

## AVIATION RESOURCES ORIENTATION PACKET



Welcome to the Bridger-Teton National Forest (BTF) and Grand Teton National Park (GRTE). The intent of this packet is to provide information needed by pilots and flight managers to complete missions for these two federal units and local cooperating agencies.

The Fire Management programs for the BTF and GRTE are jointly managed by Teton Interagency Fire Management, a fully integrated interagency program. Teton Interagency Dispatch (TIDC) located at park headquarters in Moose, WY, provides dispatch support for both federal units.

Enclosed is a list of key aviation contacts for the BTF and GRTE. Please feel welcome to contact the Unit Aviation Officer (UAO), TIDC, Teton Helibase or other management personnel if you have any questions while you are here. The Interagency Aviation Management Plan contains the information included within this briefing packet plus a great deal more. The Interagency Aviation Management Plan can be found at the following link: <https://gacc.nifc.gov/gbcc/dispatch/wy-tdc/home/operations/aviation> or by contacting the UAO.

### **Aviation Briefing Checklist**

- Aviation Contacts – locations and phone numbers
- Aviation Hazards & Special Considerations – MTR's, Airports, Helispots
- Initial Attack procedures
- Zone aviation resource location and availability
- Flight routes
- Forest and Park maps, layout of Districts, and other cooperating agencies
- Frequencies – air/ground, air/air, repeaters. Give frequency lists and repeater map.
- Medical facilities - refer to local and regional contact phone numbers, and hospitals to include latitude/longitudes.
- Any discrepancies, changes, or additions to Briefing packet contact Unit Aviation Officer
- Obtain Crew/Helicopter Information Sheets
- Ensure receipt of the following
  - Teton Interagency Aviation Resources Orientation Packet
  - Fire Radio/Frequency Guide
  - Incident Organizer
  - QR Code to Aerial Hazard Map
  - QR Code to District Maps

Link to Teton Interagency Dispatch Aviation Page:

<https://gacc.nifc.gov/gbcc/dispatch/wy-tdc/home/operations/aviation>

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**Aviation Contacts**

Position	Name	Office #	Cell #
Teton Interagency Dispatch	TIDC	307-739-3630	
Forest Fire Staff	James Turner	307-739-5576	435-671-2871
Forest Deputy Fire Staff	Josh Erickson	307-739-5581	307-226-0807
Park FMO	Will Bayse	307-739-3310	505-261-3832
Park AFMO	Bill Mayer	307-739-3313	307-690-0139
Unit Aviation Officer	Kyle Stump	307-739-5524	208-816-3141
Teton Airbase Manager	Erik Newell	307-739-5555	442-247-1974
Teton Helitack Supervisor	Vacant	307-739-5552	
Teton Interagency Helibase	TIH	307-739-5557	
Jenny Lake District Ranger	Chris Bellino	307-739-3372	559-346-7050
Jenny Lake Rescue Cache	Lupine Meadows	307-739-3474	
R4 Aviation Officer	Nikki Sandhoff	801-620-1890	385-264-4018
R4 Aviation Safety Manager	Jenn Benedict		385-837-5687
R4 Helicopter Insp. Pilot	Michael Peitz		208-576-1351
R4 Helicopter Ops Specialist	Gene Hodges		208-313-7826
R4 Helicopter Ops Specialist	Colby Richmond		208-859-2845
RAM DOI Regions 6, 7, & 8	Justin Jager		928-266-5672

## **AVIATION RISK MANAGEMENT EMPHASIS**

A risk assessment (RA) will be completed for all aircraft missions. The RA will include the identification of hazards, identification of mitigations, and a risk decision.

When planning and time allow, a Deliberate Risk Assessment will be completed. When the urgency of the situation does not allow for a Deliberate Risk Assessment then a Rapid Risk Assessment should be made. "Rapid" does not mean "hasty" or "uninformed". These situations may include SAR and fire suppression operations when there are high values at risk.

## **DAILY OPERATIONS/ALL AIRCRAFT**

### **Flight Weather Briefing/NOTAM's/TFR's**

Due to the expanse of the geographic area which BTF and GRTE encompass variable weather conditions may be present across the Forest and Park. Pilots and aircraft managers can obtain WX briefs from TIDC, local airports, or receive a daily flight weather brief from the FAA. NOTAMS should also be checked daily and printed if possible. The following links and phone number are good sources for this information is: <https://www.1800wxbrief.com> or 1-800-wx-brief and <https://notams.aim.faa.gov/notamSearch/nsapp.html#/>.

### **Flight Planning**

Flight schedules and/or FAA flight plans are to be completed per the GBCC Mob Guide and submitted to TIDC with the following information: Aircraft tail #, pilot and passengers names, route, destination, and expected times of departure and arrival.

#### **Flight Schedule:**

- Aircraft Managers initiate and close flight schedules.
- Pilots file and close formal flight plans with the FAA.

### **Flight Following Procedures**

Use Automated Flight Following (AFF) for flight following or 15-minute check-ins when AFF is inoperable.

TIDC or the local flight follower is responsible for flight following and will maintain positive communications until the aircraft has positive communications with another station or has landed assured.

- Incident Commander or Flight Manager or Pilot will contact TIDC or local flight following RADO to initiate flight following and establish 15-minute flight following intervals.

- Communicate to Dispatcher/RADO the following:
  - Communication frequency.
  - Type of mission.
  - Aircraft type and identification number ("N" number).
  - Number of passengers and pilots.
  - Proposed flight route or destination.
  - Confirm AFF is working.

- Depending on aircraft communication capabilities the following procedures will be adhered to:

When flight following **WITHOUT AFF**, relay the following information to dispatch every 15 minutes:

- Current location (geographic, legal location, or latitude / longitude).
- Current direction of flight.
- Next destination or area to be surveyed.
- Estimated time on ground (if landing).

When flight following **WITH AFF**, the aircraft dispatcher or flight follower will check the status of the aircraft every 15 minutes.

- Flight Manager or Pilot will communicate to dispatch any deviations to the last report of flight intentions
  - Aircraft dispatcher or flight follower will call the aircraft if there is any unexpected change or deviation from last report
- Terminate flight following with Dispatch at end of mission or advise intent to contact or positive contact with adjacent dispatch center. TIDC will contact that dispatch center for positive handoff.

## Flight Routes

When flying in the area, please **AVOID** flying over the cities of Jackson, Afton, and Pinedale. The public in and around Jackson are very sensitive to the noise created by our aircraft. Typical flight routes are to the east or west of Jackson. When working out of the helibase approach and depart as per standard airport approach/departure rules when in contact with the control tower. Ensure that flights levels over the National Elk Refuge exceed 500 AGL.

When flying over noise sensitive areas (National Parks and Wilderness Areas) comply with AC No 91-36D flying 2000' AGL, weather permitting and when otherwise applicable.

## Hours of Operation

All helicopters and single-engine aircraft must be on the ground no later than one half hour after official sunset (civil twilight). The only exceptions would be for multi-engine IFR rated fixed-wing aircraft flying into or out of a lighted airport. If smoke or weather conditions dictate, VFR aircraft may be further restricted as to hours of operation. Teton Dispatch has access to the sunrise/sunset tables and can provide that information upon request.

## Maintenance/Serviceing

All scheduled aircraft maintenance including 50 and 100 hour inspections need to be coordinated with the appropriate Helibase manager, IC, or Duty Officer. Please inform a Helibase Manager of upcoming maintenance well in advance so arrangements can be made or replacement aircraft ordered. All aircraft should be serviced after each flight and made ready for the next assignment.

## Flight/Duty Time

It is the responsibility of the pilot and flight manager to track pilot flight time and duty limitations to avoid their exceedance and mitigate and report when this occurs.

## Pilot Availability

Ensure your manager and/or dispatch can contact you throughout the shift and provide an afterhours contact number if applicable.

## Accident/Incident Reports

Our accident/incident reporting system is valuable in promoting aviation safety. The SAFECOM report is not intended to single out any one person. Through sharing information regarding outcomes that have happened here we may help prevent them from happening to someone else. Please report any accident or incident that occurs while you are in the Teton Interagency Dispatch Area to the UAO, Helibase Manager, or TIDC and the SAFECOM system. A copy of the TIDC Aviation Mishap Response Plan is available from TIDC or the UAO.

## HAZARDOUS FLYING CONDITIONS

We know that mountain flying in the heat of summertime can be hazardous. There are certain times because of winds, turbulence, down drafts, and other environmental problems in which we will need to shut down our aviation operations until conditions improve. Pilots are usually the first to become aware of these types of conditions. Do not be hesitant about suggesting or recommending shutting down operations until conditions improve. Let other aircraft and dispatch know about hazardous conditions in your area. YOUR COMMUNICATION MAY PREVENT AN ACCIDENT.

## Flight Hazards

The BTF and GRTE have a flight hazard map, copies of which are posted at TIDC and Teton Interagency Helibase. You should review the flight hazard map prior to any mission on the Forest and/or Park. For general information, the flight hazards on this Unit are:

**MILITARY LOW-LEVEL TRAINING ROUTES (MTRs):** There is one MTR which bisects the forest. It is MTR IR-499 and begins southeast of Cody, Wyoming and ends near Palisades Lake, Idaho. Direction of aircraft travel is east to west. Altitude of the route is from 200 feet AGL to 15,000 feet MSL, 1 to 4 nautical miles either side of the centerline. This route has been increasingly used the past two years. Hours of operation are continuous, and activity must be anticipated. Scheduling activity is through Ellsworth AFB Wing Scheduling Office, South Dakota (phone # 605-385-4246) or (on call # 605-431-3025). Contact TIDC prior to missions which will bisect the airspace of the MTR: TIDC will contact the scheduler and inform you of scheduled activity.

**WIRES AND POWER LINES:** There are many power lines and cables located on the BTF and GRTE. Check the flight hazard map prior to all missions. Some power lines have colored balls attached to increase their visibility, others do not. **Pilots should be aware that not all hazards have been identified on the map and so appropriate caution should be taken during all flights.** You may assist by identifying unknown hazards and personally briefing relief crews of unknown hazards.

**OTHER AIRCRAFT:** There are privately owned airstrips adjacent to and within the BTF. Expect to encounter fixed-wing or rotary-wing aircraft anywhere throughout the operations area. Paragliding is a popular activity on the BTF, and common launch sites are identified on the Aerial Hazard Map. Hobbyist UAS use is also on the rise. Practice see-and-avoid procedures and encourage passengers to alert the pilot if other aircraft are spotted during flight.

**AIRCRAFT TRANSPONDER CODE:** As directed by AMD Information Bulletin #97-5, transponder code 1255 must be utilized by aircraft responding to and operating over fire suppression operations. It is not to be used for repositioning or cross-country flights. It is important that aircraft transponders are in good operating condition and turned on for Traffic Alert and Collision Avoidance Systems (TCAS) to function.

**VFR FLIGHT RULES:** Flights should be conducted following the FAA VFR flight rules which state visibility must be 3 miles with a ceiling minimum of 1000 feet. An exception in uncontrolled airspace exists for helicopters which permits half mile visibility when clear of clouds.

**MOUNTAINOUS FLYING:** Flying conditions in mountainous areas are always hazardous and weather conditions can change rapidly. Anticipate lee-side turbulence, wind shears,

and related up or down air movement near mountain ranges or prominences. All aircraft should avoid flying through squall lines whenever possible.

## Fire Traffic

**Fire Traffic Area (FTA)** is the **required** method for flight operations over an incident. The FTA plan contains three levels of vertical and lateral separation for aircraft working over an incident. All aircraft must follow the designated rules for entering and working within the airspace over the incident.

### Vertical Levels of Separation

- All Helicopters will operate at 500' AGL and below
- Airtankers and Lead Planes will work at 1000' AGL during tactical operations. This is called the Air Tactical Maneuvering Area
- Air Tanker orbit area is at 1500' AGL
- Air Attack / ASM will operate at 2500' AGL minimum

### Lateral Separation

- 12 Nautical Mile radius – Initial Contact / Communication / request permission to enter
- 7 Nautical Mile radius – NOCOM ring, aircraft must establish communication with the incident before proceeding into the FTA.
- 5 Nautical Mile radius – Must be at appropriate altitude and communication has been established with Air Attack.

If Communication has not been established by the 7 NM ring the aircraft must hold outside the ring until contact has been made. There are two acceptable methods, the quadrant method or circle outside the 7 NM ring flying counterclockwise. The pilot may choose the method and must announce intentions on air to air or on the air guard frequency.

### The 3 C's of the Fire Traffic Area

- Communication
- Clearance
- Comply

### Chain of command on the incident

- Incident Commander is ultimately in command of the incident
- Air Attack – acts as air traffic controller and as the link between the air resources and the ground forces / Incident Commander.
- Lead Plane or Lead Plane coordinator – The lead plane may assume air traffic coordination in the absence of Air Attack.
- HLCO – Helicopter coordinator may serve as Air Attack in their absence.



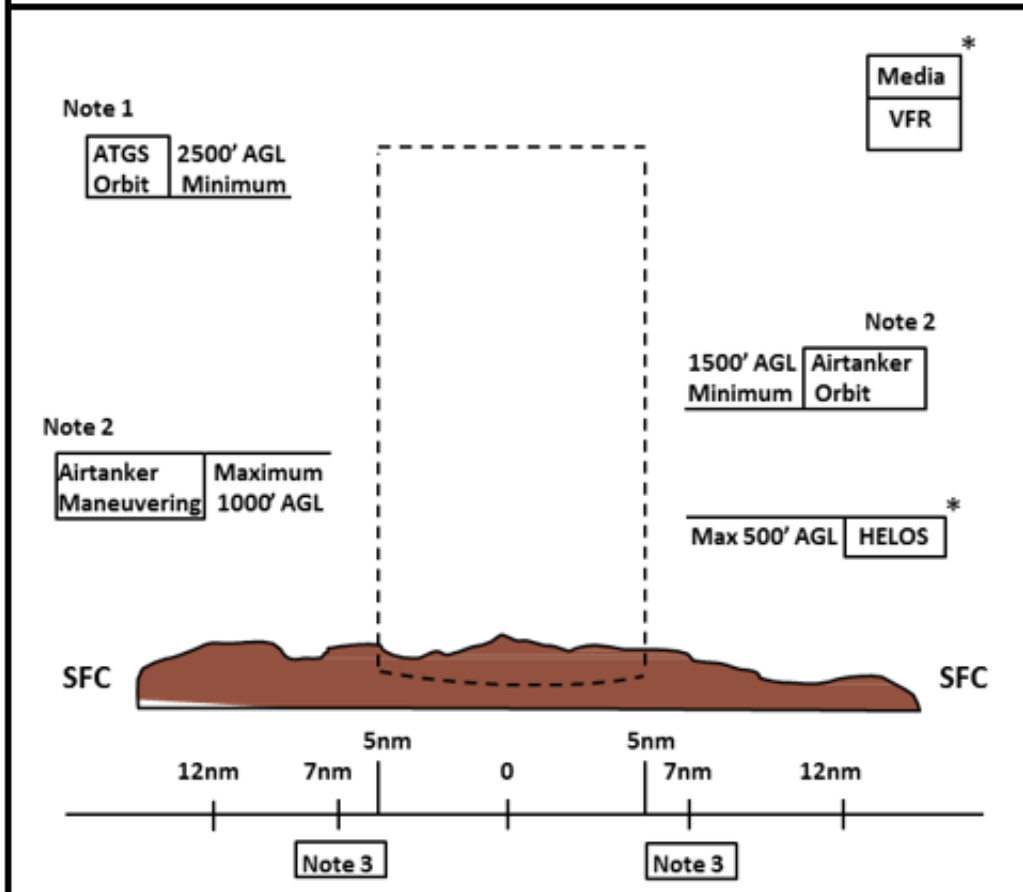
### Fire Traffic Area (FTA) 09 Dec 2015

**\*\*\* Clearance is required to enter the FTA \*\*\***

**Initial Radio Contact:** 12 nm on assigned air tactical frequency.

**No Radio Contact:** Hold a minimum of 7 nm from the incident.

**Note:** Airtanker maneuvering altitude determines minimum airtanker and ATGS orbit altitudes. Assigned altitudes may be higher and will be stated as MSL.



Note 1	1000' min. separation between ATGS orbit and airtanker orbit altitude.
Note 2	500' min. separation between airtanker orbit and maneuvering altitude.
Note 3	On arrival reduce speed to cross 7 nm at assigned altitude and 150 KIAS or less.

- \* **Helicopters:** Fly assigned altitudes and routes.
- \* **Media:** Maintain VFR separation above highest incident aircraft or position and altitude as assigned by controlling aircraft.

Airtanker Base As Assigned	Air Guard 168.625 Tx Tone 110.9	Air to Air As Assigned	National Flight Following 168.650 Tone 110.9 TX and RX
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## **HELICOPTER OPERATIONS**

### **Teton Interagency Helibase Operations**

The Teton Interagency Helibase is located at the Jackson Airport to the northeast of the terminal. The Airport is located approximately seven miles north of the town of Jackson within GRTE. Hours of operation for the Jackson Control Tower are 0700 to 2100 year-round. Tower communication frequency is 118.075. All operations at the Teton Helibase will follow the procedures described in the Teton Interagency Helicopter Operations Plan.

### **Load Calculation Procedures**

Load calculations will be completed by the pilot of each helicopter first thing in the morning for the given temperature and elevation. A new load calculation will be completed each time the temperature changes +/- 5 degrees Celsius and for each 1000' of elevation change. If necessary, an additional load calculation will be completed while enroute to a fire if the previous calculations do not cover the new destination.

### **Bucket Operations**

During bucket operations all personnel should stay clear of the drop area. Pilots will avoid flying over people, vehicles, and structures at all times. If this is not possible a flight path must be established to lessen the risk to personnel and vehicles on the ground. Example: setting up road guards to keep vehicles and personnel from stopping or standing in the flight path.

A dip site manager may be necessary whenever the bucket operations are conducted at a remote water site, especially if communications are poor at the dip site. Dip site managers must have good communication with Dispatch in case an emergency occurs.

### **Wilderness Areas**

All landing in Wilderness areas must have prior approval from the Agency Administrator through TIDC for the intended mission.

### **Aquatic Invasive Species Prevention**

Follow direction found in the Guide to Preventing AIS Transport by Wildland Fire Operations (PMS444) - inspect, dry, wash with 140-degree F high pressure water, or with potable water if the other alternatives are not available.

## **LOCAL FACILITIES and SERVICES**

### **Medical Facilities**

The following page has a table with information for the local medical facilities within the Teton Interagency Dispatch area.

St. John's Medical Center (SJMC) has the following specific protocols to be followed for the rooftop pad:

SJMC rooftop helipad use will be coordinated through the Emergency Department (ED). Coordination with the ED via the ER number provided should be done prior to landing. Approaches shall be made from the East and North of the helipad avoiding overflights of town, HOGE landing can be expected, call "in the blind" on radio a half mile out with position, intent, and payload - complete landing. No "Hot" unloading of patients is allowed. SJMC ED nurse will facilitate patient transfer when rotors have stopped. The ED nurse or security will remain in safe area at elevator to ensure helicopter departure.

Hospital	City	Phone	Helicopter Landing Pad	Facilities
<b>St. John's Hospital</b>	Jackson, WY	307-733-3636 ER: 739-7250	Helipad on top of hospital, 12,000 lbs capacity	24 hours Emergency Service
RADIO: 155.34 OHMC TX tone 82.5 LAT/LONG: 43 28.80 X 110 44'.98 ELEV: 6244'				
<b>South Lincoln Medical Center</b>	Kemmerer, WY	307-877-4401	Helipad SW of hospital. Lighted with a windsock.	24 hour Basic Service
LAT/LONG: 41 47.36 X 110 32.50 ELEV: 6959'				
<b>Big Piney Medical Clinic</b>	Big Piney, WY	307-276-3306 307-276-3308	Helispot set up in road near rear of clinic when needed. Airport is 2 miles north of clinic	24 hour Basic Service
RADIO: 154.94 OMHZ LAT/LONG: 42 33.37 X 110 06.67				
<b>Star Valley Hospital</b>	Afton, WY	307-885-5800	LZ south of building. Windsock	24 hour Emergency Service + Cardiac Unit
RADIO: 155.99 SMHZ LAT/LONG: 42 43.06 X 110 55.84 ELEV: 6230				
Pinedale Medical Clinic	Pinedale, WY	307-367-4133	LZ south of building. Windsock	24 hour Basic Service
RADIO: 154.94 OMHZ LAT/LONG: 42 52.22 X 109 51.14				
<b>EIRMC (Eastern Idaho Regional Medical Center)</b>	Idaho Falls, ID	208-529-6111	Near Emergency Room	24 hour Emergency Service. Level II Trauma Center
Located 2 miles east of city. RADIO: monitors 155.340 AIRPORT: located 2 miles NW of city. LAT/LONG: 43 28.28 X 111 59.49				
<b>Portneuf Regional Medical Center</b>	Pocatello, ID	208-239-1000 ER: 239-1801 Lifeflight: 888-470-0911	In parking lot near Emergency entrance. A/C maintained by hospital.	24 hour Emergency Service. Trauma pref.
Located in the SE part of town on hill overlooking I-15 777 Hospital Way				
<b>University Of Utah</b>	Salt Lake, UT	801-581-2121 (burn) 801-581-2700	Advance notice req. LZ west of hospital. Windsock. Lighted. Surrounded by small buildings and close to the road	24 hour Emergency Service. NEAREST BURN CENTER. Cardiac Unit.
2 mi. SE of Capital Building. LZ west of hospital. RADIO: 155.340 LAT/LONG: 40 46.27 X 111 50.35				
<b>McKay Dee</b>	Ogden, UT	801-387-2800 ER/Life flight 801-387-7001	LZ on West side of hospital on South end	24 hour Emergency Service. Cardiac Unit.
South of Ogden proper, just E of South Ogden. 3-4 miles E of Ogden Hinkley Airport RADIO: 154.88 LAT/LONG: 41 11.97 X 111 57.00 RADIO: 154.88				
<b>Ogden Regional Medical Center</b>	Ogden, UT	801-479-2111	LZ right on campus of the hospital	24 hour Emergency Service. Cardiac Unit.
LOCATION: Off of I-15 in S Ogden near mile marker 339 LAT/LONG: 41 09.80 X 111 58.20				
<b>Intermountain Medical Center</b>	Salt Lake, UT	801-507-7000 ER 801-507-6600 Life flight 801-321-1234	76'x76' on E side of Building	24 hour Emergency Service. Cardiac Unit. Level I Trauma Center
7-8 Mi s of SLC, E of I-15 RADIO: 460.500 & 186.2 Security LAT/LONG: 40 39.617 x 111 53.373				

## Airports and Fixed Base Operators

Airport	Lat/Long	Elev.	Frequency	Fuel	Contact
Jackson Hole (JAC)	N 43 36.44 W 110 44.27	6451'	Tower: 118.075 Ground: 124.55 Unicom: 122.950	Avgas Jet A	Manager: 307-733-7682 FBO: 307-733-4767
Afton (AFO)	N 42 42.49 W 110 56.53	3221'	Unicom:122.8	Avgas Jet A	Manager: 307-885-3245/887-3246 FBO: 307-885-7030
Alpine (46U)	N 43 11.08 W 110 02.55	5634'	Unicom: 122.9	Avgas Jet A	Airpark: 307-654-4646
Big Piney (BPI)	N 42 35.11 W 110 06.67	6990'	Unicom: 122.8	Avgas Jet A	Manager: 307-231-5516
Pinedale (PNA)	N 42 47.73 W 109 48.66	7288'	Unicom: 122.8	Avgas Jet A	Owner: City 307-367-4136 Manager: 307-360-9025
Kemmerer (EMM)	N 41 49.50 W 110 33.54	7282'	Unicom: 122.8	Avgas Jet A	Owner: City 307-828-2350 Manager: 307-727-7865

## Temporary Helibase/Helispot Sites

BTF Helispots		
Blackrock	N 43 49.64	W 110 20.93
	Hazards: wires, livestock, and vehicle traffic	Elev. 6906'
Bryan Flats	N 43 16.58	W 110 38.76
	Hazards: wires, public, and livestock	Elev. 6263'
McCain Meadows	N 43 05.31	W 110 43.26
	Hazards: public and livestock	Elev. 6829'
La Barge Meadows	N 42 30.65	W 110 41.26
	Hazards: public and livestock	Elev. 8481'
Coburn	N 43 19.85	W 110 47.99
	Hazards: public vehicle traffic and livestock	Elev. 6264'
Cottonwood	N 43 17.52	W 110 47.67
	Hazards: wires, vehicle traffic	Elev. 6422'
Hoback Guard Station	N 43 13.13	W 110 25.34
	Hazards: wires, public trailhead	Elev. 6569'
GRTE Helispots		
Lupine Meadows - SAR Cache	N 43 44.61	W 110 43.82
	Hazards: wires, vehicles, public	Elev. 6550'
Gros Ventre River site	N 43 38.438	W 110 35.039
	Hazards: wires to north, public, fencing	Elev. 6400'
Colter Bay Dump Road	N 43 54.53	W 110 37.23
	Hazards: trees around perimeter, vehicles	Elev. 7090'
Moran Ball Field	N 43 50.49	W 110 30.39
	Hazards: wires over buildings north of the spot, public	Elev. 6800'
Flagg Gravel Pit	N 44 05.43	W 110 40.83
	Hazards: wires, gravel landing surface	Elev. 6800'
Shadow Mountain	N 43 42.35	W 110 37.21
	Hazards: public and dispersed camping	Elev. 6810'
Dugway/Sawmill Ponds (typical winter ops only)	N 43 39.22	W 110 44.29
	Hazards: wires and poles, limited parking and one way ingress/egress	Elev. 6473'
National Elk Refuge (NER) Helispots		
Elk Refuge 1 (request approval through TIDC prior to use)	N 43 28.97	W 110 44.742
	Hazards: irrigation pipe, adjacent pump house may discharge a high volume of water to the east, and chlorine gas	Elev. 6267'

**TIDC Air to Ground and Air to Air Frequencies**

A/G 10	166.9375
A/G 19	168.1250
A/G 12	167.0750
A/A 1	127.450
A/A 2	125.400
A/A 3	121.050

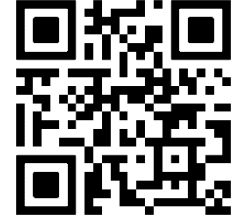
**Teton Area Maps** - some are very large files and may be slow to open



[West Zone Fire Response Map](#)



[East Zone Fire Response Map](#)



[North Zone Fire Response Map](#)



[Invasive Species Map](#)



[Aviation Hazard Map](#)



[USFS/R4 Retardant Avoidance Areas](#)