

Wilderness Airstrip Operations and Maintenance Plan
Indian Creek Airstrip
Salmon-Challis National Forest
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Introduction

This operations and maintenance plan has been developed in response to direction contained in the Frank Church-River of No Return Wilderness Management Plan, (revised 2003), Chapter 2, Aviation, Standards and Guidelines. As stated in the above document, “[This Airstrip Operations and Maintenance Plan] will reflect the Goal to maintain these facilities to a safe operating standard but not enhanced over conditions typical of 1980. The O&M Plan will define the airstrip vicinity, establish baseline design standards for landing strip dimensions and safety areas, and address the retention and maintenance of ancillary facilities provided to accommodate public use within that vicinity.”

Location

The Indian Creek airstrip is located within the Frank Church – River of No Return Wilderness in the state of Idaho and at the eastern edge of Valley County. It is located on the west side of the Middle Fork of the Salmon River, about 6 miles south of the Middle Fork Lodge. Indian Creek airstrip is about 2.5 miles downstream, or north, from Pistol Creek airstrip and about 6 miles upstream from Thomas Creek airstrip. It is 44 miles northwest of Challis, Idaho, 53 miles south east of McCall, Idaho and 100 miles north east of Boise, Idaho. At midpoint on the airstrip the UTM is 4958000N and 649930E.

The Indian Creek airstrip is administered by the Middle Fork Ranger District, Salmon-Challis National Forest, Region 4. The airstrip is located in T 16 N, R 11 E, Section 3 and T 17 N, R 11 E, Section 34 with a Latitude of 44-45-43 and a Longitude of 115-06-09. Its FAA Identifier is S81.

History of the Airstrip

Indian Creek Bar was first occupied by a Mr. Watson, grandfather of Daisy Tappen and Fred Paulsen, about 1914 when he built several small cabins there. He left in 1919. The Forest Service said the site “was primarily needed as a protective improvement for the Forest”, “for fire protection”. In 1935 the bar was surveyed by the Forest Service and in 1936 a plat was drawn up and approved for an administrative site. Construction on the airstrip probably began within a couple of years. In 1952 the runway was extended 450 feet on the southwest end. In 1953 another 1,100 feet was added. A D-4 Cat was flown in to make the improvements.

The present length is 4,650 feet. A water sprinkling system was put in and since done away with. A pole fence was put around it and then most of it removed. When the packer stays there now he puts up an electric fence to extend the pole fence.

In 1998 the estimated number of landings was 2,120. The number varies with the water flows, dry years people put in at Indian Creek when it is too low to launch at Boundary Creek.

Researching the NTSB website data from 1962 to 2006 it appears there were three accidents with the airstrip.

- On July 24, 1966 a pilot flying a Piper PA-24 misjudged the distance and speed when trying to land and came to rest in the water. There were no fatalities.
- On August 9, 1975 a pilot flying a Bell 206B rolled over on lift off. Probable cause was improper operation of flight controls. No fatalities.
- On August 4, 1979 there were 6 fatalities when a pilot collided a Cessna T210M into trees in flight. The report didn't say if he was landing on Indian Creek when it happened.

Management Objectives for the Airstrip

Management goals, objectives, standards and guidelines for wilderness airstrips can be found in the Frank Church-River of No Return Wilderness Management Plan (revised 2003), Chapter 2, Section V – Aviation, which is an amendment to the Salmon and Challis National Forest Resource Management Plans. Specific goals, objectives, standards and guidelines from the wilderness management plan will be referenced in this document in the sections to which they pertain.

Description of the Airstrip (include all FAA inspection info)

The elevation of the Indian Creek airstrip is 4,656 feet (1,419 meters). The runway has a length of 4,650 feet and a width of 40 feet. Indian Creek is one of the longest and most heavily used Forest Service airfields in the back country and central Idaho.

When inspected in 1992, the runway surface was classified as “good” with some rodent activity. Tree encroachment requires occasional attention. In 2004 it was noted that approximately 1/3 of the way down the runway several smaller depressions had allowed standing water to gather. The surface would benefit from a grading. There was also bitterbrush and a couple of smaller pines establishing themselves along the edges of the 40 foot centerline track. It was noted that there were several soft spots and depressions in the runway that needed some dirt fill. Moving fill to them was a problem due to the wilderness requirement denying the use of wheelbarrows. The tie down areas were rated good with chains present, though some bitterbrush was crowding the northernmost tie down pads. Both windsocks, standards and segmented circles were in good condition. Some minor vegetation was encroaching within the circles. It was noted that the painted rock boundary markers were quite visible from the air, but have a few sage and small pines growing up in the rocks, (primarily on the downstream end). Controlling obstructions have not changed on either end of the runway. An inspection in 2005 said the dirt runway surface was in fair shape. There were 3-4 inch loose rocks scattered on the surface and

the centerline is starting to become lower than the runway edges for most of the runway. Appendix A shows the site map.

Airstrip Surface Improvements

At the Indian Creek airstrip there are a total of ten (10) boundary markers. Four are in the shape of an “L” at each corner defining the runway. The other six are defining the edges of the length of the airstrip – three on each side.

There are two typical fluorescent orange windsocks, one is located on the south side of the strip on the west end on a wood pole and the other on the north side of the strip on the east end on a steel pole. The windsocks are still very visible and functioning well. There are segmented circles on the ground below the windsocks made of groups of rocks with alternating groups painted white and red.

Also present on the airstrip are ten (10) sets of airplane tie-downs. Four sets of tie-downs are located in the aircraft parking area between the boat ramp and windsock on the west end of the airstrip, as shown on (diagram 1) the drawing of the airstrip. Two sets are located across the airstrip from the four mentioned. Then four sets are on the east end of the airstrip shown on the drawing at the other aircraft parking.

A pole rail fence runs from the northwest end of the airstrip about a thousand feet then is extended with an electric fence to the east end of the airstrip and is used when the trail crew needs to keep their stock there. It is operated by a solar charger.

There is a low spot on the runway about $\frac{1}{3}$ rd of the distance from the south end and on each side of the strip is a ditch about a foot deep to drain the water. The ditches are filled with rocks painted white.

Ancillary Facilities

There is a boat ramp on the west end of the airstrip and a composting toilet. Across the runway from the boat ramp is a water hydrant that filters the water to provide safe drinking water, which is tested monthly, for the boaters.

There is a three panel kiosk board that offers information to the public and additional information for pilots using the airstrip. One message to pilots reads: “Announce Intention and Location on 122.9 In Advance”. There is another sign in the aircraft parking area that says: “Tie Down Area-No Camping”. At the aircraft parking area on the north end of the runway is another information board with information for pilots. There is a two sided pit toilet at the lower end of the runway in the location of the river bridge.

There is not a defined camping area at Indian Creek airstrip for river users, though there is an assigned river camp at the confluence of Indian Creek and the

Middle Fork. The Middle Fork trail #4001 runs through the Indian Creek Administration Site.

Use of the Airstrip & Support to Other Forest Service Programs

The Indian Creek airstrip is available for public use throughout the year, though it is not plowed of snow. This airstrip serves as a major boat launching location for commercial outfitters and private boaters. It is used by boaters to deliver equipment, food and boat passengers. Use of the airstrip increases over the course of the summer season as water levels decrease, making a launch at Boundary Creek more technically difficult. The airstrip is also used by hunters, and commercial air services that support them, in the fall as a starting point or base camp for hunting. Backpackers also may initiate a trip from this airstrip or travel through from other points of departure.

Indian Creek also serves as an administrative site comprised of four residential structures, an equipment storage barn, a tack and feed shed, and a corral, hitch rails and feed boxes for administrative stock support. Two to five river support staff may be assigned to the Indian Creek guard station in support of the river program. Additionally, wilderness, weed, trail, archaeology and other resource program crews may spend time at the station while engaged in work. Fire crews may also utilize the site as a base of operations.

When an air taxi operator is contracted by the Forest Service to get into Indian Creek it is almost always either Middle Fork Aviation out of Challis, ID or Salmon Air out of Salmon, ID, because these taxi services are based in the same towns that the Salmon-Challis National Forest is located. When a private individual or group hires an air taxi service into Indian Creek, the service is usually provided by Middle Fork Aviation, Salmon Air or McCall Air which are based from Stanley, Salmon and McCall.

Another use of the airstrip is for training flights or what are known as 'touch downs', where pilots land and take off to check off that they have landed there before, or 'touch and go's' where pilots practice landing and taking off. While this use is contradictory to the concept and spirit of the Wilderness Act and not encouraged by the Salmon-Challis National Forest, it has not been discouraged by either policy or direction.

Restrictions and Requirements for Use of the Airstrip

All special orders that apply to the Salmon-Challis National Forest managed portion of the Frank Church – River of No Return Wilderness also apply to the airstrips. See Appendix C for a summary listing of all of the special orders. Of particular note are the following restrictions and prohibitions gleaned from the Special orders:

1. Camping or allowing stock within 75' of either side or 500' of either end of the airstrip is prohibited;

2. Overnight camping with stock at landing strips is limited to one night (Standard 9, Chpt. 2 – Aviation, FC-RONRW Mngt. Plan, 2003);
3. The possession or use of motorized equipment, including chainsaws, is prohibited;
4. The airstrip is located within the Middle Fork of the Salmon River Wild and Scenic River Corridor, therefore, all human waste must be packed out; fires must be built within a fire pan with a minimum of 3” sides and all ash packed out;
5. Group size is limited to 20 people and stock are limited to 20 animals
6. Camping is limited to 14 days in any area or campsite within a 5 mile radius;
7. There is a 14 day limit on storing equipment, personal property or supplies;
8. Possession, use or transport of hay, straw or mulch without having each individual bale or container tagged or marked as weed free is prohibited;
9. Possessing or using a wagon, cart or other mechanized transportation, including a game cart, is prohibited.

General Operating Procedures for Landing, Take-off, and Parking

The radio frequency for communicating at the airstrip and at neighboring backcountry airstrips within the Frank Church – River of No Return Wilderness is CTAF 122.9 MHz. The traffic pattern at the airstrip is left (airnav). There are no published instrument procedures at Bernard. Some nearby airports with instrument procedures include:

- KSMN – Lemhi Co. Airport (37 nm E)
- 6S5 – Ravalli Co. Airport (80 n NW)
- S80 – Idaho Co. Airport (82 nm NW)
- KMYL – McCall Municipal Airport (58 nm W)
- KSUN – Friedman Memorial Airport (90 nm S).

The parking areas and tie-downs exist near either end of the airstrip. Some are on the south end just below the Indian Creek Guard Station on the west side of runway and some are at the north, end on the east side of the runway. Planes typically taxi back up the main part of the runway through the dirt and rocks. If the runway needs to be closed for maintenance or other reasons operating procedure requires that it be marked with a white X on the airstrip ends.

Wilderness Education / Visitor Contacts

Since the Indian Creek Guard Station is staffed, there are opportunities for face to face visitor contacts and educational messages. A three panel kiosk board exists next to the boat ramp. The board is maintained annually with various educational information posters which include: “Traces of the Past” poster

(reminding visitors to leave be, archeological sites and artifacts); “Leave No Trace” poster (educating visitors on Leave No Trace Ethics); “Fire Cycle” poster (educating visitors that fire is a part of the natural system); “Wolves” poster (educating visitors that there are protected wolves in the area); “Bear Aware” poster (educating visitors that there are black bears in the area and showing them proper food storage techniques). Special orders pertaining to the Forest, Wilderness and airstrip are also posted on the kiosk. Visitor contacts are also made with river users by the river patrol.

There are some key wilderness education themes and messages to use in visitor contacts at this airstrip. The airstrip accesses the Middle Fork of the Salmon River, a federally designated Wild and Scenic River. Communicating the mandatory requirements related to the river corridor (listed in the requirements section of this document) are essential to the ability to enforce them and protect the riverine resource. Other key messages include wilderness rules and regulations, Leave No Trace principles and practices, and information on the effects of noxious weeds and techniques to limit their spread. Information on hazards such as giardia, poison ivy and rattlesnakes may also be helpful to the visitor.

Law Enforcement / Search and Rescue / Life Flight

Law enforcement actions would be conducted no differently than anywhere else in the Wilderness or on the Forest. Law enforcement actions need to be coordinated with and communicated to a Forest Law Enforcement Officer (LEO). Certified Forest Protection Officers (FPO's) can issue tickets if necessary. Incident Reports should be completed and submitted to the South Zone LEO.

If Forest employees are present during an emergency life threatening incident that requires a Life Flight, those incidents must be requested through and coordinated with Central Idaho Dispatch via Forest Service Radio.

Search and Rescue procedures are described in the Salmon-Challis National Forest Search and Rescue Plan. A copy of that Plan should be made readily available at the Bernard Guard Station house.

- “Coordinate and cooperate with local County Sheriff, State of Idaho, Federal Aviation Administration (FAA), and National Transportation and Safety Board (NTSB) for such actions as search and rescue, removal of wreckage and emergency or temporary airstrip closures.” (Guideline 14, Chpt. 2 – Aviation, FC-RONRW Mngt. Plan, 2003)

Maintenance Needs for the Airstrip / Responsibilities and Skills / Tools for Maintenance

Airstrip

- “Manage and maintain airstrip dimensions, conditions and function to those existing in 1980 at the time of wilderness designation.” (Goal 4, Chpt.2 – Aviation, FC-RONRW Mngt. Plan, 2003)
- “Airstrip maintenance operations will adhere to the wilderness concept of using the “minimum tool”. Non-motorized methods will be used for recurring and routine maintenance, in conformance with general wilderness management policy and prohibitions against use of motorized equipment or types of mechanical transport.” (Standard 5, Chpt. 2 – Aviation, FC-RONRW Mngt. Plan, 2003)

Maintenance performed on the airstrip occurs in a three year rotation with two other Forest maintained airfields, Mahoney Creek and Indian Creek, which are administered by the Middle Fork District. Each of the three strips is maintained once every three years. See Appendix B for Maintenance Task Matrix.

The Indian Creek airstrip is a heritage resource that has been determined to be not eligible for the National Register of Historic Places. Routine maintenance within the current airstrip footprint is allowed. However, if off-site barrow material is needed to fill-in holes/ruts, etc. a cultural resource clearance will be required in order to protect archaeological sites in the immediate vicinity.

The Salmon-Challis National Forest Trails Program Coordinator has lead responsibility for scheduling and conducting maintenance tasks for the airstrips. That person is responsible for informing and coordinating with the Forest Wilderness Program Manager on planned activities. Both trails and wilderness program employees may participate in accomplishing the work. Additionally, airstrip maintenance work crews will be responsible for checking and maintaining the wind sock and it's structure, tie downs, hitch rails, naturalization of campsites and pack out of trash and garbage.

Ancillary Facilities - Campsites & Outhouses, Information Board & Registration Box

- “Campsites at airstrips will be managed for primitive recreation use opportunities appropriate within wilderness.” (Goal 5, Chpt. 2 – Aviation, FC-RONRW Mngt. Plan, 2003)
- “Ancillary facilities – such as toilets, fire rings, aircraft tie-downs, information boards or horse handling facilities – provided to accommodate airstrip operations or recreation use activities in the vicinity of airstrips, will adhere to the wilderness management concept of “minimum requirements”. The Minimum Requirements Analysis for Facilities provides general guidance. For each airstrip, periodically review any facilities and maintain for retention or schedule removal, as dictated by this evaluation. ...The Idaho Historic Preservation Office, prior to

implementation, will review O&M Plans.” (Standard 7, Chpt. 2 – Aviation, FC-RONRW Mngt. Plan, 2003)

- “Provide for voluntary registration of visitors accessing the area by air or using the public airstrips as destination points.” (Guideline 16, Chpt. 2 – Aviation, FC-RONRW Mngt. Plan, 2003)
- “Stock will not be left unattended on airstrips, unless authorized.” (Standard 17, Chpt. 2 – Aviation, FC-RONRW Mngt. Plan, 2003)

The staff assigned to Indian Creek Guard Station will be responsible for regular maintenance and cleaning of campsite areas and outhouses; maintaining signing and posting of special orders on the information board and registration box; and replacing and collecting voluntary registration sheets. They will coordinate with the Wilderness Program Manager in reporting issues and needs for these facilities. Additionally, the staff assigned to Indian Creek Guard Station and the River Patrol will complete incident reports as needed, and issue violation notices if they hold FPO certification.

The Wilderness Program Manager will facilitate the resolution of issues, the acquisition of materials and supplies needed for maintenance activities, conduct periodic assessments of ancillary facilities for retention or removal and process voluntary registration sheets. They will also be responsible to annually contact the State of Idaho Transportation Department – Aeronautics Division to conduct inspection of the airstrip. The River Program Manager has overall management responsibility for the Indian Creek Guard Station and its various structures.

Inspections and Monitoring

- “Annually the Forest Service and State of Idaho will coordinate and conduct scheduled inspections for (all seven (7)) designated public use airstrips operated and maintained by the Forest Service.” (Objective 5, Chpt. 2 – Aviation, FC-RONRW Mngt. Plan, 2003)
- “Conduct use sampling at selected airstrips as a basis for estimating airstrip operations and to track use trends.” (F. Monitoring, Chpt. 2 – Aviation, FC-RONRW Mngt. Plan, 2003)

Indicators:

1. Total airstrip use levels including:
 - a. Number of aircraft landings by user type (Commercial, Private, Administrative)
 - b. Number of people per party
 - c. Types of use supported by aircraft
 - d. Length of stay
 - e. Number of aircraft at airstrip at any one time

2. Landing Strip Safety Inspection report ratings – Maintain fair or better rating

The Wilderness Program Manager will be responsible to annually contact the State of Idaho Transportation Department – Aeronautics Division to conduct an inspection of the airstrip. The River Program Manager will be responsible for the design, implementation, analysis and summary of airstrip sampling.

Costs associated with maintenance Tasks by BLI

Estimated 2009 costs: Currently coming out of CMTL13

Jim Upchurch 10 days @ 248.00 per day:	\$2,480.00
JE Newman 12 days @216.00 per day:	\$2,592.00
GS-05 teamster 12 days @126.00 per day:	\$1,512.00
GS-05 teamster 12 days @126.00 per day:	\$1,512.00
GS-05 trail crew 20 days @ 126.00	\$2,520.00
GS-05 trail crew 20 days @ 126.00	\$2,520.00
PERDIEM: 20 PER DAY@ 86DAYS	\$1,720.00
FLIGHTS: Islander 900.00 per flight x 3:	\$2,700.00
TOTAL :	\$17,556.00

The teamsters are needed to drive the teams, usually two on the grader and two working with the scoop. The 2 GS-05 (20 days) trail crew are needed to open and clear the trail of debris from Camas Creek to the airstrip that is due for maintenance. What is not factored in is the amount of overtime (varies from year to year) and the additional flights for the GS-05 trail crew to open the trail to the airstrips.

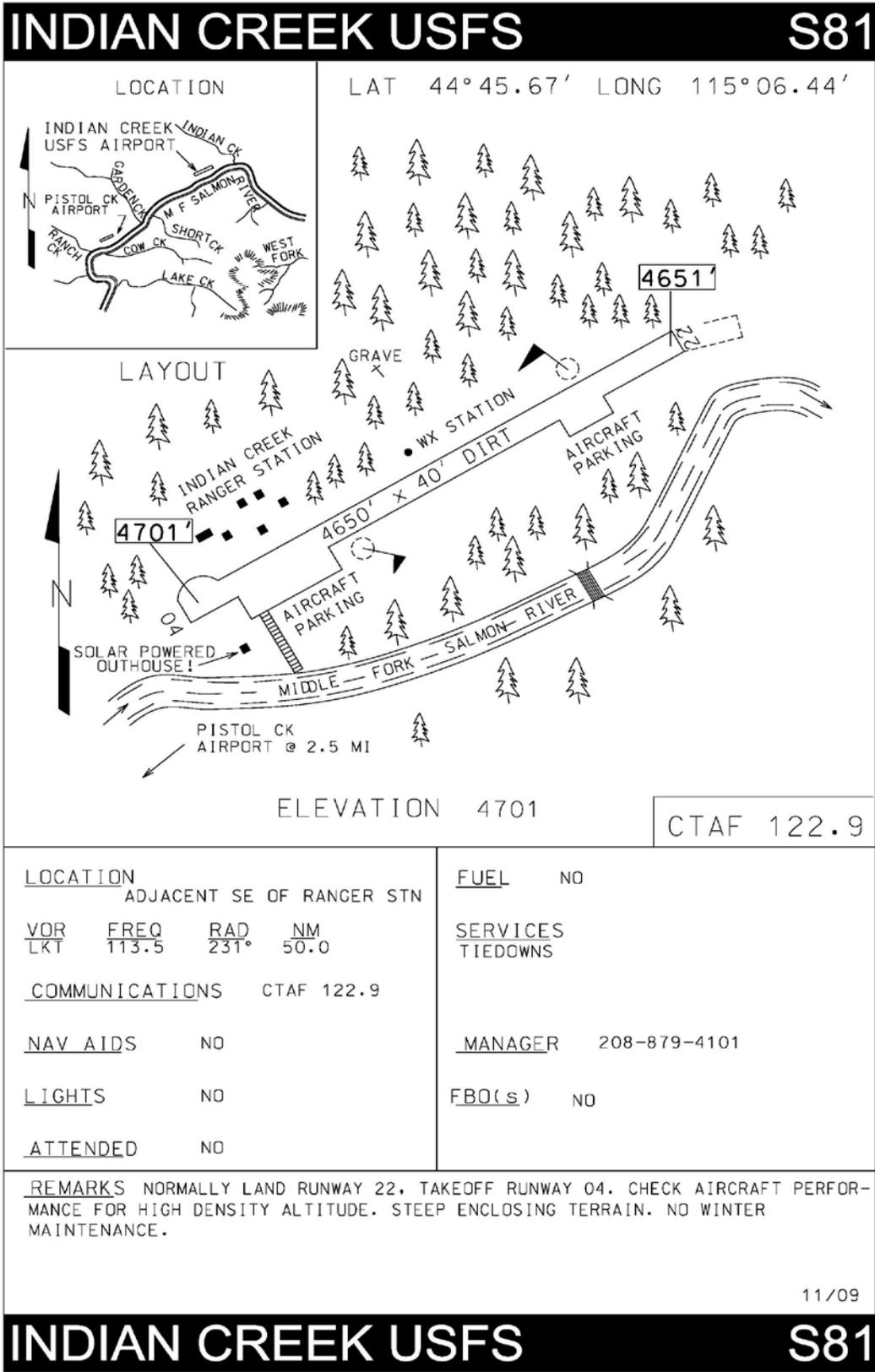
Appendices

Appendix A – Site Map

Appendix B – Maintenance Task Matrix

Appendix C – Special Orders for area

Appendix A



Appendix B

Action Area	Specific Need or Location	Type of Action (standard)	Action Frequency, How often completed	Time of Year	Quantity, Amount, or Area Treated	Estimated Cost (for reference only, costs may change)
Leveling	a. Entire airstrip as needed	Maintain a rut free level surface	Every three (3) years	Typically the beginning of the season	Main landing area	
	b. Spot leveling ruts and holes	Fill holes and ruts	Every three (3) years	Typically the beginning of the season	Whole airstrip	
Painting	Runway boundary markers	Keep runway markers visible from the air	Every three (3) years (as needed)	Typically the beginning of the season	4 End markers (60 sq ft each) 4 Side markers (40 sq ft each)	
Vegetation control	a. Clear runway approaches	Remove vegetation that intrudes on approach glide slope	Every three (3) years (as needed)	Typically the beginning of the season	Maintain 5% glide slope for 300' from runway end	
	b. Clear encroaching vegetation on runways	Remove vegetation that encroaches on runway dimensions	Every three (3) years (as needed)	Typically the beginning of the season	Remove any woody vegetation within runway dimensions	
Clearing obstructions	Remove obstructions : fallen logs, rolled rocks	Remove obstructions from runway surface	Every three (3) years	Typically the beginning of the season	Entire airstrip	

Action Area	Specific Need or Location	Type of Action (standard)	Action Frequency, How often completed	Time of Year	Quantity, Amount, or Area Treated	Estimated Cost (for reference only, costs may change)
Rock removal	Remove rocks	Remove rocks of size that pose hazard	Every three (3) years	Typically the beginning of the season	Entire airstrip	
Navigation marker maintenance	Maintain windsock	Ensure windsocks turn freely and are in fair or better condition	Every three (3) years	Typically the beginning of the season	One (1) windsock	
Weed control	Control spread of noxious weeds	Remove noxious weeds through spraying				
Airplane tie-downs	Maintain airplane tie-downs	Repair or replace tie-downs	Every three (3) years	Typically the beginning of the season	Four (4) pairs of tie-downs	
Camp areas	Maintain camp areas	Clean camp areas around airstrip; remove garbage, clean fire rings	This usually gets done once every year	Typically the beginning of the season	Each camping area (2 fire rings presently)	
Inventory and monitoring	Annual inspection of airstrip conditions and linked facilities	Annual inspection of airstrip conditions, facilities and monitoring of plans	Annually	Typically the beginning of the season	Entire airstrip and linked facilities	

Appendix C