

# NORTHERN ROCKIES MISSION AVIATION SAFETY PLAN

## 2024 Fixed Wing Backcountry Operations

Unit: \_\_\_\_\_

### MASP INSTRUCTIONS

Page 1 through the end of the Risk Assessment Worksheet require completion prior to regional office review and approval signatures. The Aerial Hazard Analysis and Map page through the end of the MASP document may be completed as information becomes available. Partial completion of these pages is recommended during the submission process and all pages **shall** be completed prior to mission start. A Mission Planning Sheet with this information is considered completion of these pages. Insert Forest Specific Mission Planning Sheet Hyperlink as able. →

### RISK MATRIX INSTRUCTIONS

The risk outcomes on the risk assessment matrix have been incorporated into the risk assessment worksheet's drop-down menus. Risk Assessment Category (RAC) outcomes are categorized as follows:

**LOW**      **MODERATE**      **HIGH**      **EXTREMELY HIGH**

In no case will the overall risk of the mission be less than the highest specific factor. (Example: One extremely high, one high, and two moderate threats results in an extremely high risk assessment category 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 or as appropriate. MASPs should be submitted as a PDF document (if possible) to allow for digital signatures for Forest/Unit Aviation Officer, RASM, RAO, and Line officer. The MASP approval signature will only be valid for one year (365 days).

All signature boxes for Mission Prepared Unit level will be signed in typed text:

Example: /s/ John M. Smith

Line officer signatures may be signed 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. Plans approved by the line officer will be maintained in the dispatch office and referenced during flight. Retention of the safety plan by dispatch shall be three years. Retention of the plan and daily briefing sheets by the mission manager shall be three years.

# NORTHERN ROCKIES MISSION AVIATION SAFETY PLAN

<u>Unit:</u> <span style="color: red;">(Insert Local Unit)</span>	<u>Sub Unit:</u>
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<b><u>Agency Requesting Mission</u></b>			<b><u>Calendar Year</u></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"/>			Anticipated Date(s): YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> Calendar Year: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		
<b><u>Aircraft Type</u></b>			*Use start and end date below only if anticipated date(s) box is selected*		
Fixed	Rotor	UAS	Start Date	End Date	<b>MASP Objectives</b>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			Training <input checked="" type="checkbox"/> Resource <input checked="" type="checkbox"/> LE&I Mission <input type="checkbox"/> Incident <input checked="" type="checkbox"/>

<b><u>Mission prepared by:</u></b>	<b><u>Title:</u></b>	<b><u>Date:</u></b>
<b><u>Mission reviewed by:</u></b> <span style="color: red;">(REQUIRED)</span> FAO	<b><u>Title:</u></b> Forest Aviation Officer (FAO)	<b><u>Date:</u></b>
<b><u>Mission reviewed by:</u></b> <span style="color: red;">(REQUIRED)</span> FWOS	<b><u>Title:</u></b> Fixed Wing Operations Specialist	<b><u>Date:</u></b>
<b><u>Mission reviewed by:</u></b> <span style="color: red;">(REQUIRED)</span> RASM:	<b><u>Title:</u></b> Regional Aviation Safety Manager	<b><u>Date:</u></b>
<b><u>Mission reviewed By:</u></b> <span style="color: red;">(REQUIRED)</span> RAO:	<b><u>Title:</u></b> Regional Aviation Officer	<b><u>Date:</u></b>
<b><u>Mission and Risk Assessment approved by:</u></b> Line Officer:	<b><u>Title:</u></b>	<b><u>Date:</u></b>
<b><u>Mission and Risk Assessment approved by:</u></b> <span style="color: red;">(REQUIRED)</span> - Line Officer:	<b><u>Title:</u></b> Forest Supervisor	<b><u>Date:</u></b>

# NORTHERN ROCKIES MISSION AVIATION SAFETY PLAN

\* Participant’s qualifications and responsibilities shall be verified and discussed during daily briefing\*

<p><u>Project Aviation Manager (IAW IAT Guide):</u> Complete or See MPS</p>	<p><u>Alternate Proj. Aviation Manager (IAW IAT Guide):</u> Complete or See MPS</p>
<p style="text-align: center;"><u>Mission Name</u> Fixed Wing Backcountry Operations</p>	
<p><b><u>Mission Description and Location:</u></b> The missions will involve utilization of fixed wing aircraft to shuttle personnel and equipment from one airport or airstrip to another. Flights may be in support of a resource objective, project, or incident. Several remote District Offices and Work Centers are heavily reliant upon Fixed Wing support due to the extremely remote location and lack of access. It is common for personnel and/or equipment to be picked up at one backcountry airstrip and shuttled to another backcountry airstrip. Multiple flights may occur throughout the season. Light fixed wing aircraft will be utilized to perform the mission. Flight following will be conducted through Dispatch.</p> <p>The Risk Hazard Index (RHI) will be reviewed for hazard discussion, confirm that an RHI has been completed within the last 2 years and discuss any changes that have occurred in the past 2 years. This MASP is for any backcountry airstrip which has a current RHI and is on the Regional Aviation Officer (RAO) approved Airstrip list.</p> <p>Personnel transport is classified as a “Special Use Mission Flight” of aircraft (FSH 5709.16, 35.1) with agency level direction found in IAT policies, guidelines, and training requirements will also be met for all resource missions.</p> <p>Light Fixed-wing projects are typically planned by sub-unit fire/staff areas. Once the option to use aircraft is selected a qualified Fixed Wing Flight Manager Special Use (FWFM-SU) will be assigned with the responsibility to manage the overall mission support functions for the flight.</p> <p>This MASP or a specific Mission Planning Sheet (MPS) will be utilized that details the project name, funding codes, aircraft assigned, specific mission, communication plan, project site location(s), specific helispot and/or landing zones, participant signatures, and mission/flight hazard maps. Site or project specific hazards not identified in the attached Risk Assessment need to be documented (e.g. FRAT/GAR).</p> <p>Fixed wing missions will not be considered without Aviation officer review, and the appropriate Aviation Safety Plan/Mission Planning sheet completed. If a project request involved anything that might be considered beyond the scope of this MASP, a mission specific MASP will be written and approved prior to moving forward.</p> <p>Preflight briefings will be conducted wherever the flight originates. These briefings will include but not limited to the following: flight safety, emergency equipment and procedures, flight following, communications, sterile cockpit procedures and frequencies, flight routes, monitoring areas , hazards, any changes to normal procedures, and mountain flying, aircraft performance and high density altitudes. The pilot will be briefed prior to commencing any flights on known hazards, MTR’s/MOA’s, and local weather. Current and forecasted weather will be discussed prior to operations. Any hazardous materials will be packaged and transported in accordance with the guidelines provided in the Hazardous Materials Guide (PMS 513); the pilot will be notified of the type, quantity and location of any hazardous materials placed on board the aircraft.</p>	

# NORTHERN ROCKIES MISSION AVIATION SAFETY PLAN

An Operational Risk Assessment (ORA) e.g. FRAT/GAR will be conducted prior to flight operations. If at any point during this briefing any or all participants are uncomfortable to continue, or the ORA risk level exceeds the approved rating level, the mission will be cancelled or delayed until the issue/s can be rectified.

Aviation personnel will be equipped with required PPE and radios. Positive communication between all air and ground resources will be in place and utilized. In the event of a mishap the Aviation Mishap Response Guide and Checklist (PMS 503) will be initiated by contacting Dispatch.

**Mission Objectives:** Support Agency objectives to provide access to backcountry sites; flights will be used to transport equipment, supplies and personnel to backcountry airstrip locations. Such locations have limited access and are commonly staffed by agency personnel and volunteers that provide needed communication and information to backcountry visitors as well as project and other resource objectives.

Develop and maintain awareness to Safety Management System (SMS) principles, and their application, at all operations and management levels.

\*Please Note: If a volunteer needs to participate in a flight a Day Trip Authorization (FS 5700-12) must be completed and signed by the Line Officer sponsoring the flight.\*

## **Aircraft Justification For Mission:**

Justification is a function of the planning and management approval process. Individual projects provide objectives that guide the consideration and decision to employ fixed wing aircraft, and this supplement to the unit aviation plan provides management expectations for field application of the flight activity.

Backcountry sites accessed by light fixed wing are generally not efficiently or safely accessed by land based methods. This includes vehicles, UTV's, snowmobiles, stock and hiking. Whenever possible, other means of transport will be utilized if it is determined to be the safest method to meet the objectives of the mission. Helicopters shall be considered as an alternative when mission parameters dictate (time of day, temperature, multiple legs between airstrips, load configurations etc)

Summer Flights into Backcountry Airstrips:

Due to prevalent high temperature and/or turbulent conditions, pilots and aircrews should avoid late morning and mid-afternoon flights during the summer months at backcountry airstrips. As a best practice, special consideration will be given to Fixed Wing flights using backcountry airstrips between approximately 1000 and 1800 during the summer months, and when the temperature is approximately 70 degrees Fahrenheit or above. If operating within these parameters, pilot and Fixed Wing Flight Managers will include discussion and mitigations during the Flight Risk Assessment and highlight any concerns to the Aviation Officer and Agency Fixed Wing Pilots.

# NORTHERN ROCKIES MISSION AVIATION SAFETY PLAN

**Aircraft Information:**

**\*Check all that apply, if name is unknown, add information as it becomes available\***

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

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

Cooperator:

Agency:

Vendor:

Military:

Other:  Federal Partners

**Mission Category: Complete or see MPS**

**\*Check all that apply, if unknown, add information as it becomes available\***

Pax Transport  Detection  Recon  Aerial Ignition ( PSD  Helitorch)  UAS

External Load  Backcountry  Training  Other \_\_\_\_\_

**Rotor Wing:**

Type One:

Type Two:

Type Three:

**\*Document additional requirements beyond standard typing in aircraft justification and on the 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:**

Fixed Wing

Rotary Wing (VTOL)

**Aircraft Make and Model: If unknown, add information as it becomes available. All information shall be filled out prior to mission start. Complete or see MPS**

**Unknown CWN:**

**Unknown EU:**

**Vendor:**

**FAA Registration #:**

**Make:**

**Model:**

**Carded for Mission:**  YES  NO

**Card Expiration Date:**

**Aircraft Color Scheme:**

**\*\* CWN helicopter information attained after hiring process, ensure CWN inspection sheet has been completed and a copy of the aircraft data card is on file prior to mission start. \*\***

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

**Procurement Type:**

Unknown

**Estimated Flight Hour Cost:**

Unknown

**Mission Flight Hours:**

Unknown

**Estimated Miscellaneous Cost(s):**

**Charge Code:**

Unknown

Unknown

# NORTHERN ROCKIES MISSION AVIATION SAFETY PLAN

**\*\*Risk assessment must be completed prior to mission approval\*\***

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

**\*\*Ensure appropriate management level for approval \*\***

**\*\*See the National Aviation Safety Management System Guide, Yellow Book, and ORM guide for additional guidance with Risk Assessments**

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

Risk Assessment Matrix		Probability <i>Likelihood of Mishap if Hazard is Present</i>				
		Almost Certain <small>(Continuously experienced)</small>	Likely <small>(Will occur frequently)</small>	Possible <small>(Will occur several times)</small>	Unlikely <small>(Remotely possible but not probable)</small>	Rare <small>(Improbable; but has occurred in the past)</small>
Severity/ Consequences <i>Consequence if Mishap Occurs</i>	<b>Catastrophic</b> <small>(Imminent and immediate danger of death or permanent disability; major property or facility damage; loss of critical system or equipment)</small>	Extremely High	Extremely High	Extremely High	High	Moderate
	<b>Critical</b> <small>(Permanent partial disability, temporary total disability; moderate environmental damage; extensive damage to equipment)</small>	Extremely High	Extremely High	High	Moderate	Moderate
	<b>Moderate</b> <small>(Hospitalized minor injury, reversible illness; minor damage to equipment, property or the environment)</small>	High	High	Moderate	Low	Low
	<b>Negligible</b> <small>(First aid or minor medical treatment; little or no property or environmental damage)</small>	Moderate	Moderate	Low	Low	Low

# NORTHERN ROCKIES MISSION AVIATION SAFETY PLAN

Risk Assessment Code	Severity of Consequences
<b>Extremely High</b>	<ul style="list-style-type: none"> <li>• Complete or near complete failure to meet objective</li> <li>• Major property or facility damage</li> <li>• Death or permanent total disability</li> <li>• Severe environmental damage</li> <li>• Loss of major or critical system or equipment</li> </ul>
<b>High</b>	<ul style="list-style-type: none"> <li>• Significantly degraded capability for meeting the objective or accomplishing the project/incident/work activity</li> <li>• Injury that results in permanent partial disability, or temporary total disability lasting more than three months</li> <li>• Serious environmental damage</li> </ul>
<b>Moderate</b>	<ul style="list-style-type: none"> <li>• Degraded capability for meeting objective or accomplishment of the project/fire operation</li> <li>• Lost days due to injury or illness not exceeding three months</li> <li>• Moderate damage to property or the environment</li> </ul>
<b>Low</b>	<ul style="list-style-type: none"> <li>• No adverse impact to meeting objective or accomplishment of the project/fire operation</li> <li>• Little or no medical treatment required</li> <li>• Little or no damage to equipment, systems, property or environment</li> </ul>

<b>Risk Decision Authority</b>		
Risk Level	Fire	Mission
Extremely High	Incident Commander or Operations Sections Chief	Line Officer
High	Incident Commander or Operations Sections Chief	Line Officer
Moderate	Air Operations Branch Director	Supervisor or Lead
Low	Base Manager	Individual

# NORTHERN ROCKIES MISSION AVIATION SAFETY PLAN

SAFETY MANAGEMENT SYSTEM ASSESSMENT AND MITIGATION								
System Being Evaluated: Backcountry Fixed Wing		Pre Mitigation				Post Mitigation		
Sub System(s)	Hazards	Likelihood	Severity	Risk Level	Mitigation	Likelihood	Severity	Risk Level
Mission - Policy	Operational/Mission goals may be unstated, unclear or conflict with policy.	Possible	Critical	High	Conduct thorough briefings, ensure organization is in place, and adhere to interagency policy, procedures & Guides	Unlikely	Critical	Moderate
Mission - Policy	MASP absent or not complete (Policy Deviation).	Possible	Critical	High	Ensure MASP and risk assessment are completed and approved at appropriate level. Ensure Forest Aviation Officer is involved in mission planning. MASP should be used as a briefing tool. If at any point during this briefing any or all participants are uncomfortable to continue, or the ORA risk level exceeds the approved rating level, the mission will be cancelled or delayed until the issue(s) can be rectified Ensure that all parties are available for mission briefings.	Unlikely	Critical	Moderate
Mission	No preflight safety or mission briefing	Possible	Moderate	Moderate	Safety briefings with all crew will be conducted before flight to include proper emergency procedures. Everyone is “crew” and can stop a mission at any time. Pilot has final authority for any flight. FWFM-SU will ensure pilot is briefed and FRAT has been completed for flight. All crew will be briefed before flight on mission and safety.	Unlikely	Moderate	Low
Mission - Communications	Frequency management, cockpit overload, inadequate briefing, and/or loss of communication.	Possible	Critical	High	Ensure frequencies are reviewed and operational. Consider a discrete channel for air operations. Ensure thorough communication briefing and understood. Halt operations if loss of communications	Unlikely	Critical	Moderate



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SAFETY MANAGEMENT SYSTEM ASSESSMENT AND MITIGATION								
System Being Evaluated: Backcountry Fixed Wing		Pre Mitigation				Post Mitigation		
Sub System(s)	Hazards	Likelihood	Severity	Risk Level	Mitigation	Likelihood	Severity	Risk Level
Personnel	Unqualified employees working in or around aircraft. Personnel not trained properly or proficient with equipment/mission. Personnel unfamiliar with local flight following protocol and/or crash rescue procedures	Possible	Critical	High	All personnel will be fully qualified to perform the duties associated with a position and will take part in the pre-mission brief, assignments (duties) will be assigned. Emphasis on mentoring and training in conjunction with operations and emphasize hazard identification and communication methods. Advise Pilot to communicate/ provide feedback with FWFM-SU or ground contact.	Unlikely	Critical	Moderate
Personnel Human Factors	Acceptance of high risk missions as normal. Lack of CRM, Task saturation or fixation, hazardous attitude. Poor mission analysis. Fatigue. Management pressure/mission driven sense of urgency. Unknown change in objective. Experience level of air crew and vendor.	Possible	Catastrophic	Extremely High	Conduct thorough risk assessments & brief/debrief. Pilot and flight crew utilize CRM and work together in mission planning. Conduct daily briefing and complete real time FRAT. Ensure management does not place undue pressure or sense of urgency on flight crews. Ensure objective has not changed and re-evaluate mission if changes occur	Unlikely	Catastrophic	High
Personnel / Pilot	Fatigue causing lack of focus, concentration errors, cutting corners, or mistakes.	Unlikely	Catastrophic	High	Work/Rest guidelines. Check on last days off. Monitor fatigue, stay hydrated, take breaks and enforce flight hour and duty day restrictions.	Rare	Catastrophic	Moderate

# NORTHERN ROCKIES MISSION AVIATION SAFETY PLAN

SAFETY MANAGEMENT SYSTEM ASSESSMENT AND MITIGATION								
System Being Evaluated: Backcountry Fixed Wing		Pre Mitigation			Mitigation	Post Mitigation		
Sub System(s)	Hazards	Likelihood	Severity	Risk Level		Likelihood	Severity	Risk Level
Crew / Passengers	Lack of PPE	Unlikely	Moderate	Low	Required PPE for fixed wing flight includes nonflammable pants that cover the tops of leather footwear when in a seated position, nonflammable shirt—preferably with long sleeves— and ear and eye protection.	Rare	Moderate	Low
Pilot	Lack of familiarity with aircraft, uncarded pilot or un-carded aircraft.	Possible	Catastrophic	Extremely High	Pilot shall be agency carded for the aircraft and mission type and current in backcountry airstrip landings. Only agency carded aircraft will be used for mission. Check pilot card and aircraft card. Passenger will refuse flight if either do not appear to be carded. Contact COR.	Unlikely	Catastrophic	High
Pilot	Lack of familiarity with the mission	Possible	Critical	High	Brief vendor/pilot regarding mission. Assess pilot comfort level and familiarity with the area and airstrip. Ensure pilot meets qualifications and has a mountain airstrip endorsement and meets specific requirements for each airstrip. FWFM-SU briefs pilot and discusses specific elements of the mission. Complete a FRAT.	Unlikely	Critical	Moderate
Pilot	Sense of urgency or acceptance of unnecessary risk.	Unlikely	Catastrophic	High	Pilot will be briefed on mission expectations. Mission planning complete, briefings complete, flight following established and understood. The flight crew will not pressure pilot to accept unnecessary risk.	Rare	Catastrophic	Moderate

# NORTHERN ROCKIES MISSION AVIATION SAFETY PLAN

SAFETY MANAGEMENT SYSTEM ASSESSMENT AND MITIGATION								
System Being Evaluated: Backcountry Fixed Wing		Pre Mitigation				Post Mitigation		
Sub System(s)	Hazards	Likelihood	Severity	Risk Level	Mitigation	Likelihood	Severity	Risk Level
Aircraft	Aircraft Performance not suitable for mission. Operating in Hot, High, and Heavy (HHH) environment.	Unlikely	Catastrophic	High	Ensure appropriate aircraft is ordered, utilized and operated in accordance with appropriate flight manuals. Conduct thorough pre-mission briefing and planning.	Rare	Catastrophic	Moderate
Aircraft	Possibility of mechanical failure	Unlikely	Catastrophic	High	Use only agency carded aircraft with a current valid inspection card. Aviation Maintenance Inspector (AMI) will card aircraft prior to the contract start and will verify maintenance records. The FWFM-SU and pilot will perform an inspection if needed. FWFM-SU can consult AMI if needed for clarification/follow-up.	Rare	Catastrophic	Moderate
Aircraft / Communications	Loss of aircraft radio and/or satellite phone communications. or AFF capability lost or interrupted.	Unlikely	Moderate	Low	Ensure Pilot is familiar with established procedures for back-up communication and flight following. Discuss with all crew and pilot during pre-flight briefing. If comms is temporarily lost, try to reestablish until reconnected. If all flight following capability is lost, the flight should be stopped.	Rare	Moderate	Low
Environment	Adverse wind speed / direction, thunderstorms, etc. Weather becoming less than VFR conditions	Unlikely	Catastrophic	High	Ensure flight crew obtains current forecast and updated weather briefings and continually monitor the wind speed and direction. If visibility or winds become unfavorable, postpone until conditions improve or delay to another day.	Rare	Catastrophic	Moderate

# NORTHERN ROCKIES MISSION AVIATION SAFETY PLAN

## SAFETY MANAGEMENT SYSTEM ASSESSMENT AND MITIGATION

SAFETY MANAGEMENT SYSTEM ASSESSMENT AND MITIGATION								
System Being Evaluated: Backcountry Fixed Wing		Pre Mitigation				Post Mitigation		
Sub System(s)	Hazards	Likelihood	Severity	Risk Level	Mitigation	Likelihood	Severity	Risk Level
Environment	Flying in Mountainous Terrain while focused on a low level mission	Possible	Catastrophic	Extremely High	Carded and experienced pilot. Recon of the areas to be treated will occur prior to the mission. All boundaries aerial hazards will be pre-identified. Division of tasks between pilot and crewmembers and communicating location relative to terrain.	Unlikely	Catastrophic	High
Aerial Hazards	Midair collision with other aircraft, powerlines, towers, birds, UAS, during operations especially while in Low Level flight profile (below 500') during the special use mission	Unlikely	Catastrophic	High	Maintain sterile cockpit during take-off and landings while still following the "see something/say something" protocol. Allow pilot to communicate with civilian or military Air Traffic Control. In high traffic areas, allow pilot to aviate, navigate, and communicate. Practice "See and Avoid" using CRM principals at all times. Everyone in the aircraft has a responsibility for flight safety by identifying in-flight hazards, other aircrafts, birds, etc., And alerting the pilot. Recognize that backcountry airstrips can be very busy places with a mix of users covering a wide range of skills and equipment.	Rare	Catastrophic	Moderate

# NORTHERN ROCKIES MISSION AVIATION SAFETY PLAN

SAFETY MANAGEMENT SYSTEM ASSESSMENT AND MITIGATION								
System Being Evaluated: Backcountry Fixed Wing		Pre Mitigation				Post Mitigation		
Sub System(s)	Hazards	Likelihood	Severity	Risk Level	Mitigation	Likelihood	Severity	Risk Level
In flight hazards	Loose or unsecured maps, papers, GPS units, aerial photos, etc... interfering with pilot and/or flight controls	Possible	Catastrophic	Extremely High	Improve crew training, preparation, and assembly. Take only equipment needed for the mission. Keep items stored or secured during flight. Stay organized!	Unlikely	Catastrophic	High
Airspace Conflict	Conflict with General Aviation Traffic	Possible	Catastrophic	Extremely High	Monitor CTAF, Make position reports and state intentions on CTAF, visually scan area for air traffic, use TCAS.	Rare	Catastrophic	Moderate
Hazardous Materials	Transportation of Hazardous Materials.	Possible	Catastrophic	Extremely High	Follow the directions spelled out in the Hazardous Materials Handbook (PMS 513) for any and all Hazmat associated with the mission.	Unlikely	Catastrophic	High
<b>Backcountry Fixed Wing – Final Assessment:</b>		Date Completed:			Prepared by: <span style="color: red;">(Insert Preparer's Name)</span>			
Low <input type="checkbox"/> Moderate <input type="checkbox"/> High <input checked="" type="checkbox"/> Extremely High <input type="checkbox"/>		<span style="color: red;">(Insert Date)</span>						

# NORTHERN ROCKIES MISSION AVIATION SAFETY PLAN

**Aerial Hazard Analysis and map:** A written analysis of aerial hazards surrounding the mission area in this box or in Mission Planning Sheet, e.g. towers, wires, sloping terrain, dust, proximity to airports, confined landing zones, etc. Provide a hazard map/QR code.

**Project Specific Maps will be provided and briefed to prior to mission.**

**\*\*Insert local QR code OR attach aerial hazard map\*\***

Optional: Insert Hyperlink in Field Below

# NORTHERN ROCKIES 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\*

<b>Type of Operation- Check applicable boxes that may apply to mission or mission</b>	<b>Personnel protective equipment requirements.</b> <b>NOTE:</b> Agency employees must be informed of the increased personal hazard that is associated with wearing non-fire resistant clothing or footwear when the full complement of PPE is not worn. <b>The MASP for the project must document PPE exception(s) and in accordance with FSH 5709.16, Chapt 30, 36.53b.</b>
<input type="checkbox"/> <b>Rotor Wing Ground Operations</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 the Interagency Aerial Ignition Guide for additional ground operation requirements.*
<input type="checkbox"/> <b>Rotor Wing</b>	Fire resistant clothing, approved flight helmet, hard hat w/chin strap, fire resistant and/or leather gloves, approved leather or flight boots, eye protection, hearing protection. Additional personnel restraints needed in the helicopter pending type of mission. * Refer to appropriate guides. * 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 in type 3 helicopter) * Refer to appropriate guides*
<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 SHO chapter eleven for additional details. *
<input checked="" type="checkbox"/> <b>Fixed Wing</b>	Refer to current PMS 505, ALSE and 5700 manual directions for PPE requirements.

# NORTHERN ROCKIES MISSION AVIATION SAFETY PLAN

<p><b>Helicopter or fixed Wing Pilot Information:</b> 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 or designated as a trainee with appropriate oversight. <u>Complete or see MPS</u></p>	
<p><b><u>Pilot Name (P1): PIC/Primary</u></b></p>	<p><b><u>Pilot Phone Number:</u></b></p>
<p><b><u>Pilot Name (P2): Co-Pilot/Relief</u></b></p>	<p><b><u>Pilot Phone Number:</u></b></p>
<p><b><u>Pilot Carded For Mission:</u></b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>  <b>Charter Pilot</b> <input type="checkbox"/> 135 Certificate and FAR's Apply  <b>** Use of charter pilot requires regional forester approval**</b>  <b>Check all boxes that apply to pilot's carding below:</b></p>	<p><b><u>Pilot Card (P1) Expiration Date:</u></b></p> <p><b><u>Pilot Card (P2) Expiration Date:</u></b></p>
<p>Low-Level Recon &amp; 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"/>          NVG 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"/></p>



# NORTHERN ROCKIES MISSION AVIATION SAFETY PLAN

<b>Flight Following And Frequencies:</b> TBD/Will confirm, complete or see MPS <div style="text-align: center; color: red; font-weight: bold;">*Confirm frequencies prior to flight*</div> <div style="text-align: center; color: blue; font-weight: bold;">*FAA Flight Plan (chartered aircraft non-agency-controlled mission) no frequencies required*</div> <div style="text-align: center; color: blue; font-weight: bold;">*Chartered 135 operator is responsible for communications and flight plan*</div>		
<b>Flight Following Method:</b> AFF <input type="checkbox"/> Radio (Local or GACC aircraft desk) <input checked="" type="checkbox"/> <b>FAA Flight Plan: (Agency-owned or agency contracted aircraft mission)</b> <input type="checkbox"/> <b>FAA Flight Plan: (Charter aircraft non-agency controlled mission)</b> <input type="checkbox"/>		
<b>FM Receive:</b>	<b>FM Transmit:</b>	<b>RX:</b>
		<b>TX:</b>
<b>FM Receive:</b>	<b>FM Transmit:</b>	<b>RX:</b>
		<b>TX:</b>
<b>FM Receive:</b>	<b>FM Transmit:</b>	<b>RX:</b>
		<b>TX:</b>
<b>AM Receive:</b>	<b>AM Transmit:</b>	<b>No Tone</b>

\*\*Aviation Manager will coordinate Temporary Flight Restrictions (TFR) with dispatch if needed\*\*

<b>Military Training Route(s) (MTR'S) or Military Operating Area(s) (MOA'S)</b> <div style="text-align: center; background-color: yellow; padding: 2px;">TBD/Will confirm, complete or see MPS</div> <div style="text-align: center; color: red; font-weight: bold; padding: 5px;">                     Aviation Manager shall confirm deconfliction in these routes and areas prior to the flight with dispatch or other approved local methods.                 </div> <div style="text-align: center; color: red; font-weight: bold; padding: 5px;">                     Deconfliction will be discussed prior to mission start. Add Additional MTR-MOA information to the end of the document if necessary.                 </div>				
MTR-MOA	Route Legs-Altitudes	Activity	Time	Time Zone
		Hot <input type="checkbox"/> Cold <input type="checkbox"/> N/A <input type="checkbox"/>	Start:  Stop:	UTC <input type="checkbox"/> Local <input type="checkbox"/>
		Hot <input type="checkbox"/> Cold <input type="checkbox"/> N/A <input type="checkbox"/>	Start:  Stop:	UTC <input type="checkbox"/> Local <input type="checkbox"/>

# NORTHERN ROCKIES MISSION AVIATION SAFETY PLAN

<b>Crash Rescue/Medivac Plan:</b> <b>Additional medical information attached?</b> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		
<b>General Instructions (in the event of an incident):</b> <b>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.</b>		
Personnel will declare an incident and notify dispatch, dispatch will then activate the Aviation Mishap Response Plan. Incident information and instructions will be coordinated through involved personnel and Dispatch.		
EMT(s) on site: YES <input type="checkbox"/> NO <input type="checkbox"/> <u>Complete or See MPS</u>		
Names: <u>Complete or See MPS</u>		
First responder(s) on site:    YES <input type="checkbox"/> NO <input type="checkbox"/> <u>Complete or See MPS</u>		
Names: <u>Complete or See MPS</u>		
Available medivac helicopters: YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN <input checked="" type="checkbox"/>		
*Unknown: Select if medivac helicopter won't 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. *		
Medivac helicopter on site?    YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		
Level of care medivac personnel can provide:    ALS <input type="checkbox"/> BLS <input type="checkbox"/> Unknown <input checked="" type="checkbox"/>		
FAA Tail #(s)	Contact Information:	
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"/>		
<b>MEDICAL FACILITY</b>	Name/Location/Helipad Information	Helipad YES <input type="checkbox"/> NO <input type="checkbox"/>
Latitude	Longitude	Contact Freq.
<b>MEDICAL FACILITY</b>	Name/Location/Helipad Information	Helipad YES <input type="checkbox"/> NO <input type="checkbox"/>
Latitude:	Longitude:	Contact Freq.
<b>MEDICAL FACILITY</b>	Name/Location/Helipad Information	Helipad YES <input type="checkbox"/> NO <input type="checkbox"/>
Latitude	Longitude	Contact Freq.
<b>NEAREST BURN FACILITY</b>	Name/Location/Helipad Information	Helipad YES <input type="checkbox"/> NO <input type="checkbox"/>
Latitude	Longitude	Contact Freq.

# NORTHERN ROCKIES MISSION AVIATION SAFETY PLAN

## Signatures –Risk Assesement, Doors off Operations, GAR, Briefing completed

Complete or See MPS

<b>Participants Name/Position</b>	<b>Date</b>	<b>Participants Name/Position</b>	<b>Date</b>

**\*\*Use back of this form if needed for additional participants name and date.\*\***