

Wilderness Airstrip Management Plan Chamberlain Airstrip (U79) Payette National Forest

Introduction

This management plan is intended to provide a framework for management intent, desired conditions and opportunities at the Chamberlain Airfield. It covers annual routine operations and maintenance needs for the airstrip. Any non-routine activities or emergency actions will be managed as needed and in the context of the Minimum Requirements Decision Guide – Airstrip Maintenance, for the Frank Church-River of No Return Wilderness (FCRNRW Plan, Standard E-6, pg 2-12; FEIS, Appendix).

Chamberlain airstrip is classified “primitive” under the Idaho Airstrip Network classification matrix (May 2010).

Location

Chamberlain airstrip, a FAA designated public use airstrip, is located adjacent to the Chamberlain Forest Service Station within the Frank Church-River of No Return Wilderness. It is administered by the Krassel Ranger District, Payette National Forest, Intermountain Region 4. The airstrip is located at Township 24N, Range 10E, Section 35, with a Latitude of 45° 22.74' and a Longitude 115° 11.81'. The FAA identifier is U79 and it lays at an elevation of 5,765 feet.

History of the Airstrip

In 1925 the Forest Service developed additional lands adjacent to the Chamberlain Basin Administrative Site for hay and pasture land. This meadow was gradually improved and served as an emergency airstrip. Additional clearing of timber was an annual task which lead to the strip being used to “fly in” firefighters by 1930. The first official landing field was constructed in 1940 (runway 15/33). In 1941 the runway (15/33) was recorded to be 3,000' long by 150' wide.

From roughly 1941 to 1952 the construction of runway 07/25 occurred using hand labor. In 1952 or 1953 a D-7 tractor was walked across country to level and finish the airstrip. The runway was completed in 1954 and eight sets of tie downs were added to the airfield 1961. Original dimensions of runway 07/25 are currently unavailable, but one document references an initial planned length of 3400'.

- The airstrip was inspected in 1982 and was shown to have the following dimensions:
 - Runway 07/25 = 4100' X 200'
 - Runway 15/33 = 2700' X 120' (All subsequent documentation shows the runway to be 140')
- The 1982 Big Creek Ranger District Airfield Maintenance Plan states the airstrip was utilized to support Chamberlain Guard Station, two outfitter operations, and a large

number of fly-in recreationists. At the time a sampling effort showed the airstrip handled approximately 1,000 landings per season and was one of the busiest airfields in the River of No Return Wilderness. Historic documents also note the use of the airstrip for fire control and State Fish and Game activities.

- A search of the National Transportation Safety Board's Accident Database identifies one known accident at Chamberlain airstrip:
 - (1) 04/30/1992 – Cessna/182B – Pilot encountered downdraft winds @ 25' AGL during final approach for landing on runway 25. The aircraft descended abruptly, landed hard and nosed over. One minor injury and no fatalities occurred.
- The airstrip has historically been utilized by a variety of aircraft makes and models. It can and has accommodated aircraft as big as the DC-3.
- Characterization of past maintenance or projects:
 - Raking, grading, and leveling with stock has also occurred at Chamberlain but does not occur annually. This more intense work is usually reserved to address specific needs and situations or when funding is available.
 - Maintenance of landing surface vegetation is difficult and success is largely related to factors of use intensity and location. At Chamberlain, where the airstrip is wide enough, moving the landing zone back and forth with white cones has helped maintain a vegetative cover. The presence of rodents, with the natural population swings, also modifies the vegetative cover to some extent and the landing surface conditions of these native surface strips. Other than filling in holes and smoothing the rodents' diggings, there have been no rodent population control efforts at these Wilderness strips.
- Replace culvert near E/W & N/S runways intersection – 1993
- Chamberlain's Proximity to other airstrips:
 - Stonebreaker (Private) 1NM to the NE
 - McCall (KMYL) 48NM to the SW
 - Mackay Bar (ID28) 13NM to the W
 - Cold Meadows (U81) 12NM to the SE

Objectives for Management of the Airstrip

- R-1/R-4 Regional Aviation Plan Ch. 2.2 Aviation section C 3 & 4
- 1) Forests will develop and maintain an *Airstrip Management Plan* for each Forest owned and operated airstrip within their responsibility.
- 2) Forest owned and operated airstrips will be maintained in accordance with FSM 7730.
- FSM 7735.22 #2

- Develop minimum maintenance standards for airfields in the forest transportation system, and maintain them to at least those standards.

FCRNRW policy

- Maintain the airstrip to a safe operating standard but not enhanced over conditions typical at the time of the passage of the Central Idaho Wilderness Act and in compliance with the Frank Church-River of No Return Wilderness Management Plan.
- Chamberlain Airstrip will be managed for unrestricted public and commercial use until use levels and evaluations dictate a need to establish use limits.
- Recognize the needs and values of multiple users while ensuring the overall goal of maintaining these facilities to a safe operational standard is accomplished.

Physical Description of the Airstrip (including all FAA inspection info)

The airstrip is located within the Chamberlain Basin and is surrounded by deceptively rising terrain. The USFS Chamberlain Guard Station is adjacent to the airstrip, which contains two intersecting runways and there are several Forest Service trails which intersect at the airstrip.

- Elevation of the airstrip is 5765'
- Dimensions of runway 7/25 are 4100' x 200'
- Dimensions of runway 15/33 are 2700' x 140'
- Runway 25 is generally favored for landing and Rwy 07 favored for departure
- The airstrip is grass turf, in generally good condition, but rodent activity can be prevalent.
- There is no winter maintenance; the grass surface can be "slick" from dew or rain at times. The airstrip is snow covered in the winter months, and big game are common on and around the airstrip.
- Closure of runway 15/33 and NOTAMs being issued for water/mud are common in the spring due to run-off.
- No telephone located at airport

- Obstructions:

+70' Trees adjacent to all runway edges

Runway 7: 50' trees, 105' right of centerline
+35' trees 150' on centerline

Runway 25: 35' tree, 110' left of centerline
+325' timbered ridge 5000' on centerline

Runway 15: 150' hill, 200' right of centerline, 7:1 slope to clear
120' timbered hill 1200' on centerline

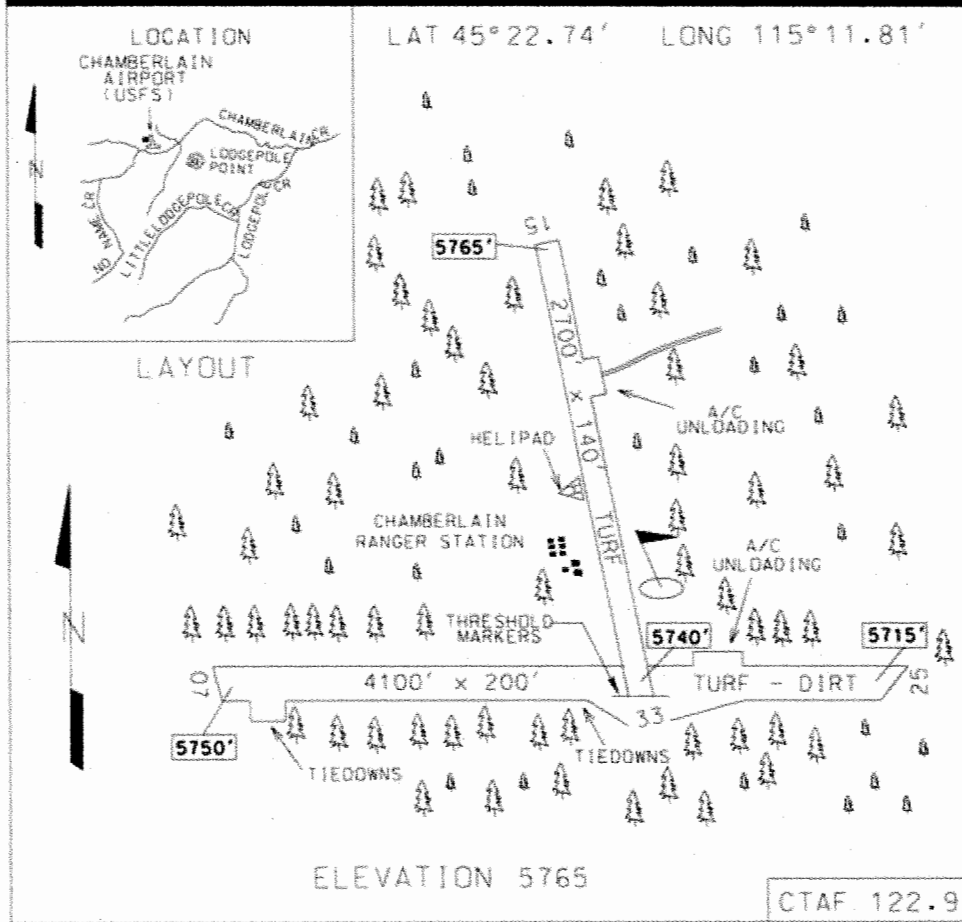
Runway 33: 10' trees, 50' from runway, 5:1 slope to clear
+275' timbered ridge 3000' on centerline
+35' trees at 30' on centerline

- A 110-1 airport subject to temp closure early spring to soft runways.
- A 110-2 +70' trees adjacent to all runway edges.
- A 110-3 extensive rodent activity on both runways.
- A 110-4 no telephone avbl at airport.
- A 110-5 pvt stone breaker airport located 1 nm ne of chamberlain USFS.
- A 110-7 ry 07/25 w 500 ft clsd indefly.
- A 110-8 ry 15/33 has +2 ft pipe & -2 ft ditch across runways north of runway 7/25 intersection.

Runway 7/25				Runway 15/33			
Dimensions		4100' X 200'		Dimensions		2700' X 140'	
Surface		Turf/Dirt		Surface		Turf/Dirt	
Alignment		East - West		Alignment		North - South	
End Markers		Yellow		End Markers		Yellow	
Side Markers		Yellow		Side Markers		None	
Runway 7		Runway 25		Runway 15		Runway 33	
Gradient	0.2%	Gradient	0.2%	Gradient	0.3%	Gradient	0.3%
Traffic Pattern	Left	Traffic Pattern	Left	Traffic Pattern	Left	Traffic Pattern	Left

Airstrip diagram produced by the Idaho Transportation Department –Division of Aeronautics

CHAMBERLAIN BASIN USFS U79



<u>LOCATION</u> ADJACENT EAST OF R.S.				<u>FUEL</u> NO
<u>VOR</u>	<u>FREQ</u>	<u>RAD</u>	<u>NM</u>	<u>SERVICES</u>
LKT	113.5	276°	51.5	TIEDOWNS
<u>COMMUNICATIONS</u> CTAF 122.9				
<u>NAV AIDS</u>	NO			<u>MANAGER</u> 208-634-0700
<u>LIGHTS</u>	NO			<u>FBO(s)</u>
<u>ATTENDED</u>	NO			NO

REMARKS
 RUNWAYS SOFT IN EARLY SPRING. NORMALLY LAND RUNWAY 25. TAKEOFF RUNWAY 07. RWY 07-25 AND RWY 15-33 THRESHOLDS MARKED AND RUNWAYS OUTLINED WITH YELLOW PILED ROCK BOUNDARY MARKERS. CHECK AIRCRAFT PERFORMANCE FOR HIGH DENSITY ALTITUDE. RISING TERRAIN AND POTENTIAL DOWNDRAFTS WEST OF AIRPORT. RUNWAY THRESHOLDS MAY BE UNDEFINED. RUNWAYS AND TIEDOWN AREAS SUBJECT TO ONGOING RODENT DAMAGE.

9/09

CHAMBERLAIN BASIN USFS U79

Airstrip Surface Improvements

- White cones are used on runway 7/25 to direct traffic to the left or right of centerline in an effort to reduce erosion and maintain the turf. This has been a successful management tactic to minimize surface impacts and will continue in the future.
- The end and side markers are made of rock and have been previously painted. As long as the airstrip dimension, as seen from the air, are usable no additional painting or marking will take place. If safety is compromised by lack of visibility of the runways edge, markers will be painted for better visibility.
- A windsock and standard is located on the east side of runway 15/33. Current dimensions are unknown.
- There are two aircraft unloading areas, one on each runway.
- Six tie-downs are available on the west end of runway 7/25 and on the south side of runway 7/25 near the intersection.
- The concrete helipad was removed in 1990-1991

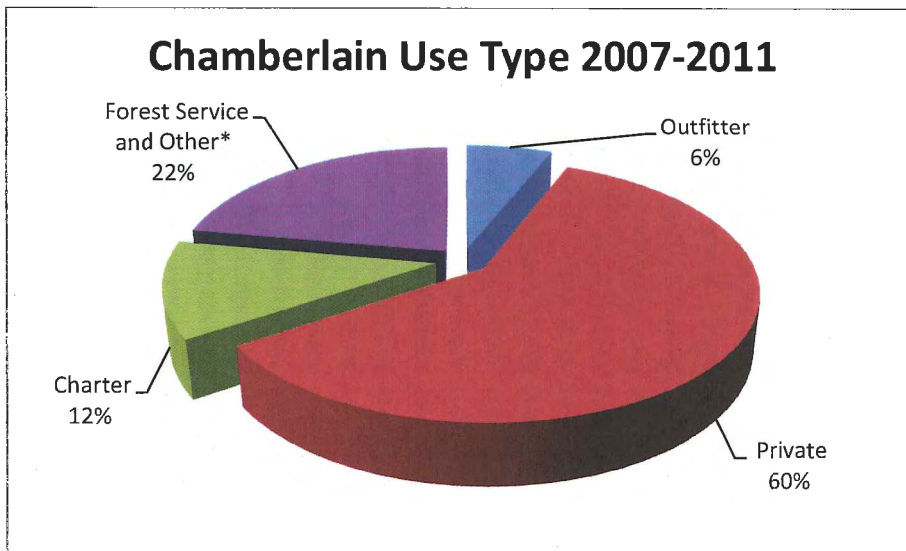
Airstrip Facilities

- There are three pit-style out houses located on runway 07/25 which are maintained when the Chamberlain Station is staffed. These were reconstructed in 2010-2011
- Three trailhead registration boxes and two sign boards can be found adjacent to the airfield.
- Several dispersed campsites with fire rings are located along the airstrip.
- Grazing and stock holding is not permitted on or near the airstrip.
- All ancillary public use facilities associated with the airstrip will be for the purpose of protection of the Wilderness resource and be the minimum necessary for administration of the area, and not for user convenience.

Use of the Airstrip

- The FAA designation is public ownership, public use.
- The Forest Service listing per FC-RONRW direction is:
"The seven (7) designated public use airstrips operated and maintained by the Forest Service will be managed for unrestricted public and commercial use until use levels and evaluations dictate a need to establish use limits." (FC-RONRW Ch. 2-11)
- The IAN current classification is "Primitive."
- The Forest Service utilizes the airstrip to move personnel and supplies into the backcountry to support a variety of agency activities.
- Private pilots use the airstrip for wilderness access, camping, hunting and fishing. Pilot experience encountered may significantly vary due to the size of the runways and surrounding terrain. This represents the greatest use category, with no overnight stay. (2011 = 78% of landings)

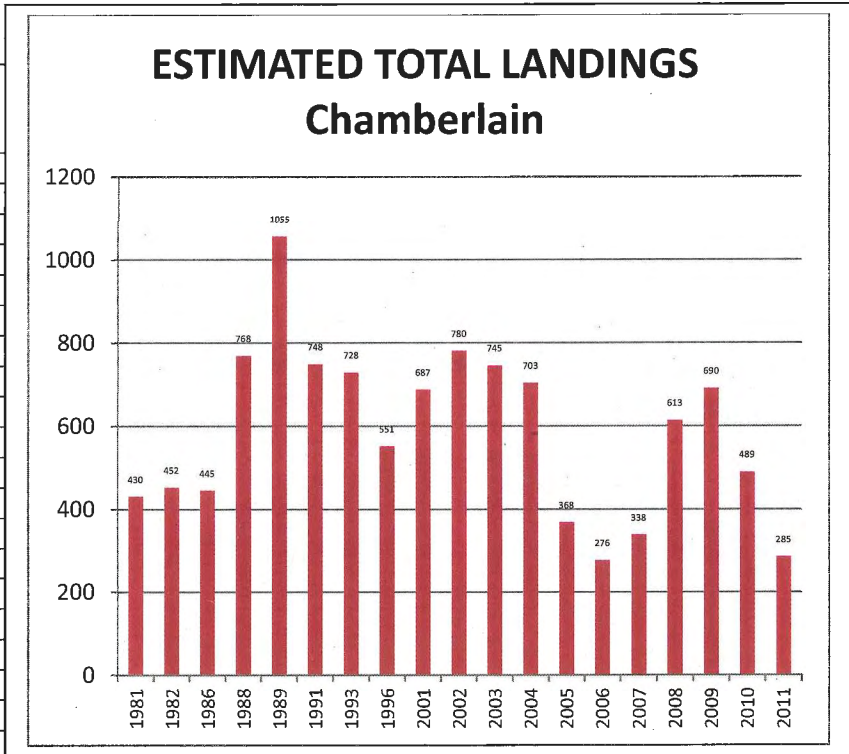
- The airstrip is utilized by a variety of aircraft makes and models. Due to the density altitude experienced at Chamberlain during summer months, higher performance aircraft are required.
- Commercial use of the airstrip occurs to deliver people and supplies for hunting, fishing, camping, research, state and federal agency administration and hiking trips. (2007-2011 = 6% of landings)
- One outfitter currently bases operations out of the airstrip in the fall.



- Multiple trails converge and intersect at the airfield.
- Daily and seasonal use numbers are compiled from a sampling program.

Comparison with past years based on estimate of total landing for sample season:

YEAR	ESTIMATED TOTAL LANDINGS
2011	285
2010	489
2009	690
2008	613
2007	338
2006	276
2005	368
2004	703
2003	745
2002	780
2001	687
1996	551
1993	728
1991	748
1989	1055
1988	768
1986	445
1982	452
1981	430



Restrictions and Requirements for Use of the Airstrip

- Generally open from May – October, depending on snow.
 - Use at own risk – Not all hazards are identified by this Plan.
 - High density altitudes during summer months.
 - Recommended for use by mountain proficient pilots using high-performance aircraft.
 - Runways are soft in early spring.
 - Rising terrain and potential downdrafts west of the airfield.
 - Multiple airstrips in the vicinity, including Stonebreaker airstrip 1NM to the North. Standard backcountry announcement procedures on 122.9 MHz should be employed.
 - Big game animals on and in the vicinity of airstrip.
 - No winter maintenance.

- Chamberlain Airstrip lies within the Frank Church River of No Return Wilderness. Pilots and arrivals must practice appropriate Leave No Trace ethics at the airstrip and surrounding areas.

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

- Announce intentions on 122.900.

- Watch for other traffic; Stonebreaker airstrip is 1NM to the north.
- Remember, airstrip's grass surface can be slick from dew, frost or rain.
- Park aircraft in approved areas and utilize unloading areas appropriately.
- Be aware of closures communicated through NOTAM's and/or by use of yellow X's placed on both ends of the runway.

Wilderness Education/Visitor Contact

- When the Chamberlain Station is staffed, Forest Service employees perform visitor contacts and conduct use surveys. This occurs in the spring, summer and fall.
- Information boards are also available at the airstrip for sharing information and education materials.

Law Enforcement/Search Rescue/Life Flight

- There are no routine or scheduled federal Law Enforcement activities planned involving the use of Chamberlain Airfield.
- Search and rescue (SAR) or life-flight activities would follow standard communication protocols on 122.9 during airstrip use.
- If agency aircraft are missing or known to have had an accident, Payette Dispatch is to be notified of the incident immediately and will coordinate the rescue/search according to the Interagency Aviation Mishap Response Guide and Checklist.
- If non-agency aircraft are involved in an accident or missing in the vicinity of the airstrip, Payette Dispatch can be notified and they will contact the Idaho Division of Aeronautics and/or the Idaho County Sheriff's Department who will then coordinate the response.

Support to Other Forest Service Programs

- Multiple Forest Service disciplines, such as recreation, wildlife, fisheries and fire utilize the Chamberlin Airstrip in support of agencies mission and goals.

Maintenance Needs for the Airstrip

Maintenance will be dependent on the availability of funding and appropriate with the minimum necessary needs for the administration of the area. All maintenance will be conducted by non-motorized/non-mechanized means unless authorized by the Regional Forester and supported by a Minimum Requirements Decision Guide recommendation of the District Ranger and Forest Supervisor. The matrix below defines what items will be addressed at Chamberlain Airstrip. The Maintenance Plan will be updated as needed to provide the level of maintenance required to meet the need.

Periodic or reoccurring maintenance items have identified by State and Forest Service inspections. Following are areas in need of attention:

- Tie-downs need to remain serviceable and functional and may be painted and cleared of vegetation to make them more visible if needed.

- Side and end markers need to remain serviceable and functional. As long as the airstrip dimension, as seen from the air, are usable no additional painting or marking will take place. If safety is compromised by lack of visibility of the runways edge, markers will be painted for better visibility.
- There is a major drainage issue at the intersection of runway 7/25 and 15/33 where Ranch Creek crosses runway 15/33. The creek has naturally changed its course and now no longer flows through the culvert installed to prevent airstrip damage. Design or fix at this location has not been developed to date.
- The airstrip has a history of rodent impacts, which may present a hazard to aircraft safety. Rodent populations cycle and at times can be prevalent, requiring more frequent maintenance patrols of the landing surface. Impacts to the runway surface from rodents will be managed to prevent unacceptable landing and takeoff conditions.

Due to the remote location at least one overnight stay will be needed to accomplish any significant amount of maintenance work. Work parties could vary from two to 10+ personnel depending on the project needs.

NOTE: If maintenance which could affect aviation operations is scheduled to occur, the Forest Aviation Officer (FAO) must be notified in advance so a NOTAM can be issued. If unable to contact the FAO notify Payette Dispatch.

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)
Mowing	Entire airstrip	Mow to 6" height	<u>Not mowed</u>		Airstrip surface	N/A
Leveling	a. Entire airstrip as needed	Maintain a rut free level surface	As needed. Estimate every 5-10 years.	As needed	Airstrip surface is approx. 27 acres	Wilderness: \$10,000 per event (contract)
	b. Spot leveling ruts and holes	Fill holes and level ruts when aircraft safety is compromised	3-4 times per season	As needed	Entire airstrip	\$1200 per season 2 person days per month
Seeding	Bare areas	Seed bare areas with native seed as needed to prevent windborne erosion	As needed	Fall	As needed. Use 2 lbs seed per 100 sq ft:	\$150 per airstrip
Drainage	a. Clear culverts	Keep culverts clear for free flow of water	Check for obstructions annually maintain as needed	Pre-season	As needed, typically annually and after storm events	Need to address the mgmt response to the need for Ranch Creek passage under/over the N/S runway
Painting	a. Windsock pole	Keep windsock pole paint in good condition	Every 3-5 years as needed	As needed	One pole	\$250 per pole
	b. Runway markers	Keep runway markers visible from the air	Every 5 years as needed	Pre-season	8 End markers 10 Side Markers	TBD

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)
Vegetation Control	a. Clear vertical approaches	Remove vegetation that intrudes on approach glide slope	as needed, typically once every 5 years	Pre-season	Maintain an appropriate glide slope from runway end markers, which provides for safe operations (terrain permitting)	\$100 per event when combined w/ scheduled maintenance. Costs can be significantly more not routinely maintained.
	b. Clear sides of runways	Remove vegetation that intrudes on side clearing	typically once every 5 years	Pre-season	Maintain appropriate side clearance which provides for safe operations.	\$100 per event when combined w/ scheduled maintenance. Costs can be significantly more not routinely maintained.
	c. Clear encroaching vegetation on runways	Remove vegetation that encroaches on runway dimensions	Annually as needed	Pre-season	Remove any woody vegetation within runway dimensions;	\$200 per event when combined with scheduled maint.
Clearing obstructions	Remove obstructions (fallen logs, rolled rocks)	Remove obstructions from runway surface	Annually, as needed	Pre-season and as needed	Entire airstrip	\$100 per event when combined with scheduled maint.
Rock removal	Remove rocks	Remove rocks of size that pose hazard	Annually, as needed	Pre-season and as needed	Entire airstrip	\$100 per event when combined with scheduled maint.

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)
Navigation Marker Maintenance	a. Maintain windsocks	Ensure windsocks turn freely and are in fair or better condition	as needed; typically replace every 2-3 years	Pre-season	Typically, 1 windsock per airstrip	\$50 annually, \$250 per replacement of windsock standard (frame)
	b. Runway markers		, as needed	Pre-season and as needed		N/A
Landing Area Rotation	Rotate landing strip configuration to reduce impact on airstrip	Place cones or other signal devices to rotate landing surface	During start of use season	Typically once per year	Length of runway 07/25 move markers 1-2 time per season	\$200
Weed Control	Control invasion and spread of noxious weeds	Remove noxious weeds, thru hand pulling or spraying	Annually, as needed	Spring, prior to seed set.	Entire airstrip	\$700
Rodent Control	Rodent impacts threatening runways	Reduce rodent impacts on runway surface	Annually, as needed	As needed	Entire Airstrip	\$700
Airplane Tie-downs	Maintain airplane tie-downs	Repair, replace and/or trim around airplane tie-downs	Annually inspect, Repair or replace as needed	Pre-season	6 existing tie-downs	Replacement = \$50 each per tie-down; \$10 per tie-down maintenance
Inventory and Monitoring	Annual inspection of airstrip conditions and facilities	Annual inspection of facilities, airstrip conditions and monitoring of plans	Annually	Pre-season	Each airstrip	\$Cost incorporated in maintenance activities above

Identify Estimated Annual Budget Needs:

Approximately \$3,000 per year and an additional \$10,000 when a stock team and teamster is contracted to level the entire surface (every 5-10 years)

Assumptions:

- Currently there is no horse drawn blade at Chamberlain Airstrip; this activity has traditionally been accomplished by a private contractor.
- All maintenance will be appropriate with the objectives of the airstrip and dependent on funding.
- When personnel are transported to the site by aircraft, the Agency Twin Otter costs approximately \$1,000 per flight hour. A round trip flight from McCall to Chamberlain airstrip and back is 1 flight hour.
- Chamberlain airstrip requires scheduled maintenance throughout the season.
- The Idaho Aviation Association, Recreation Airfield Foundation, Idaho Aviation Association and the National Smokejumper Association are all organizations with potential to assist with maintenance work, but require direction and sign up under appropriate authorities.

Identify Tools for Maintenance

- Shovels
- Pulaski's
- Axe
- Crosscut saw
- Paint brushes
- Grass whip
- Tamping tool

Identify any Inspections and Monitoring

R-4 pilots will inspect the airstrip annually. Feedback from field staff and local pilots will supplement the monitoring process.

The State of Idaho also conducts airstrip inspections and communicates their findings.

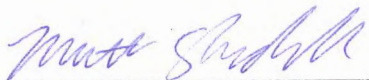
Identify Responsibilities and Skills

R-4 pilots are a reliable SME group for airstrip condition evaluation. The McCall light fixed-wing contract pilots are an experienced group for appraisals.

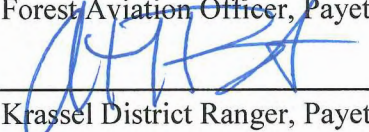
Krassel R.D. Recreation & Wilderness staff will be responsible for routine operational maintenance of the Chamberlain Airstrip.

District & Forest Contacts:

- Krassel District Ranger – Anthony Botello; (208) 634-0601
abbotello@fs.fed.us
- Krassel Recreation Staff Officer – Clem Pope; (208) 634-0616
c pope@fs.fed.us
- Forest Aviation Officer – Matt Shaddle; (208) 634-0768
m mshaddle@fs.fed.us
- Krassel Fire Mgt Officer – Tom Bates; (208) 634-9290
t bates@fs.fed.us

Prepared by: 
Forest Aviation Officer, Payette NF

Date: 2/3/12

Approved by: 
Krassel District Ranger, Payette NF

Date: 2/3/12

Appendices

Additional information regarding Chamberlain Airstrip can be found in the airstrip folder at the Krassel District Office or at the Supervisors Office with the Forest Aviation Officer.