

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN

MASP INSTRUCTIONS

All the information required to complete this document may not be available during the planning stages, for example, the charge code or flight hour cost. Pages 1-10 require total completion for Regional Office review and a Line Officer's signature; acceptable missing information for pages 1-10 will have an "unknown" box to check. Partial completion of pages 11-14 is acceptable during the planning and approval process. **All pages shall be completed prior to mission start.**

RISK MATRIX INSTRUCTIONS

Risk assessment processes and risk decision approvals follow the guidelines set forth in the Aviation Risk Management Workbook, aka the "yellow book." The risk outcomes on the risk assessment matrix (page 5) have been incorporated into risk assessment worksheet's drop-down menus. Risk outcomes are categorized as follows:

LOW **MEDIUM** **SERIOUS** **HIGH**

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 risk outcome).

SIGNATURES

Route all MASP's through the Unit/Forest Aviation Officer for Regional Office review. Signature blocks on page 2 are listed in the order required for MASP approval. The MASP's will be routed back down through the Unit/Forest Aviation Officer (AO) for line officer approval. MASPs will be submitted as a word document and will be returned in PDF format for the approving official's signature.

All signature boxes up to the Aviation Officer will be signed in typed text:

Example: /s/ John M. Smith

The Aviation Safety Manager (ASM) and the Aviation Officer will sign with link pass digital signatures. Line officer signatures may sign with a wet signature or link pass digital signature at their discretion.

RETENTION AND FILING OF PLAN

MASPs that have been reviewed by the Regional Office will remain in Pinyon and archived by fiscal year. These plans are accessible by the Regional Office, Unit/Forest Aviation Officers, and select aviation managers. MASP's approved by the line officer will be stored with the prescribed fire burn plan by the burn boss. The MASP and daily briefing sheets completed by the mission manager shall be given to the unit aviation manager for storage up to one year. Reference current PMS 510 Standards for Helicopter Operations (SHO) for additional information.

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN

Unit: Bridger-Teton NF	Sub Unit: Click here to enter text.
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Agency Requesting Mission			Anticipated Date(s) YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		Calendar Year
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 checked="" type="checkbox"/>			Calendar Year YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> ----->		Choose an item.
Aircraft Type			Date Variance Acceptable YES <input type="checkbox"/> NO <input type="checkbox"/>		
Fixed <input type="checkbox"/> Rotor <input type="checkbox"/> UAS <input checked="" type="checkbox"/>			*Document variances on approved document. Use start and end date below only if anticipated date(s) box is selected.*		
Fixed	Rotor	UAS	Start Date	End Date	MASP Objectives
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5/1/2020	5/1/2021	Training <input checked="" type="checkbox"/> Resource <input checked="" type="checkbox"/> LE&I Mission(s) <input checked="" type="checkbox"/> Incident <input checked="" type="checkbox"/>

Mission prepared by: David A. Gomez	Title: Interagency Aviation Officer	4/2/2020
Mission reviewed by: (OPTIONAL) Unit Level: Click here to enter text.	Title: Choose an item.	Click here to enter a date.
Mission review by: (OPTIONAL) Regional Level: Click here to enter text.	Title: Choose an item.	Click here to enter a date.
Mission reviewed by: (REQUIRED) Click here to enter text.	Title: Choose an item.	Click here to enter a date.
Mission reviewed by: (REQUIRED) RASM: NIKKI SANDHOFF <small>Digitally signed by NIKKI SANDHOFF Date: 2020.04.08 10:04:26 -06'00'</small>	Title: Regional Aviation Safety Manager	See signature for date.
Mission reviewed By: (REQUIRED) RAO: SAMUEL RAMSAY <small>Digitally signed by SAMUEL RAMSAY Date: 2020.04.02 16:51:02 -06'00'</small>	Title: Regional Aviation Officer	See signature for date.
Mission and Risk Assessment approved by: (REQUIRED) - Line Officer: PATRICIA O CONNOR <small>Digitally signed by PATRICIA O CONNOR Date: 2020.04.15 08:40:38 -06'00'</small>	Title: Forest Supervisor	See signature for date.

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN

**** Participant's qualifications and responsibilities verified/discussed during daily briefing****

<p><u>Mission Supervisor:</u> Line Officer and UAS Manager TBD</p>	<p><u>Alternate Mission Supervisor:</u> Click here to enter text.</p>
<p><u>Mission Name</u> UAS Remote Sensing</p>	
<p><u>Mission Description and Location:</u> This plan is applicable to any PSD aerial ignition, remote sensing data acquisition and/or aerial surveillance accomplished through the use of sUAS for the BTF and GRTE. Examples of aerial observation data that may be obtained using sUAS under this plan are, but not limited to: visible and multispectral imagery, infrared imagery; Electro-Optical/Infrared video; LIDAR; meteorological observations, air/chemical measurements, etc.</p>	
<p><u>Criteria for Application of this Plan:</u> If more than one aircraft (UAS and manned aircraft) must be flown simultaneously applicable mitigations will be in place to ensure airspace conflict avoidance. Project areas should be small in scale to limit complexity enabling aerial ignition and aerial surveys to be performed within visual line of site of the sUAS operator. Applicable areas should also present limited access and a work environment for personnel where there is high probability of hazard encounter. The potential hazards that are expected to be encountered during egress, ingress, or while on site must pose moderate to high consequence threats to personnel. Project managers may also consider the comparison of cost effectiveness and technical feasibility of project implementation with a sUAS versus manned aircraft.</p>	
<p><u>Special Instructions:</u> UAS missions performed under this plan will adhere to Federal Aviation Administration (FAA), Forest Service, and Department of Interior aviation policies and requirements, including necessary authorizations and permits (certificates of authorization, etc.). Missions will be conducted only with approved aircraft and operators.</p> <p>The UAS pilot is responsible for obtaining project specific flight hazard intelligence, submitting a NOTAM of the operation when applicable, developing any supplemental flight planning documents, alerting Teton Interagency Dispatch Center (TIDC) or incident communications of initiation and termination of flight operations, and maintaining positive communication with TIDC/incident communications throughout the operation. The UAS flight crew and participants will conduct the PASP briefing found within this plan and complete a Preflight Briefing Checklist at the beginning of each operational period. A visual observer will be used at all times.</p>	
<p><u>Mission Objectives:</u> PSD aerial ignition will be used to achieve management goals described in an approved planned ignition plan or incident plan. Data acquired via remote sensing will be used to develop derivative products and information to support management decisions and actions for various FS business activities, including, but not limited to, engineering and maintenance, infrastructure assessment, geotechnical surveys, forest health surveys, forest/range inventory and analysis, riparian surveys, wildlife surveys, invasive species surveys, fire/incident response and management, etc.</p>	
<p><u>Aircraft Justification For Mission:</u> The use of sUAS for aerial ignition and to obtain remote sensing observation data from areas described in the criteria for application of this plan significantly reduces the number of personnel and length of exposure to higher probability hazard encounters in the air and on the ground. The use of sUAS for these projects limits exposure of personnel to higher consequence hazards associated with manned aircraft operations. This plan permits aerial ignition and collection of data over inaccessible terrain. The use of sUAS may also limit negative optics from the public associated with agency access to closed areas. This plan also enables the comparison of products from traditional methods and techniques relative to products derived from sUAS.</p>	

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN

Aircraft 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 aircraft

Cooperator Click here to enter text. **Agency** Click here to enter text.

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

Other Click here to enter text.

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

***Document additional requirements beyond standard typing in aircraft justification and resource order* (performance capabilities, equipment, Etc.)**

Fixed Wing: **Single Engine** **Twin Engine**

Document mission needs for turbine, twin-engine, air conditioning, high or low wing, pressurized cabin, radio package, etc. in the aircraft justification section and on the resource order

UAS: TBD Public Commercial ***Refer to Forest Service policy on UAS use**

Aircraft Make and Model: Refer to safety plan briefing sheet for vendor name, make, FAA# and model.

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 only****

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

Procurement Type: Agency or Cooperator

Choose an item.

Unknown

Missioned Flight Hours: Click here to enter text.

Unknown

Charge Code: agency program preparedness, severity, or incident code

Unknown

Estimated Flight Hour Cost: Click here to enter text.

Unknown

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

Unknown

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN

UAS Missions Only

Crew: Other Than Pilot: TBD			
UAS Crew Leader: Click here to enter text.	Contact Number: Click here to enter text.		
UAS Data Specialist (1): Click here to enter text.	Contact Number: Click here to enter text.		
UAS Data Specialist (2): Click here to enter text.	Contact Number: Click here to enter text.		
UAS Visual Observer (1): Click here to enter text.	Contact Number: Click here to enter text.		
UAS Visual Observer (2): Click here to enter text.	Contact Number: Click here to enter text.		
Additional Crew: Click here to enter text.	Contact Number: Click here to enter text.		
TFR Information: Click here to enter text.			
Airspace Authorization:			
<input type="checkbox"/> Part 107	<input type="checkbox"/> 107/LAANC	<input type="checkbox"/> SGI Waiver	<input type="checkbox"/> FAA/DOI MOA
Authorization Comments – Applicable authorizations will be in place at time of implementation.			
Lost Link and Flyaway Procedures-Protocols: Click here to enter text.			
Special Consideration-Safety Concerns-Comments Section: Click here to enter text.			

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN

****Mission risk assessment must be completed prior to mission approval****

****Risk assessment hazards shall be reassessed prior to starting the mission – see FRAT****

****See appropriate management level for approval ****

****See National Aviation Safety Management System Guide for additional guidance with Risk Assessments, if necessary****

****This Risk Assessment does not negate the requirement to complete a FRAT prior to flight. ****

Mission Risk Assessment Matrix Scale				
	Severity			
Likelihood	Negligible IV	Marginal III	Critical II	Catastrophic I
Frequent A	2	3	4	4
Probable B	2	3	4	4
Occasional C	1	2	3	4
Remote D	1	2	2	3
Improbable E	1	2	2	2

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

Appropriate Management Level for Operational Risk Decisions		
Risk Level	Fire	Mission
High	Incident Commander or Operations Sections Chief	Line Officer
Serious	Incident Commander or Operations Sections Chief	Line Officer
Medium	Air Operations Branch Director	Mission Aviation Manager
Low	Base Manager	Helicopter or Flight Manager

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN

SAFETY MANAGEMENT SYSTEM ASSESSMENT AND MITIGATION								
System Being Evaluated: UAS Aerial Ignition – PSD		Pre Mitigation				Post Mitigation		
Sub System(s)	Hazards	Likelihood	Severity	Risk Level	Mitigation	Likelihood	Severity	Risk Level
UAS Mission	Collision with another aircraft	Remote	Catastrophic	Serious	The remote pilot will utilize a visual observer (VO) who will scan the area for air traffic and other hazards to aviation. The remote pilot will file a NOTAM as per USFS/DOI/FAA policy. Flights within TFRs will be coordinated with the controlling authority and participating aircraft. The remote pilot will give way to manned aircraft.	Improbable	Catastrophic	Medium
UAS Mission	Collision with personnel or vehicles	Occasional	Critical	Serious	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 UAS over personnel or vehicles.	Remote	Critical	Medium
UAS Mission	Collision with a fixed aerial hazard	Probable	Catastrophic	—	The remote pilot will conduct a survey of the operations area prior to flight operations.	Improbable	Negligible	Low
UAS Mission	Aircraft flyaway (loss of control)	Probable	Critical	Serious	Aircraft, personnel and ATC having jurisdiction over the airspace will be notified with the last location, heading, speed and approximate battery/time remaining of the UAS. The crew actions to recover the UAS will be relayed as well.	Remote	Negligible	Low

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN

SAFETY MANAGEMENT SYSTEM ASSESSMENT AND MITIGATION								
System Being Evaluated: UAS Aerial Ignition – PSD		Pre Mitigation				Post Mitigation		
Sub System(s)	Hazards	Likelihood	Severity	Risk Level	Mitigation	Likelihood	Severity	Risk Level
UAS Mission	Aircraft loss of link with ground control station	Probable	Critical	Serious	UAS will be programmed to return to home and land	Occasional	Negligible	Low
UAS Mission	Injury caused by spinning propellers	Occasional	Critical	Medium	Preflight briefing will include safety precautions when working around UAS with motors running.	Occasional	Negligible	Low
UAS Mission	Adverse Weather (wind, thunderstorms, etc.)	Occasional	Critical	Serious	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.	Occasional	Negligible	Low
UAS Mission	Night operations	Occasional	Critical	Serious	The UAS will have USFS/DOI approved lighting. The launch and recovery area will be well lit.	Occasional	Negligible	Low

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN

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System Being Evaluated: UAS Aerial Ignition – PSD		Pre Mitigation				Post Mitigation		
Sub System(s)	Hazards	Likelihood	Severity	Risk Level	Mitigation	Likelihood	Severity	Risk Level
UAS Mission	Battery fire	Occasional	Critical	Serious	Batteries will be stored in approved containers. A fire extinguisher will be available on site.	Remote	Critical	Medium
UAS Mission	Operating aircraft outside of published parameters	Occasional	Marginal	Medium	The remote pilot will ensure the aircraft is operated within policy and the provisions of the aircraft operations manual.	Remote	Marginal	Low
PSD Mission	Lack of training in firefighting strategy, tactics, terminology, basic ICS, frequency management, etc.	Probable	Critical	High	Establish requirements for documentation of online training to meet basic, minimum level of knowledge for all contracts. Consider pilot academy.	Occasional	Marginal	Medium
PSD Mission	Fatigue	Probable	Critical	High	Managers work with flight personnel to ensure adequate rest. Manage missions to be most effective with proper use of pilots & aircraft. Implement Phase Duty Limitations as appropriate	Remote	Critical	Medium

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN

SAFETY MANAGEMENT SYSTEM ASSESSMENT AND MITIGATION								
System Being Evaluated: UAS Aerial Ignition – PSD		Pre Mitigation			Post Mitigation			
Sub System(s)	Hazards	Likelihood	Severity	Risk Level	Mitigation	Likelihood	Severity	Risk Level
PSD Mission	Low CRM with crew rotations (multiple relief pilots)	Frequent	Critical	High	Ensure there incoming crews are thoroughly briefed. Practice CRM, conduct effective AARs, etc. Enforce contract language regarding relief pilot/personnel changes.	Occasional	Marginal	Medium
PSD Mission	PSD Operations	Occasional	Critical	Serious	Conduct orientation flight with Ignition Specialist, hang fire mitigation and escaped fire contingency established, complete all operational checklists prior to starting operations.	Occasional	Marginal	Medium
PSD Mission	In flight PSD Malfunction/Fire	Remote	Critical	Medium	Emergency procedures covered by Remote Pilot, Visual Observer and Burn Boss/Ignition Specialist in pre-burn briefing. Emergency release operations tested before flight	Remote	Critical	Medium
Final Assessment: Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Serious <input type="checkbox"/> High <input type="checkbox"/>		Reviewed By: David A. Gomez			4/2/2020			
Add Additional Rows To The Mission Risk Assessment As Necessary								

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN

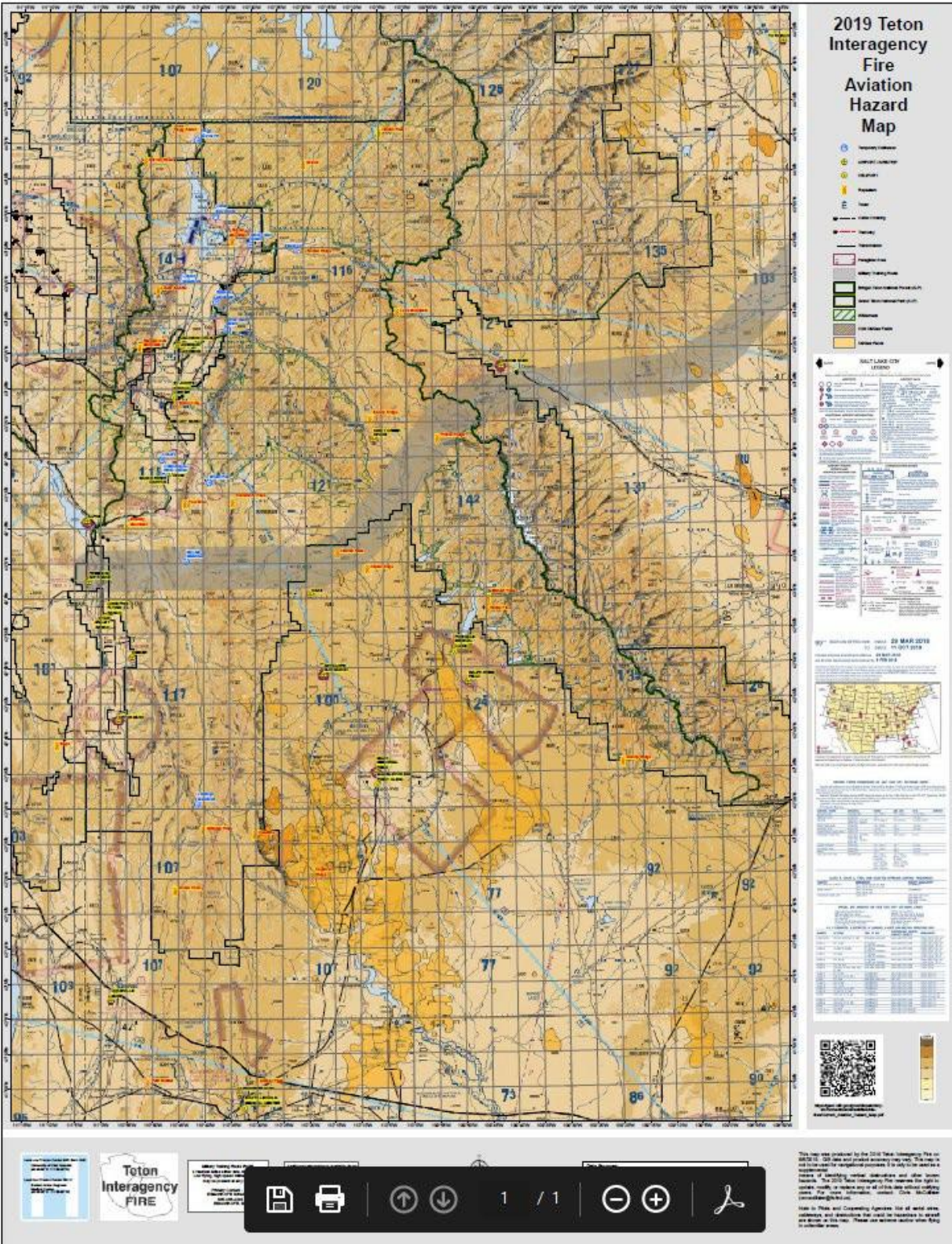
Aerial Hazard Analysis and map: This plan is applicable to a broad area, however has specific criteria for application in the plan description on page 2. Pilots and UAS managers shall review this material during their mission planning, assure applicable authorizations are in place (COA's, LAANC, SGI Waiver, etc.), and be familiar with local airports and fixed based operators. Attached to this MASP is a list of local airports and fixed based operators enabling direct communication with airport management or tower personnel if necessary. The aircrew will also consult the unit aerial hazard map, assess weather conditions, and terrain for each mission operating area.

Aerial Hazard Map Link and QR code:



<https://gacc.nifc.gov/gbcc/dispatch/wy-tdc/home/sites/default/files/site-files/Current Aviation Hazard Map.pdf>

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN



INTERMOUNTAIN 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 SHO chapter 7 or chapter 70 of the Military Use Handbook for additional information.

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

Type of Operation- Check applicable boxes that may apply to mission or mission	Personnel protective equipment requirements
<input type="checkbox"/> Rotor Wing Ground Operations	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. <i>*Refer to the Interagency Aerial Ignition Guide for additional ground operation requirements.*</i>
<input type="checkbox"/> Rotor Wing	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. <i>* Refer to appropriate guides. * Charter flights, (non-agency controlled mission), shall comply with 14 CFR 135 requirements.</i>
<input type="checkbox"/> Doors Off Flight(s)	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) <i>* Refer to appropriate guides*</i>
<input type="checkbox"/> Cargo Free Fall Operations	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. <i>* Refer to SHO chapter eleven for additional details. *</i>
<input type="checkbox"/> Fixed Wing	Refer to current IASG, ALSE and 5700 manual directions for PPE requirements.

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN

Helicopter or fixed Wing Pilot Information: Fixed wing: use "other" box and state approved mission(s). Any unknown information shall be added after signature approvals. All personnel shall be qualified for mission.

<p style="text-align: center;"><u>Pilot Name (P1): PIC/Primary</u> Not applicable</p>	<p style="text-align: center;"><u>Pilot Phone Number:</u> Click here to enter text.</p>
<p style="text-align: center;"><u>Pilot Name (P2): Co-Pilot/Relief</u> Click here to enter text.</p>	<p style="text-align: center;"><u>Pilot Phone Number:</u> Click here to enter text.</p>
<p><u>Pilot Carded For Mission:</u> Yes <input type="checkbox"/> No <input type="checkbox"/> Charter Pilot <input type="checkbox"/> 135 Certificate and FAR's Apply ** Use of charter pilot requires regional forester approval** Check all boxes that apply to pilot's carding below:</p>	<p style="text-align: center;"><u>Pilot Card (P1) Expiration Date:</u> Click here to enter a date.</p> <p style="text-align: center;"><u>Pilot Card (P2) Expiration Date:</u> Click here to enter a date.</p>
<p>Low-Level Recon & Survey P1 <input type="checkbox"/> P2 <input type="checkbox"/> Helitack-Passenger Transport P1 <input type="checkbox"/> P2 <input type="checkbox"/> External Load (Belly Hook) P1 <input type="checkbox"/> P2 <input type="checkbox"/> Water-Retardant Delivery P1 <input type="checkbox"/> P2 <input type="checkbox"/> Longline VTR (150') P1 <input type="checkbox"/> P2 <input type="checkbox"/> Snorkel VTR <input type="checkbox"/> Mirror <input type="checkbox"/> P1 <input type="checkbox"/> P2 <input type="checkbox"/> Mountainous Terrain Flying P1 <input type="checkbox"/> P2 <input type="checkbox"/> Aerial Ignition (PSD) P1 <input type="checkbox"/> P2 <input type="checkbox"/> Aerial Ignition (Torch) P1 <input type="checkbox"/> P2 <input type="checkbox"/> Rappel Operations P1 <input type="checkbox"/> P2 <input type="checkbox"/> Cargo Letdown P1 <input type="checkbox"/> P2 <input type="checkbox"/> Snow Operations (Deep Snow) P1 <input type="checkbox"/> P2 <input type="checkbox"/> Hoist P1 <input type="checkbox"/> P2 <input type="checkbox"/> UAS P1 <input type="checkbox"/> P2 <input type="checkbox"/></p>	<p>Designated "Pilot Trainer" P1 <input type="checkbox"/> P2 <input type="checkbox"/> "Trainee Only" Pilot P1 <input type="checkbox"/> P2 <input type="checkbox"/> Short Haul LE <input type="checkbox"/> SAR <input type="checkbox"/> P1 <input type="checkbox"/> P2 <input type="checkbox"/> Float Operations (Fixed) P1 <input type="checkbox"/> P2 <input type="checkbox"/> Platform Landings-Offshore P1 <input type="checkbox"/> P2 <input type="checkbox"/> Vessel Landings P1 <input type="checkbox"/> P2 <input type="checkbox"/> Night Vision Goggle Operations P1 <input type="checkbox"/> P2 <input type="checkbox"/> ACETA Net Gun (All ACETA) P1 <input type="checkbox"/> P2 <input type="checkbox"/> ACETA Eradication P1 <input type="checkbox"/> P2 <input type="checkbox"/> ACETA (Herding) P1 <input type="checkbox"/> P2 <input type="checkbox"/> ACETA Darting-Paintball P1 <input type="checkbox"/> P2 <input type="checkbox"/> STEP P1 <input type="checkbox"/> P2 <input type="checkbox"/> Other <input type="checkbox"/> P1 <input type="checkbox"/> P2 <input type="checkbox"/> Click here to enter text.</p>

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN

<u>Flight Following And Frequencies:</u> <p style="text-align: center;">*Confirm frequencies during 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*</p>		
Flight Following Method: AFF <input 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: See attached Radio Plan	FM Transmit: Click here to enter text.	RX: Choose an item. TX: Choose an item.
FM Receive: Click here to enter text.	FM Transmit: Click here to enter text.	RX: Choose an item. TX: Choose an item.
FM Receive: Click here to enter text.	FM Transmit: Click here to enter text.	TX: Choose an item. RX: Choose an item.
AM Receive: TBD	AM Transmit: Click here to enter text.	No Tone

****Mission supervisor will coordinate Temporary Flight Restrictions (TFR) with dispatch if needed****

<u>Military Training Route(s) (MTR'S) or Military Operating Area(s) (MOA'S)</u> <p style="text-align: center;">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.</p> <p style="text-align: center;">Deconfliction will be addressed during the aviation safety plan briefing. Add Additional MTR-MOA information to the end of the document if necessary.</p>				
MTR-MOA	Route Legs-Altitudes	Activity	Time	Time Zone
IR 499	Begins SE of Cody, WY and ends near Palisades Lake, ID. Altitude of the route is from 100 feet AGL to 13,000 feet MSL 1-4 nautical miles either side of centerline. Hours of operation are continuous. Scheduling Activity is through Offutt AFB. Originating activity is through Ellsworth Air Force Base, South Dakota (phone # 605-385-1230) or (on call # 605-431-3025).	Hot <input type="checkbox"/> Cold <input type="checkbox"/> N/A <input type="checkbox"/>	Start: Click here to enter text. Stop: Click here to enter text.	UTC <input type="checkbox"/> Local <input type="checkbox"/>

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN

Additional medical information attached? YES NO

<p>Crash Rescue/Medivac Plan – Brief applicable resources on local MISHAP Response plan and notify TIDC (307-739-3630) for implementation of the plan.</p>	
<p>General Instructions (in the event of an incident): Mission site duties and actions to be coordinated through dispatch in accordance with local search & rescue (SAR) and emergency crash rescue plan(s). These items will be discussed and recorded during the daily safety briefing.</p>	
<p>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.</p>	
<p>EMT(s) on site: YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN <input checked="" type="checkbox"/></p>	
<p>Names: Click here to enter text.</p>	
<p>First responder(s) on site: YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN <input checked="" type="checkbox"/></p>	
<p>Names: Click here to enter text.</p>	
<p>Available medivac helicopter(s)? YES <input type="checkbox"/> UNKNOWN <input checked="" type="checkbox"/></p> <p>*Unknown: Select if medivac helicopter is not to be ordered for the mission or incident prior to need. The helicopter will be ordered on demand through the dispatch process. Dispatch will provide medivac ship call sign or tail number, including capabilities and contact information. *</p>	
<p>Medivac helicopter on site? YES <input type="checkbox"/> NO <input type="checkbox"/></p>	
<p>Level of care medivac helicopter personnel can provide: ALS <input type="checkbox"/> BLS <input type="checkbox"/> UNKNOWN <input checked="" type="checkbox"/></p>	
<p>FAA Tail #(s) Click here to enter text.</p>	<p>Contact Information: Click here to enter text.</p>
<p>Hoist/Rappel/Extraction Capable? YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN <input checked="" type="checkbox"/></p>	
<p>Check all that apply: Hoist <input type="checkbox"/> Rappel <input type="checkbox"/> Short Haul <input type="checkbox"/></p>	

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN

<input type="checkbox"/> Doors Off or Doors Open Flight(s)	<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>**Safety Alert IASA 18-03 language**</p> <p>“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”.</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.

Briefing Checklist:

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

Participants Name	Date	Participants Name:	Date

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN

Medical Facility	Coordinates/Physical Address	Helipad	Phone #
Pinedale Medical Clinic	(42 52.062N x 109 51.179W) 625 E Hennick, Pinedale WY	Y	307.367.4133
Marbleton/Big Piney Clinic	(42 35.00N x 110 06.00W) 103 W 3rd Street, Marbleton, WY	Y	307.276.3306/3308 EMS Barn 307-276-3032
Star Valley Hospital	(42 43.06N x 110 55.86W) 901 Adams St. Afton, LZ north of building	Y	307.885.5800/5821
S. Lincoln Med. Center	(41 50.20N x 100 30.14W) Kemmerer, SW of Hospital	Y	307.877.4401
St Johns Hospital	(43 28.806N x 110 44.988W) Freq 155.340 rx/tx with tx tone 82.5 Gross Weight Limit of 12,000 lbs 625 E Broadway, Jackson WY	Y	ER 307.739.7251
Memorial Hospital of Sweetwater County	(41 35.16N x 109 14.08W) FAA Identifier: KKY49 1200 College Dr. Rock Spgs WY	Y	ER 307.352.8351
Eastern Idaho Regional Med Center	(43 28.26N x 111 59.50W) FAA Identifier: KID18 3100 Channing Way, Id Falls ID	Y	208.227.2000
McKay Dee	(41 10.98N x 111 57.30W) FAA Identifier: KUT16 Ogden, UT	Y	801.387.2800
LDS Hospital	(40 46.75W x 111 52.80W) FAA Identifier: KUT55 Salt Lake City, UT	Y	ER 801.408.1181
University of Utah (BURN CENTER)	(40 46.34N x 111 50.24W) FAA Identifier: KUT21 Salt Lake City UT	Y	ER 801.581.2293 Burn Center 801.581.2700
Ogden Regional	(41 9.88N x 111 58.28W) FAA Identifier: K54UT Ogden, UT	Y	ER 801.479.2376

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN

GROUP 10 - Teton Interagency Helitack

Chnl #	Site Name	Channel Label	RX Freq	RX CTCSS	TX Freq	TX CTCSS	Narrow/ Wide
1	BT North Net Direct	BT N DIR	171.3875		171.3875	107.2	N
2	BT North Net Repeat	BT N RP	171.3875		164.1375	110.9	N
3	BT South Net Direct	BT S DIR	169.9000		169.9000	123.0	N
4	BT South Net Repeat	BT S RP	169.9000		165.0125	131.8	N
5	Air-to-Ground 10	A/G 10	166.9375		166.9375	136.5	N
6	Air-to-Ground 19	A/G 19	168.1250		168.1250	146.2	N
7	Air-to-Ground 12	A/G 12	167.0750		167.0750	156.7	N
8	Region 4 Tac 1	R4 TAC 1	166.8125		166.8125	167.9	N
9	Region 4 Tac 2	R4 TAC 2	166.8875		166.8875	131.8	N
10	Region 4 Tac 3	R4 TAC 3	169.1750		169.1750	131.8	N
11	Teton Co Search and Rescue	SAR DIR	151.1975		151.1975	127.3	N
12	DECK	DECK	163.1000		163.1000	100.0	N
13	Grand Teton SAR	GT SAR	172.4250		172.4250	123.0	N
14	Grand Teton NP Direct	GT DIR	171.6750		171.6750	123.0	N
15	Grand Teton NP Repeat	GT RP	171.6750		164.9500	123.0	N
16	Air Guard	AIRGUARD	168.6250		168.6250	110.9	N

Tone Picklist

- 107.2 Green Knoll Repeater
- 110.9 Ramshorn, Hawks Rest Repeaters
- 123.0 Gravel, Pinyon Repeaters
- 131.8 Elkhart Repeater, TACs
- 136.5 Lava, Muddy Repeaters
- 146.2 Bradley Repeater (North and South)
- 156.7 Bacon, Deadline Repeaters
- 167.9 Rendezvous, Sage Repeaters
- 100.0 Graham Repeater

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN

Daily UAS Mission Checklist			
A. Chain of command, individual roles and responsibilities are identified to all participants?	Yes	No	NA
B. Project Aviation Safety Plan is approved and signed at the appropriate levels?	Yes	No	NA
C. Is the emergency evacuation plan reviewed?	Yes	No	NA
D. Are all elements in place to track the UAV at all times?	Yes	No	NA
E. Can terrain, altitude, temperature or weather that could have an adverse effect be mitigated?	Yes	No	NA
F. Are all aerial hazards identified and known to all participants?	Yes	No	NA
G. Have ground operations hazards and safety been identified to all participants?	Yes	No	NA
H. Have mitigating measures been taken to avoid conflicts with military or civilian aircraft?	Yes	No	NA
I. Have adequate landing areas been identified and or improved to minimum	Yes	No	NA
J. Are all agency personnel qualified for the mission?	Yes	No	NA
K. Are there enough (qualified) agency personnel to accomplish the mission safely?	Yes	No	NA
L. Is the pilot carded and experienced for the mission to be conducted?	Yes	No	NA
M. Will adequate briefings be conducted prior to flight with all participants?	Yes	No	NA
N. Is the aircraft capable of performing the mission with a margin of safety?	Yes	No	NA
O. Does the aircraft have the capability to perform the mission based on predicted weather conditions?	Yes	No	NA
P. Is the aircraft properly carded?	Yes	No	NA
Q. Do all personnel have the required PPE?	Yes	No	NA
R. Remember; maps of areas/sites, handheld radios, cell phones.	Yes	No	NA
S. Are pilot flight and duty times compromised?	Yes	No	NA
T. Is there an alternative method that would accomplish the mission more safely?	Yes	No	NA
U. Have the proper approvals been given by FAA?	Yes	No	NA
V. If flying in Restricted Airspace, has notification been made with controlling authority prior to launching sUAS?	Yes	No	NA
W. Other? (identify) NOTAM on File	Yes	No	NA
X. Other? (identify) Aerial Hazard Map reviewed	Yes	No	NA
Y. Other? (identify) Dispatch notified of flights	Yes	No	NA
Identify Corrections (if any):			
UAS Crew Leader Signature:		Date:	

INTERMOUNTAIN REGION MISSION AVIATION SAFETY PLAN

LOCAL AIRPORTS AND FIXED BASE OPERATORS:

Jackson Hole (JAC) N 43 36.44' x W 110 44.27

Elevation: 6451 feet MSL

Tower Frequency: 118.075

UNICOM: 122.950

GROUND: 124.55

Fuel: Avgas, Jet A

Owner: JH Airport Board – 307-733-7682

Manager: Jim Elwood – 307-733-7682

FBO: Jackson Hole Aviation:307-733-4767

Operating Hours - 0600 - 2200

Afton (AFO) N 42 42.49 x W 110 56.53

Elevation: 6221 feet MSL

UNICOM: 122.8

Fuel: Avgas, Jet A - 24 hr. credit card service

Owner: Town of Afton – 307-885-8696

Afton FBO: 307-885-7030

Manager: Rick Sessions – 307-885-3245 or 307-887-3246

Alpine (46U) N 43 11.08 x W 110 02.55

Elevation: 5634 feet MSL

UNICOM: 122.9

Fuel: Avgas, Jet A – 24 hr. credit card service

Owner: Bill Weiman - 307-654-4646

Manager: 701-367-6161

Alpine Airpark: Scot Cook – 307-630-5212

After hours - 307-713-1313

Big Piney-Marbleton (BPI) N 42 35.11 x W 110 06.67

Elevation: 6990 feet MSL

UNICOM: 122.8

Fuel: Avgas, Jet A - 24 hr. credit card service and Jet A truck available

Owner: Public – Big Piney/Marbleton – 307-276-4022

Manager: Phil Stevens – 307-231-5516

Pinedale (PNA) N 42 47.73 x W 109 48.66

Elevation: 7288 feet MSL

UNICOM: 122.8

Fuel: Avgas, Jet A - 24 hr. credit card service

Owner: Town of Pinedale - 307-367-4136

Manager: Jim Parker – 307-360-9025

24 hour #307-413-7888 (John Douglas)

Kemmerer (EMM) N 41 49.50 x W 110 33.54

Elevation: 7282 feet MSL

UNICOM: 122.8

Fuel: Avgas, Jet A - 24 hr. credit card service

Owner: Public – Kemmerer – 307-828-4061

Manager – Chad Nielson – 307-727-7865