

Project Aviation Safety Plan

Mission:	Project Name: Cabin sling	Unit: Little Pend Oreille NWR
Anticipated Project Dates: 5/23/XX	Daily Start Time:	Daily Ending Time:
Project Plan Prepared by: Jonny Doe		Title: Helicopter Manager
Date: 3/27/XX		
Note: Signature by the preparer verifies that all personnel have the required training for the mission. Attach map, clearly showing areas to be flown; aerial hazards must be indicated.		
Project Plan Reviewed by: Jane Dane		Title: Project Manager
		Date: 4/1/XX

Project Description: The purpose of work is to sling cabin logs and materials into the Trapper Joe remote cabin site on May 23rd. The pilot can generally expect a workday from 0800–2000 (12 hours). Two 2-person crews will be involved. Helicopter Manager Jonny Doe will supervise. Two crewmembers will position at the cabin site to receive loads, which will be slung in with long line and remote hook. Some materials will go internal. Once the materials are positioned at the site, the helicopter and all personnel will be released.		
Attachments: ☒ Map		☒ Other: Lat/Longs and coordinates for all landing areas.
Project Supervisor: Jane Dane		Phone: 509-260-XXXX
Helicopter Manager (if used): Jonny Doe		Cell: 292-XXXX1
Participants: Todd Fod, Susie Green, Matt Brown		

Type of Flight: Special Use		Desired Make/Model: AS350 B2 or B3, Bell 206L4	Charge Code: XXXX-1261-XXXX
Type Procurement: Contract #XX-ARA-XXXX		Method of Payment:	Projected Cost: \$8K
Vendor: Sky High Helicopters		Phone: 509-830-XXXX	Cell: 509-830-XXXX
Aircraft N#: 190SH	Make & Model: Aerospat. AS350 B2	Aircraft Color: Blue/white	
Pilot Name: Pat Ross		Pilot Carded: ☒ Yes ☐ No	A/C Carded: ☒ Yes ☐ No
Flight Follow: Flight follow local each take-off/landing. En route to SXQ or CDA, every 30-min per local policy by either Base Station or Jane Dane (after hours)		Before/After hours Flight Follow, include name and phone number: Jane Dane (509)-260-XXXX	
Method of Tracking: ☐ Phone ☒ Radio ☐ GPS		☒ Prior to Takeoff ☐ Each Stop En Route ☒ Arrival at Dest.	
Scheduling Dispatch Phone: 907-262-7021		Destination Dispatch Phone:	
FM Receive: 169.X25 (Hideout)		FM Transmit: 172.X65	Tones: none
FM Receive:		FM Transmit:	Tones: none
FM Receive: 172.X25 (Trapper Joe)		FM Transmit: 172.X25	Tones: none
Refuge air to ground: 167.X50		Air Guard: 168.625 tone:	Other:

Project Aviation Safety Plan (continued)

Fuel Source? Jet-A tank at SXQ Airstrip.
If barreled fuel, pilot notified barrel-fueling kit needed? (Kit to include 2 spare low-pressure system approved filters) There will be no barreled fuel.
Project time frames must include a minimum of 20 minutes to fuel aircraft for each projected fueling, plus flight time to and from fueling site. Multiply gallons-per-hour burn by projected hours of flight time, compare with fuel capacity information provided by operator. Aircraft must maintain 20 minute fuel reserve.
20 lb. BC fire extinguisher will be placed at fueling sites.

Passenger Names	Weights		
Jonny Doe	180 lbs		
Todd FOD	195 lbs		
Susy Green	140 lbs		
Matt Brown	160 lbs		
List Cargo		Hazardous Material (incl. bear spray firearms, stove fuel)	
10 10ft. Logs	160 lbs ea	☐ Yes ☒ No	
Misc. tools & materials	45 lbs	☐ Yes ☒ No	
Concrete Blocks	150 lbs	☐ Yes ☒ No	
		☐ Yes ☐ No	
Day packs cabin crew	30 lbs X 2 packs	☐ Yes ☒ No	
Day Packs mile 63 crew	30 lbs X 1 pack	☐ Yes ☒ No	
		☐ Yes ☐ No	
		☐ Yes ☐ No	
		☐ Yes ☐ No	
		☐ Yes ☐ No	
		☐ Yes ☐ No	
		☐ Yes ☐ No	
TOTAL	1885 lbs		

Location	Latitude	Longitude	Elevation
SXQ Airstrip (Fueling)	48 35.45N	117 50.54W	850'
Mile 63 Helispot	48 31.70N	117 37.43W	1060'
Trapper Joe Cabin	48 26.50N	117 34.88W	4800'

Project Aviation Safety Plan (continued)

Type of Operation – check applicable boxes	Personal Protective Equipment Requirements
☒ Helo Ops – ground personnel	Nomex clothing, hardhat w/chin strap, gloves, leather boots, eye protection, hearing protection, fire extinguisher
☒ External Loads	Nomex clothing, hardhat w/chin strap, gloves, leather boots, eye protection, hearing protection, radio, external load training
☒ Rotor Wing flights	Flight helmet, Nomex clothing, gloves, leather boots, eye protection, hearing protection
☐ Doors off flight	Use approved secondary restraint harness attached to approved aircraft hardpoints
Justification statement for low-level flights: Flights will remain above 500' AGL except approach/departure.	
Special instructions: Helicopter will meet manager at SXQ airstrip. Radio frequencies listed, “Hideout” is the main refuge frequency. In order to minimize radio traffic on the primary refuge frequency, local radio traffic will be conducted on Trapper Joe repeater and Refuge air to Ground. Crewmembers and pilot shall have onboard intercom capability. VHF-FM air-to ground radio contact will be maintained at all times. The pilot will monitor the VHF-AM air-to-air frequency (122.9). Flight following and contact with Refuge Dispatch will be on the main refuge frequency, “Hideout” Mtn. Repeater: Tx 172.X65, Rx 169.X25. If medevac makes communication with Local Hospital or an Air Ambulance from Colville, use the frequency of 130.X5	
Crash/Search and Rescue Procedures: Contact Refuge Base, request emergency medical assistance. After hours, Jane Dane will place 911 call and/or notify State Troopers and Refuge mgt.	

Project Aviation Safety Plan (continued)

Job Hazard Analysis

Aircraft Manager/Pilot review with all participants as part of preflight briefing.

JOB HAZARD ANALYSIS (JHA)	1. WORK PROJECT/ACTIVITY Cabin sling	2. LOCATION Little Pend Oreille Refuge	3. UNIT xx
	4. PREPARED BY Jonny Doe	5. TITLE Helicopter Mgr.	6. DATE 05/23/20XX
7. TASKS/HAZARDS	8. ABATEMENT ACTIONS		
Unqualified Personnel	-Pilot and helicopter will be carded annually. Government personnel will be qualified as Helicopter Crewmember and Helicopter Manager. Complex logistical scenarios, external loads, etc. require Helicopter Manager with significant external load experience.		
Unknown Responsibilities	-The project briefing will cover responsibilities and emergency procedures.		
Aircraft Avoidance	-See and avoid. Fly established airport patterns, initiate and stay in radio contact, practice sterile cockpit 5 miles out from airstrip.		
Weather	-Use weather advisory. Maintain VFR minimums, cancel mission if necessary.		
High/Hot/Heavy	-Performance planning consider utilizing load calculation. Do not place the aircraft in performance related situations		
Low level obstacles	- Complete a high level recon, no unnecessary low level flight.		
Door off helicopter operations	-Use approved secondary restraint harness in addition to seat belt. Remove/secure loose items from cabin. Know doors off VNE.		
Pilot not familiar with area	-Supply hazard maps. Complete high-level recon prior to low-level work, project area identified.		
Noise, rotor wash	-Wear ear and eye protection.		
Unplanned aircraft events	-All personnel equipped with required PPE and trained in crash procedures. Review Crash Rescue/Medevac plan. Utilize Personnel Flotation Device when required.		
Unscheduled Maintenance or mechanical problems	-Call AMD maintenance specialist for clearance to fly. File SAFECOM. Personnel will have survival gear in the event aircraft cannot retrieve them.		
Hazardous materials	-Mechanic will return aircraft to service. DOI maintenance specialist will approve and return to contract availability.		
Communications	-Flight following established, checked and followed, communication plan shared with all. Maintain communications at all times, establish backup alternate frequencies or utilize satellite phone or GPS tracking system, if available. Take handheld radio along. Call in prior to landing. If radio contact is lost return to best suitable landing area and check-in.		
Rotor hazards	-Pilot perform aircraft safety brief, approach/depart safely or after shutdown and rotors stop.		
Aircraft Fueling	- Vendor responsibility. No agency personnel on board.		
Missing Aircraft, Crash/Search & Rescue	- Duties assigned for extraction, suppression and flight following. Dispatch/helibase responsible to have current Aviation Incident Response/Crash SAR Plan posted and ready to implement.		
Pilot fatigue	-Observe FAA regulations to maximum 8 hours flight time a day. Provide sufficient time for pilot to accomplish preflight, mission requests, and postflight of aircraft within federally mandated maximum of 14 total hours of duty per day. Provide mandated 2 days off within any 14 consecutive days of duty. Do not pressure pilot.		

Project Aviation Safety Plan (continued)

Go/No-Go Checklist

Helicopter Manager/Pilot review with all participants as part of preflight briefing.

Is everything approved with clear instructions, aviation plan signed and reviewed?	☐ Yes	☐ No	☐ NA
Are communications and flight following established, including repeater tones?	☐ Yes	☐ No	☐ NA
Can terrain, altitude, temperature, or weather that could have an adverse effect be mitigated?	☐ Yes	☐ No	☐ NA
Are all aerial hazards identified and known to all participants?	☐ Yes	☐ No	☐ NA
Have mitigating measures been taken to avoid conflicts with military or civilian aircraft.	☐ Yes	☐ No	☐ NA
Have adequate landing areas been identified?	☐ Yes	☐ No	☐ NA
Are all agency personnel qualified for the mission?	☐ Yes	☐ No	☐ NA
Is the pilot carded and experienced for the mission to be conducted?	☐ Yes	☐ No	☐ NA
Are pilot flight and duty times compromised?	☐ Yes	☐ No	☐ NA
Are there enough agency personnel to accomplish the mission safely?	☐ Yes	☐ No	☐ NA
Will adequate briefings be conducted prior to flight to include Pilot, Passengers, and Dispatch?	☐ Yes	☐ No	☐ NA
Are all involved aware that the Pilot has the final authority, but if any passenger feels uncomfortable, that they can decline the flight?	☐ Yes	☐ No	☐ NA
Is the aircraft capable of performing the mission with a margin of safety?	☐ Yes	☐ No	☐ NA
Have manifests of cargo and passengers, load calculations, and/or weight and balance completed?	☐ Yes	☐ No	☐ NA
Is the aircraft properly carded?	☐ Yes	☐ No	☐ NA
Do all personnel have the required PPE?	☐ Yes	☐ No	☐ NA
Fuel planning, adequate fuel on board, fuel location, availability of commercial fuel?	☐ Yes	☐ No	☐ NA
Remember maps of areas/sites, GPS coordinates, handheld radios, cell phones, day/survival packs, and sick sacks.	☐ Yes	☐ No	☐ NA
Is there an alternative method that would accomplish the mission more safely?	☐ Yes	☐ No	☐ NA
Will the mission be conducted at low levels? (Below 500' AGL). Discuss	☐ Yes	☐ No	☐ NA
Can the same objectives be achieved by flying above 500' AGL?	☐ Yes	☐ No	☐ NA
	☐ Yes	☐ No	☐ NA