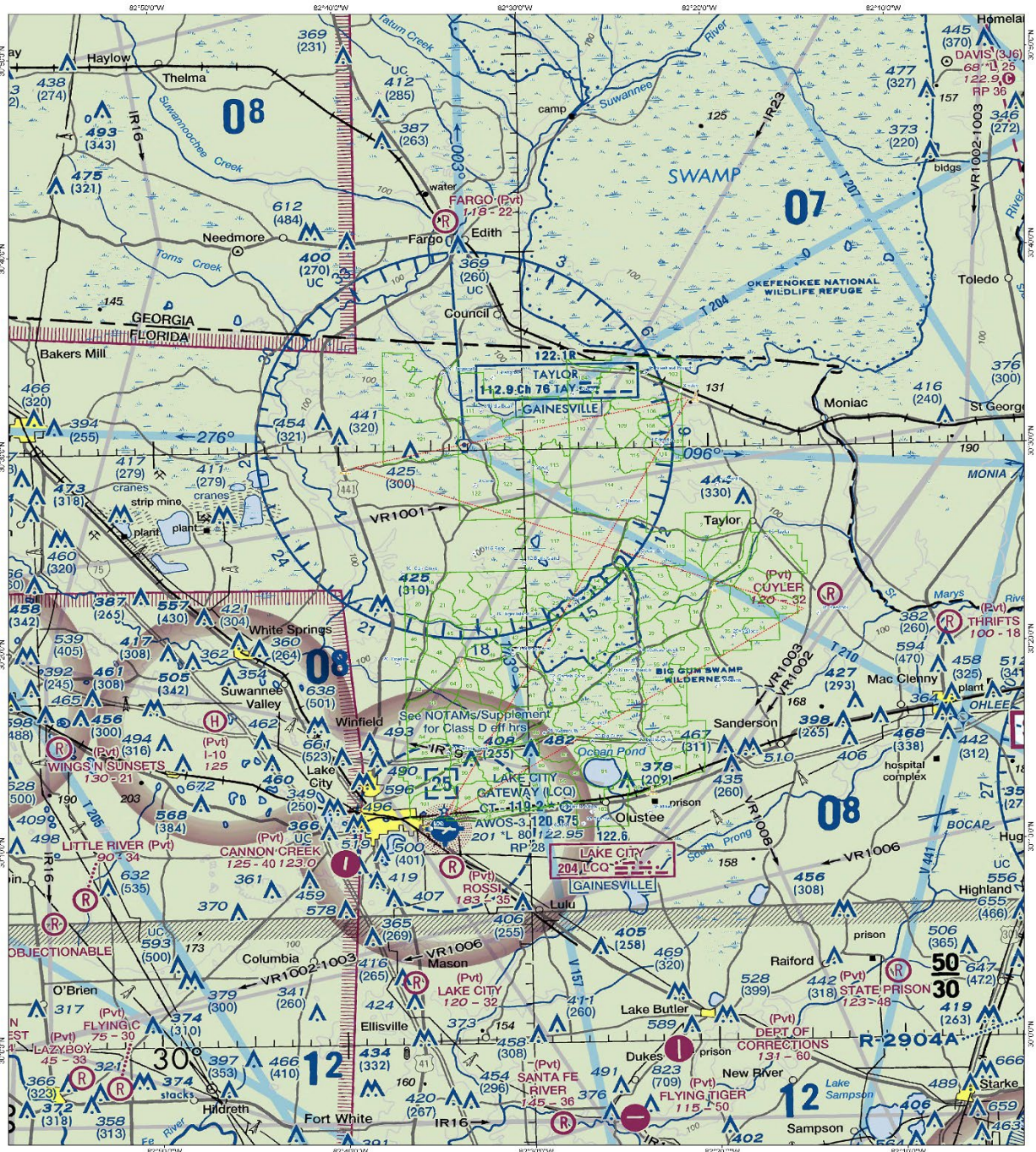
<b>MEDICAL FACILITY</b> Lake City Medical 340 NW Commerce BLD. Lake City FL	<b>Name/Location/Helipad Information</b> Lake City Medical	<b>Helipad</b> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Latitude N 30 11.38'	Longitude 082 41.17'	Contact 386-719-9000

<b>NEAREST BURN FACILITY</b> Shands Hospital East 1515 SW Archer Rd Gainesville, FL	<b>Name/Location/Helipad Information</b> Shands/ Gainesville/ On Roof on the south side Pad 2	<b>Helipad</b> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Latitude N 29 38.33'	Longitude W 082 20.73	Contact 352-265-0111



# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

## Flight Hazard Map CY23



JOSHUA PIEROTTE Digitally signed by JOSHUA PIEROTTE  
Date: 2022.10.24 11:19:20 -0400'

**USDA Osceola National Forest**  
FAA Sectional Chart



1:100,000



Caution: Not all hazards are identified. This map is for reference only. Use current sectional chart for navigation.

# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

<input checked="" type="checkbox"/> <b>Doors Off or Doors Open Flight(s)</b>	<p>Personnel will remain seated and inside fuselage during all flights, approved secondary restraint harness for doors off flights (only for PLDO, HRAP, HRSP, Aerial Photography, IR Operator, ACETA Gunner, Cargo Letdown, Short Haul Spotter, Cargo Free Fall Operations-type 3 helicopter) * Refer to appropriate guides*</p> <p><b>**Safety Alert IASA 18-03 language**</b></p> <p><i>“Agency personnel involved in any public aircraft operations mission that require aircraft doors to be removed prior to flight, or open during flight, shall receive hands-on secondary restraint refresher training prior to conducting flight operations”.</i></p>
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**Doors Off or Open Operations checklist: \*\*All items shall be covered and signed for prior to operations\*\***

- Aircraft connection point and secondary restraint configuration (Interagency Safety Alert IASA 17-02)
- Proper donning and adjustment of secondary restraint system.
- Have an understanding of the secondary restraint interaction with FAA approved seat belts.
- Potential of secondary restraint interference with Airbus AS 350 fuel shut off lever if applicable.
- Know location and use of secondary restraint interaction quick- release.
- Perform buddy-check and Pilot in Command check of secondary restraints before flight.
- Practice egress with secondary restraint quick-release mechanism and function of seatbelt.
- Know location and use of rescue knife.

Vendor Name:	Aircraft Model:	Aircraft Make:	FAA#:
Mission Supervisor/Manager:	Date:	Pilot:	Date:

Participant's Name: Print	Date	Participant's Name: Print	Date



# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

## Appendix 1

### Hazardous Materials Manifest

#### Form (cont.) DOT-SP-9198

Date: Click or tap to enter a date. Aircraft #: Click or tap here to enter text. Bureau/Agency: Click or tap here to enter text.

Common Name	Shipping Name	Hazard Class	UN #	ERG #	QTY	WT
Acetylene	Acetylene, dissolved	2.1 Flammable Gas	UN1001	116		
Aerosols	Aerosols non-flammable each not exceeding one-liter capacity	2.2 Non-Flammable Gas	UN1950	126		
Aerosols starting fluid, WD-40	Aerosols flammable each not exceeding one-liter capacity	2.1 Flammable Gas	UN1950	126		
Batteries dry	Batteries dry, containing potassium hydroxide solid electric storage	8 Corrosive	UN3028	154		
Batteries wet	Batteries wet filled with acid	8 Corrosive	UN2794	151		
Batteries wet	Batteries wet filled with alkali	8 Corrosive	UN2795	131		
Batteries wet	Batteries wet non-spillable	8 Corrosive	UN2800	154		
Bear spray, irritants	Aerosols flammable each not exceeding one-liter capacity	2.1 Flammable Gas	UN1950	126		
Biomedical waste	Infectious substances affecting humans	6.2	UN2814	158		
Cartridge	Cartridge for small arms	1.4s	UN0012	114		
Clorox, liquid bleach	Hypochlorite Solutions	8 Corrosive	UN1791	154		
Diesel	Diesel, fuel	3 Flammable	UN1993	128		
Drip torch fuel	Gasoline/ Diesel	3 Flammable	UN1203	128		
Engine, internal combustion	Engine, internal combustion, flammable gas powered <i>or</i> Engine, fuel cell, flammable gas powered <i>or</i> Machinery, internal combustion, flammable gas powered <i>or</i> Machinery, fuel cell, flammable gas powered	2.1	UN3529	135, A200		

# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

## Hazardous Materials Manifest

### Form (cont.) DOT-SP-9198

Date: Click or tap to enter a date. Aircraft #: Click or tap here to enter text. Bureau/Agency: Click or tap here to enter text.

Common Name	Shipping Name	Hazard Class	UN #	ERG #	QTY	WT
Engine, internal combustion	Engine, internal combustion, flammable liquid powered <i>or</i> Engine, fuel cell, flammable liquid powered <i>or</i> Machinery, internal combustion, flammable liquid powered <i>or</i> Machinery, fuel cell, flammable liquid powered	3	UN3528	135, A20 0		
Engine, internal combustion	Engine, internal combustion <i>or</i> Machinery, internal combustion	9	UN3530	135, A20 0		
Engines internal combustion	Engine internal combustion flammable gas powered	9 Misc.	UN3166	128		
Fire extinguisher	Fire extinguisher	2.2 Non-Flammable Gas	UN1044	126		
Fireline explosives FLE	Explosive blasting type E	1.1D EXPLOSIVES	UN0241	112		
Flare shell Pistol flare	Flammable solid, inorganic, nos (Aluminum powder)	4.1 Flammable Solid	UN3178	133		
Fuel white gas	Petroleum distillates, nos, (Naphtha solvent)	3 Flammable	UN1268	128		
Fuel, aviation jet-A	Fuel aviation, turbine engine	3 Flammable	UN1863	128		
Fusee	Fusee (rail or highway)	4.1 Flammable Solid	UN1325	133		
Gasoline	Gasoline	3 Flammable	UN1203	128		
Lithium battery	Lithium battery	9 Misc.	UN3090	138		
MAPP gas helitorch	Methyl acetylene propadiene propane mixtures stabilized	2.1 Flammable Gas	UN1060	116P		
Nitrogen	Nitrogen, compressed	2.2 Non-Flammable Gas	UN1066	121		
Nitrogen refrigerated	Nitrogen, refrigerated liquid, cryogenic liquid	2.2 Non-Flammable Gas	UN1977	120		

# SOUTHERN REGION-MISSION AVIATION SAFETY PLAN

## Hazardous Materials Manifest

### Form (cont.) DOT-SP-9198

Date: Click or tap to enter a date. Aircraft #: Click or tap here to enter text. Bureau/Agency: Click or tap here to enter text.

Common Name	Shipping Name	Hazard Class	UN #	ERG #	QTY	WT
Oxygen	Oxygen, compressed	2.2 Non-Flammable Gas	UN1072	122		
Paint	Paint including lacquer, enamel, stain, shellac, solutions, varnish, polish, liquid filler, and lacquer base, wood preservative	3 Flammable	UN1263	128		
Petro-gel helitorch	Gelling agent-helitorch	3 Flammable	UN1230	131		
Petroleum oil	Petroleum oil	3 Flammable	UN1270	128		
Plastic spheres	Potassium permanganate	5.1 Oxidizer	UN1490	140		
Propane	Petroleum gases, liquefied	2.1 Flammable Gas	UN1075	115		
Total Weight						
Shipper's Signature		Location				
Pilot's Signature						