

# **Teton Interagency FIRE**



***2019 Handy Dandy***

| Initial Attack Fire Size-Up |                  |  |                        |         |
|-----------------------------|------------------|--|------------------------|---------|
| Fire Name:                  |                  | Legal Location   | Town:                  |         |
| IC Name:                    |                  |  | Range:                 |         |
| Descriptive Location:       |                  | Sects.:  |                        |         |
| *Coordinates:               |                  | Deg/Min/Sec Latitude:  |                        |         |
| Datum:                      |                  | Longitude  |                        |         |
|                             |                  | UTM:   | E:                     | N:      |
| Reported by:                |                  |  |                        |         |
| *Cause: Human / Lightning   |                  |  | Ownership:             |         |
| Fire Investigator Needed?   |                  |  | No    Yes    on order? |         |
| *Character of Fire:         |                  | *Adjacent Fuel Type:   |                        |         |
| Smoldering Creeping         | Torching         | Grass/Sage   | Heavy Timber           |         |
| Running                     | Spotting         | Aspen  | Slash                  |         |
|                             | Crowning         | Light Timber   | Other                  |         |
| *Spread Potential:          |                  | *Slope at Head of Fire:  |                        |         |
| Low                         | High             | 0-25%  | 56-75%                 |         |
| Moderate                    | Extreme          | 26-40%   | 76+%                   |         |
|                             |                  | 41-55%   |                        |         |
| *Estimated Size:            |                  | *Aspect:   |                        |         |
|                             |                  | Elevation:   |                        |         |
| *Estimated Windspeed:       |                  | Position on Slope:   |                        |         |
|                             |                  | Top  | Upper 1/3              | Mid 1/3 |
|                             |                  | Lower 1/3  | Bottom                 |         |
| *Wind Direction:            |                  | *Special Information   |                        |         |
|                             |                  | Are any structures threatened?   |                        |         |
|                             |                  | Access: (Trail, road, helispot)  |                        |         |
|                             |                  | Other:   |                        |         |
| Weather Conditions          |                  | Resource Needs   |                        |         |
| Clear                       | Scattered Clouds | On Scene   |                        |         |
| Building Cumulus            | T-Storms         | En Route   |                        |         |
| Lightning                   | Overcast         | Additional?  |                        |         |
| Showers                     | Heavy Showers    |  |                        |         |
| *Fuel Type:                 |                  | Special Equipment Needs  |                        |         |
| Grass                       | Snag             | Retardant  | Jumpers                |         |
| Sage                        | Aspen            | Pumps  | Engines                |         |
| Brush                       | Log/Duff         | Bucket work  |                        |         |
| Light Timber                | Other            | Fallers  |                        |         |
| Heavy Timber                | Slash            | Is Water Available?  |                        |         |
| Hazards Identified:         |                  | Wildland Fire Risk and Complexity Assessment – IC's complete parts A and B. Complete Part C if applicable. |                        |         |
| Estimated Containment       |                  | Date:  |                        | Time:   |

| Medical Incident Report   |  |              |   |               |            |
|---|--|--------------|---|---------------|------------|
| FOR A NON-EMERGENCY INCIDENT, WORK THROUGH CHAIN OF COMMAND TO REPORT AND TRANSPORT INJURED PERSONNEL AS NECESSARY.   |  |              |   |               |            |
| FOR A MEDICAL EMERGENCY: IDENTIFY ON SCENE INCIDENT COMMANDER BY NAME AND POSITION AND ANNOUNCE "MEDICAL EMERGENCY" TO INITIATE RESPONSE FROM IMT COMMUNICATIONS/DISPATCH.  |  |              |   |               |            |
| Use the following items to communicate situation to communications/dispatch.  |  |              |   |               |            |
| 1. CONTACT COMMUNICATIONS / DISPATCH (Verify correct frequency prior to starting report)<br>Ex: "Communications, Div. Alpha. Stand-by for Emergency Traffic."   |  |              |   |               |            |
| 2. INCIDENT STATUS: Provide incident summary (including number of patients) and command structure.<br>Ex: "Communications, I have a Red priority patient, unconscious, struck by a falling tree. Requesting air ambulance to Forest Road 1 at (Lat./Long.) This will be the Trout Meadow Medical, IC is TFLD Jones. EMT Smith is providing medical care." |  |              |   |               |            |
| Severity of Emergency / Transport Priority  | <input type="checkbox"/> RED / PRIORITY 1 Life or limb threatening injury or illness. Evacuation need is IMMEDIATE<br>Ex: Unconscious, difficulty breathing, bleeding severely, 2° – 3° burns more than 4 palm sizes, heat stroke, disoriented.<br><input type="checkbox"/> YELLOW / PRIORITY 2 Serious Injury or illness. Evacuation may be DELAYED if necessary. Ex: Significant trauma, unable to walk, 2° – 3° burns not more than 1-3 palm sizes.<br><input type="checkbox"/> GREEN / PRIORITY 3 Minor Injury or illness. Non-Emergency transport Ex: Sprains, strains, minor heat-related illness. |              |   |               |            |
| Nature of Injury or Illness & Mechanism of Injury   |  |              | Brief Summary of Injury or Illness<br>(Ex: Unconscious, Struck by Falling Tree) |               |            |
| Transport Request   |  |              | Air Ambulance / Short Haul/Hoist<br>Ground Ambulance / Other                    |               |            |
| Patient Location  |  |              | Descriptive Location & Lat. / Long. (WGS84)                                     |               |            |
| Incident Name   |  |              | Geographic Name + "Medical"<br>(Ex: Trout Meadow Medical)                       |               |            |
| On-Scene Incident Commander   |  |              | Name of on-scene IC of Incident within an Incident (Ex: TFLD Jones)             |               |            |
| Patient Care  |  |              | Name of Care Provider<br>(Ex: EMT Smith)  |               |            |
| 3. INITIAL PATIENT ASSESSMENT: Complete this section for each patient as applicable (start with the most severe patient)  |  |              |   |               |            |
| Patient Assessment: See IRPG page XXX   |  |              |   |               |            |
| Treatment:  |  |              |   |               |            |
| 4. TRANSPORT PLAN:  |  |              |   |               |            |
| Evacuation Location (if different): (Descriptive Location (drop point, intersection, etc.) or Lat. / Long.) Patient's ETA to Evacuation Location: _____   |  |              |   |               |            |
| Helispot / Extraction Site Size and Hazards:  |  |              |   |               |            |
| 5. ADDITIONAL RESOURCES / EQUIPMENT NEEDS:  |  |              |   |               |            |
| Example: Paramedic/EMT, Crews, Immobilization Devices, AED, Oxygen, Trauma Bag, IV/Fluid(s), Splints, Rope rescue, Wheeled litter, HAZMAT, Extrication  |  |              |   |               |            |
| 6. COMMUNICATIONS: Identify State Air/Ground EMS Frequencies and Hospital Contacts as applicable  |  |              |   |               |            |
| Function  | Channel Name/Number  | Receive (RX) | Tone/NAC *  | Transmit (TX) | Tone/NAC * |
| COMMAND   |  |              |   |               |            |
| AIR-TO-GRND   |  |              |   |               |            |
| TACTICAL  |  |              |   |               |            |
| 7. CONTINGENCY: <u>Considerations</u> : If primary options fail, what actions can be implemented in conjunction with primary evacuation method? Be thinking ahead...  |  |              |   |               |            |
| 8. ADDITIONAL INFORMATION: Updates/Changes, etc.  |  |              |   |               |            |
| REMEMBER: Confirm ETA's of resources ordered. Act according to your level of training. Be Alert. Keep Calm. Think Clearly. Act Decisively.  |  |              |   |               |            |



**Medical Resources:****Incident Medical Personnel :**

Name: \_\_\_\_\_ Level: \_\_\_\_\_

Name: \_\_\_\_\_ Level: \_\_\_\_\_

Name: \_\_\_\_\_ Level: \_\_\_\_\_

**Gear Available:**\_\_\_\_\_ 1<sup>st</sup> Aid Kit \_\_\_\_\_ 10 person

\_\_\_\_\_ BLS Kit \_\_\_\_\_ ALS Kit

\_\_\_\_\_ O<sub>2</sub> \_\_\_\_\_ Splints

\_\_\_\_\_ Backboard \_\_\_\_\_ Litter

\_\_\_\_\_ Other: \_\_\_\_\_

**Additional medical gear/personnel needs :****Evacuation:****Air:****Landing Zones/Helispots:**

Primary (Lat/Long - DDD, MM.M):

Lat: \_\_\_\_\_/ \_\_\_\_\_.

Long: \_\_\_\_\_/ \_\_\_\_\_.

LZ Hazards: \_\_\_\_\_

Secondary (Lat/Long - DD, MM.M):

Lat: \_\_\_\_\_/ \_\_\_\_\_.

Long: \_\_\_\_\_/ \_\_\_\_\_.

LZ Hazards: \_\_\_\_\_

**Ground:**

Ground access/trailhead: \_\_\_\_\_

Distance to access/trailhead: \_\_\_\_\_

Terrain/access problems: \_\_\_\_\_

Potential ground transportation method:

\_\_\_\_\_ Wheeled Litter \_\_\_\_\_ Crew Carry \_\_\_\_\_ UTV

\_\_\_\_\_ Horse

Other: \_\_\_\_\_

**ETA medical response:**

Air: \_\_\_\_\_ Ground: \_\_\_\_\_

**ETE to get injured to:**

LZ: \_\_\_\_\_ Ground access: \_\_\_\_\_

**Contingency Communications:**

Fire Dispatch 307-739-3630

**Primary Radio Repeater:****Secondary Radio Repeater:****Air to Ground :****Incident Sat Phone #:****Cell Signal:** ☐ None ☐ Poor ☐ Good**Considerations\*:**☐ I can get my people out in a timely manner if I need to.☐ My people can get me out in a timely manner if needed.☐ Evacuation concerns or deficiencies discussed w/ Zone Duty Officer

\*The intent of these considerations (and the plan in general) is to stimulate thought and discussion on the potential for medical evacuation during any incident response. The perception of timely evacuations may be a present condition, but realize that the situation can change, sometimes in rapid fashion, plan accordingly...

**Emergency procedures reviewed and updated:**

Date/Time: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Date/Time: \_\_\_\_\_

**Personnel briefed on medical plan:**

Date/Time: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Date/Time: \_\_\_\_\_

**Emergency Procedures:**☐ **Provide initial lifesaving care (XABC).**☐ **Notify Teton Dispatch of medical emergency - request priority radio traffic.**☐ **Complete medical size up.**☐ **Provide Dispatch with medical size up.****STAY CALM, THINK CLEARLY, ACT DECISIVELY**

## REMOTE OPERATIONS UPDATE CALL-IN CHEAT SHEET

When providing an update on a remote portion of a fire, managers may have specific questions about the current status of a fire, and they'll usually let you know what those are. If not, these items listed below will assist you in painting a decent picture of an ongoing fire's status.

- Estimated (or known) current fire size
- Growth Overnight/ since last checked
- % Active Perimeter
- Active portion / quadrant (N, S, E, W)
- Fuel Model carrying fire ( pay special attention to FM transitions)
- Fire Behavior Observed: ROS, Flame Length, torching, spotting, smoke obs.
- Time of Activity (burning window)
- Weather highlights: High Temps, Low RH, wind speed and direction
- Communicate your plan for the shift
- Ask if any other information is needed (when they'd like the next update, etc)
- Specific safety or operational concerns/mitigations

When communicating with a dispatch center/ ICP, consider the additional communication SOPs:

- Notify Dispatch when you begin your travel to and from the fire, when you begin driving and when you begin hiking. This may get redundant, but they'll at least know where you are.
- Let Dispatch know when you've arrived on the fire, and give them an estimate of when you'll provide a fire update.
- Communicate your info only when it's appropriate to do so: if other radio traffic exists, wait patiently for a break in radio traffic, and be only as detailed as necessary with your update.
- Always be cordial and polite when communicating with dispatch centers.

### ONE DAY ORDER AMOUNTS

| ITEM               | QUANTITY   |
|--------------------|--|
| Water, 5 gal cubie | ½ per person                                     |
| MRE's              | 4 per person                                     |
| Batteries, AA      | 15 per radio                                     |
| Toilet Paper       | 1 roll per 4 people                              |
| Fuel (unleaded)    | 5 gal = 20 hours chainsaw use                    |
| Bar Oil            | 10 qts = 20 hours chainsaw use                   |
| 2 cycle mix        | 12.8 oz = 20 hours chainsaw use                  |
| Fuel (24:1)        | Mark III 5 gal = 3 hours, Shindawa 5 gal = 10hrs |

## Submit spot weather request online (link)

| Spot Weather Observation and Forecast Request                    |       |                       |                                 |                    |                                   |            |  |    |                 |
|--|-------|-----------------------|---------------------------------|--------------------|-----------------------------------|------------|--|----|-----------------|
| 1. Name of Incident or Project                                   |       |                       |                                 | 2. Control Agency: |                                   |            | 3. Request Made:                       |    |                 |
|  |       |                       |                                 |                    |                                   |            | Date:                                  |    | Time:           |
| 4. Location: (Township, Range, Section)                          |       |                       |                                 | 5. Drainage Name:  |                                   |            | 6. Exposure / Aspect                   |    |                 |
| 7. Size of Incident or Project (acres):                          |       |                       |                                 | 8. Elevation       |                                   |            | 9. Fuel Type:                          |    | 10. Project On: |
|  |       |                       |                                 | Top                |                                   | Bottom     |  |    | Ground Crowning |
| 11. Weather Conditions at Incident or Project or from RAWS:      |       |                       |                                 |                    |                                   |            |  |    |                 |
| Place  | Elev. | Observation Date/Time | Wind Direction/<br>Velocity     |                    | Temperature                       |            |  |    | Sky Condition   |
|  |       |                       | 20 ft                           | Eye-level          | Dry bulb                          | Wet bulb   | RH                                     | DP |                 |
|  |       |                       |                                 |                    |                                   |            |  |    |                 |
|  |       |                       |                                 |                    |                                   |            |  |    |                 |
|  |       |                       |                                 |                    |                                   |            |  |    |                 |
|  |       |                       |                                 |                    |                                   |            |  |    |                 |
|  |       |                       |                                 |                    |                                   |            |  |    |                 |
|  |       |                       |                                 |                    |                                   |            |  |    |                 |
|  |       |                       |                                 |                    |                                   |            |  |    |                 |
|  |       |                       |                                 |                    |                                   |            |  |    |                 |
|  |       |                       |                                 |                    |                                   |            |  |    |                 |
|  |       |                       |                                 |                    |                                   |            |  |    |                 |
|  |       |                       |                                 |                    |                                   |            |  |    |                 |
|  |       |                       |                                 |                    |                                   |            |  |    |                 |
|  |       |                       |                                 |                    |                                   |            |  |    |                 |
| The Weather Forecaster will furnish the information for block 13 |       |                       |                                 |                    |                                   | Date/Time: |  |    |                 |
| Spot Weather Forecast  |       |                       | Issued <input type="checkbox"/> |                    | Red Flag <input type="checkbox"/> |            | Fire WX Watch <input type="checkbox"/> |    |                 |
| Spot Forecast Discussion   |       |                       |                                 |                    |                                   |            |  |    |                 |

## Spot Weather Forecast, cont'd

|                 | Today | Tonight | Tomorrow |
|-----------------|-------|---------|----------|
| Sky/Weather     |       |         |          |
| Max Temp        |       |         |          |
| Min RH          |       |         |          |
| 20' winds       |       |         |          |
| Ridge Top       |       |         |          |
| LAL             |       |         |          |
| CWR             |       |         |          |
| Haines          |       |         |          |
| Mix Height      |       |         |          |
| Trans Winds     |       |         |          |
| Smoke Dispersal |       |         |          |

Extended forecast Days 3-5



# IRIDIUM SATELLITE PHONE PROCEDURES

*Adapted from AFS Handy Dandy Field Guide*

1. Ensure SIM card is inserted and battery is charged
2. Ensure antenna is seated firmly against body of phone. Swing antenna up to click stop and extend antenna up to full length
3. Press power button (red circle) on lower left of keyboard
4. Some phones require a PIN. Default PIN is usually 1111. Be sure to check your phone prior to travel.
5. Once the phone displays "Registered" and adequate signal strength is attained (usually 3-4 bars), you should be able to send/receive calls.
6. All calls are initiated with the access code "00" followed by country code and full phone number. For US calls, country code is "1". See **Dialing Procedures** below.
7. Antenna has click stops for maintaining vertical position when using right or left handed.
8. An audible tone is heard indicating the system is connecting the call. When connected, you will hear normal ring sounds. Remind other callers that the satellite system has a slight delay (much like international calling) transmitting audio.
9. The arrow buttons below the display screen allow you to scroll through the various menu options.
10. If all else fails, read the manual!

## DIALING PROCEDURES

To call from ISU to Landline/mobile device: dial 001 then phone number (ex. 001-208-387-5512)

To call from landline/mobile device to ISU: dial 011 then Iridium phone number (ex. 011-8816-314-41187)

To call from ISU to ISU: dial 00 then Iridium phone number (ex. 00-8816-314-41187)

# CHAINSAW TUNING GUIDE

**Use caution when making chainsaw carburetor adjustments.  
Instructions below are intended for those who are experienced saw tuners.  
If you are unfamiliar with these procedures, seek out someone who is!!!**

**If your saw fails to start, check the following:**

1. Gas ( 50:1 )
2. On/off switch is turned ON
3. Spark plug has spark
4. Exhaust screen is clean
5. Air filter is clean
6. Jets are adjusted correctly: NEVER OVER TIGHTEN JETS  
Turn both jets to the right (clockwise) until snug.  
Then, back to the left (counter-clockwise) until desired setting.  
Stihl: high 3/4 turn, low 1/4 turn
7. Carburetor is flooded:  
Tighten high jet until its snug.  
Pull starter cord until saw starts.  
Turn jet left to correct setting.

## **JET and IDLE Field Adjustments**

1. Clean or replace air filter. You cannot properly tune the carb unless the air filter is clean and in good condition.
2. Run saw at full throttle. Turn HS screw in (clockwise) slowly. As the HS screw is turned in, saw is being leaned out (more air, less gas). Keep leaning as long as the saw flutters. Go to flat line (no flutter) and back off.
3. Release throttle and let saw idle. If saw idles too fast (chain turning) or too slow (dies), adjust idle screw only. Turn screw counter clockwise to stop chain or clockwise if saw dies.
4. Idle for 30 seconds. Do the dump/roll test. Saw should idle in all positions. If saw fails the dump test, tighten (turn clockwise) the LS screw a quarter turn. Fuel is pooling and flooding out the engine. Repeat.
5. Throttle up saw. Saw should immediately respond. If it stutters, the LS is too lean. Back out (counter clockwise) the LS screw a quarter turn or less. Repeat until saw revs immediately. Adjust Idle as needed, and repeat steps 3 thru 5.
6. **TACH TUNE ASAP. HIGH RPMS SHOULD BE 13,500 OR LESS. IDLE RPM~2,500.**

### **Purging Instructions:**

1. Drain fuel tank.
2. Run saw until it stops.
3. Attempt restarting with choke on until saw fails to detonate.
4. Remove fuel tank cap and invert saw for 5 minutes.

| Commonly replaced <i>STIHL</i> Parts                                       |  |
|--|--|
| Part Description   | <i>STIHL</i> /Mfg Part #                       |
| E clip   | 9460 624 0801                                  |
| 7 tooth Rim Sprocket   | 0000 642 1223                                  |
| Sprocket Washer  | 0000 958 1032                                  |
| HD Air Filter  | 0000 120 1654                                  |
| Fuel Filter/Pick-up body   | 0000 350 3504                                  |
| Spark Plug (NGK)   | BPMR 7 A                                       |
| Spark Plug (Bosch)   | WSR 6 F  |
| Round File, Box of 1 Dozen   | 5605 773 5512                                  |
| 91 Driver <b>Full Skip Chisel Chain</b><br>3/8" Pitch, .050" gauge         | 33RSF<br>(specify # of drivers w/ this part #) |
| 28" bar Rollomatic ES Widetip<br><b>91 drivers 3/8" pitch, .050" gauge</b> | 3003 000 9638                                  |

| <i>STIHL</i> Bars     |              |
|-----------------------|--------------|
| 3/8" Pitch .050 Gauge |              |
| Bar Length            | # of Drivers |
| 25"                   | 84           |
| 28"                   | 91           |
| 32"                   | 105          |
| 36"                   | 114          |

| TACH RPM GUIDE |      |       |
|----------------|------|-------|
| Model          | Idle | High  |
| <b>Stihl</b>   |      |       |
| <b>MS360</b>   | 2800 | 13500 |
| <b>MS440</b>   | 2500 | 13500 |
| <b>MS460</b>   | 2500 | 13500 |
| <b>MS660</b>   | 2500 | 13500 |
| <b>Husky</b>   |      |       |
| <b>372 XP</b>  | 2700 | 13500 |
| <b>385 XP</b>  | 2700 | 12500 |
| <b>395 XP</b>  | 2500 | 12000 |

| MIXING GUIDE: 3:1 SLASH MIX- 5 GALLONS |  |   |
|--|--|---|
| # of cans                              | 3 Parts Diesel<br>Stop fuel pump@ gal: | 1 Part Gasoline<br>Stop fuel pump@ gal: |
| 1                                      | <b>3.75</b>                            | <b>1.25</b>                             |
| 2                                      | <b>7.5</b>                             | <b>2.50</b>                             |
| 3                                      | <b>11.25</b>                           | <b>3.75</b>                             |
| 4                                      | <b>15.00</b>                           | <b>5.00</b>                             |
| 5                                      | <b>18.75</b>                           | <b>6.25</b>                             |
| 6                                      | <b>22.50</b>                           | <b>7.50</b>                             |
| 7                                      | <b>26.25</b>                           | <b>8.75</b>                             |
| 8                                      | <b>30.00</b>                           | <b>10.00</b>                            |

|                 |  |
|-----------------|--|
| <b>1 CUP</b>    | 8 ounces   |
| <b>1 PINT</b>   | 2 Cups<br>16 Ounces                                |
| <b>1 QUART</b>  | 4 Cups<br>2 Pints<br>32 Ounces<br>946 liters       |
| <b>1 GALLON</b> | 4 Quarts<br>128 Ounces<br>3.785 liters<br>8.33 lbs |

# PORTABLE PUMP OPERATING INSTRUCTIONS

## FUEL

- Use **24:1** mix (that's 5 gal. gas / 27 oz. oil) for 2 **stroke**
- **Some new "mini pumps" are 4 stroke engines which take straight gas!! Double check fuel requirements!!**
- Connect fuel can line to tank with quick connect. Loosen lid on tank for venting.

### Fuel Consumption:

- Mark III, 5 gal/ 3 hours
- Shindaiwa 5 gal/ 10 hours

## CAUTIONS:

1. Do not run engine at full speed until it is thoroughly warmed up (1 minute).
2. Do not run engine with pump disconnected
3. Do not run pump dry.
4. Do not use suction hose without foot valve strainer
5. Remove and drain pump after final use, and at night if temperatures below freezing.

## SETTING UP AND STARTING MARK III AND MARK 26 PUMPS

1. Connect fuel line to fuel can and pump as specified above.
2. Connect suction hose to the pump. Be sure to connect the foot valve to the male end of the suction hose. Make sure that the rubber gasket or washer is in place before attaching the female end to the pump. **Tighten firmly with a spanner wrench.** Put the foot valve inside the canvas bucket in the pump kit, and/or use rope or a float to the strainer to keep it from being too close to the water surface or resting on the bottom in the mud.
3. Attach wye valve to discharge side of pump. Hand-tighten only. Twist priming pump onto one leg of the wye and hose on the other. Close valve to the hose, leave primer valve open. Stroke primer till water squirts out the small holes, or until resistance is too great to keep at it. After priming, close valve to primer and open valve to hose.
4. Pull the decompression switch out until it comes to a "click" stop. (New pumps don't have decompression switches).
5. Put the choke on START, if the engine is cold.
6. Move throttle to "START AND WARM UP" position.
7. Give starter rope several quick, steady pulls until engine starts or pops. Turn choke off immediately after engine makes any noise to prevent flooding on the next pull.
8. Put choke on RUN and pull engine over until it starts usually 1 to 3 pulls.
9. Push decompression switch fully in as soon as engine starts.
10. Allow engine to warm up fully (hot to the touch) before using full throttle.

**\*\*If the pump shuts down automatically, you may need to reset the automatic cutout\*\***  
*Do this by pushing in on the reset rod (yellow circular wire located below stop switch)*

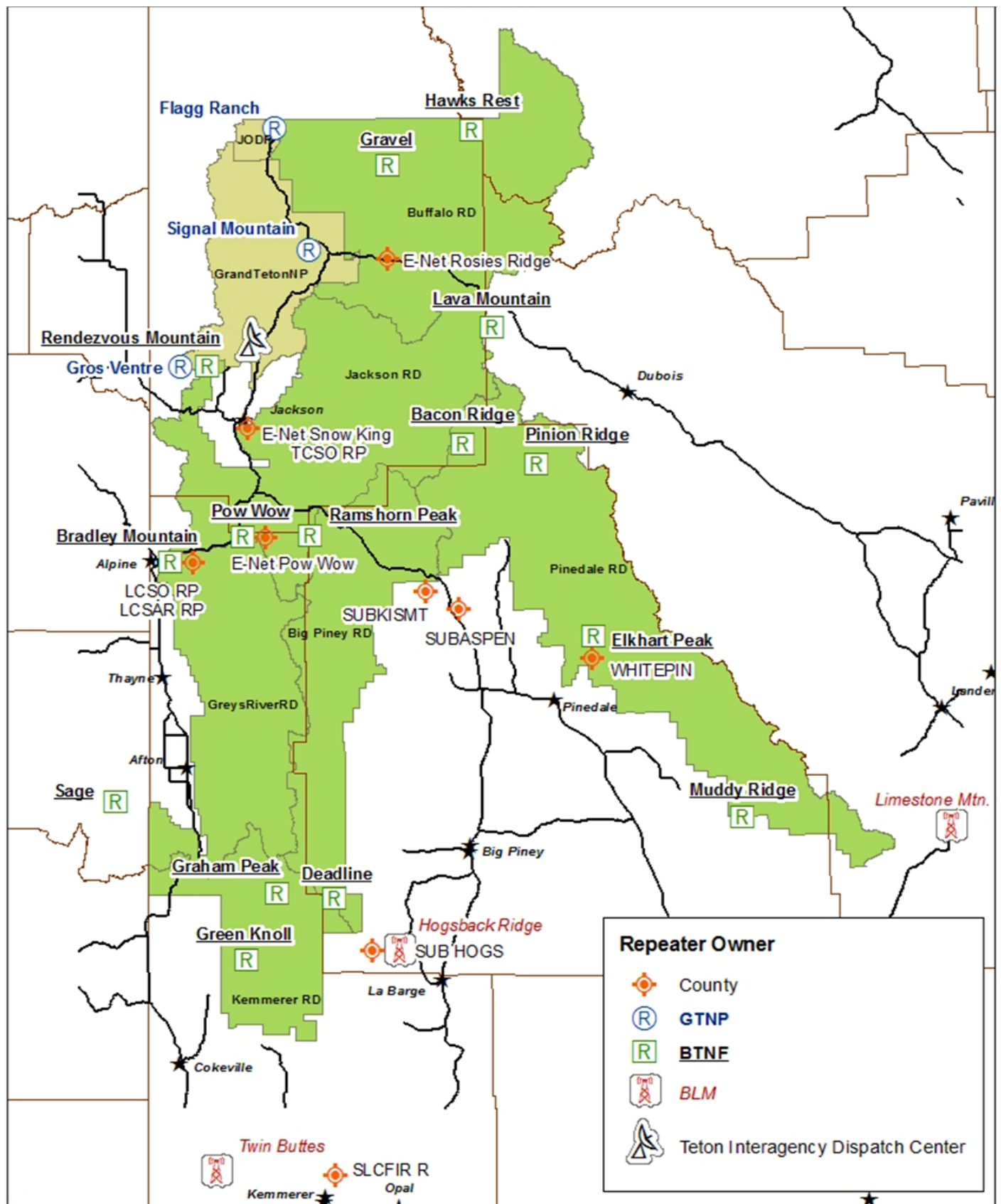
## STOPPING A MARK III OR MARK 26 PUMP

1. Move throttle lever to "stop" position.
2. Let pump run for about two minutes in this position.
3. Press and hold stop switch until engine is fully stopped.

## ORDERING PUMPS:

- Order two pump kits (NFES 0870) (one is probably short something you really need).
- Hose and appliances: Figure 100 ft. 1" laterals for every 200 ft. 1 ½" trunk line.
- Remember: Gated "Y's", nozzles, hose clamps, reducers, etc.

# Radio Operations



# BENDIX KING DPHX PROGRAMMING AND CLONING INSTRUCTIONS

*\*\*The instructions below are for analog narrowband frequencies. If you need to program digital frequencies, See the Digital Programming section below.\*\**

**Use caution when field programming any radio. These instructions are designed for radio users with field programming experience. If you are unfamiliar with these procedures, seek out someone who is.**

1. Using a programming plug, hold red plug button then Function [FCN] key until display shows "-- -- ID"
2. Enter Password (usually 000000), then press the Enter [ENT] key
3. Display will read "CH 00". Select a channel by entering the channel you want (1-16) then press the [FCN]key
4. Display will show "RX" receive frequency. To change, press [CLR], then enter desired frequency (the decimal will insert automatically). **THEN PRESS [ENT].**
5. Display will show "MODE--A".\* DO NOT CHANGE. Press [FCN]
6. Display will show RX CG, the Code Guard or Tone. To change, press [CLR], enter in desired 4 digits (the decimal will insert automatically), **THEN PRESS [ENT].** To skip press [FCN].
7. Display will show "NAC0000".\* DO NOT CHANGE-Press [FCN] to skip.
8. Display will show "SQL—NRM".\* DO NOT CHANGE- Press [FCN] to skip.
9. Display will show "TX" transmit frequency. To change, press [CLR], then enter desired frequency (the decimal will insert automatically) **THEN PRESS [ENT].**
10. Display will show "MODE--A" DO NOT CHANGE. Press [FCN] to skip.
11. Display will show TX CG, the Code Guard or Tone. To change, press [CLR], enter in desired 4 digits (the decimal will insert automatically)**THEN PRESS [ENT].** To skip press[FCN].
12. Display will show "NAC0000".\* DO NOT CHANGE. Press [FCN] to skip.
13. Display will show "TG00001".\* DO NOT CHANGE. Press [FCN] to skip.
14. Display will show channel label. See page 9 below for label editing instructions. To skip press [FCN]
15. Display will read "CH XX". Select next channel (press [PRI] for next channel) to program and repeat steps 1-14.

**\*=DIGITAL FUNCTIONS**

## CLONING

1. Obtain programmed Master radio.
  2. Turn on Master and Slave (your) radios and attach cloning cable between radios. Make sure all scan and priority switches are OFF for both radios.
  3. Select desired group to program in Slave radio
  4. Access Programming mode of MASTER radio. (see above)
  5. With Master radio display reading "CH 00", press the \* key on the Master radio
  6. "PRGM" will appear in screen and flash.
  7. Press the Function [FCN] key and "PRGM" will appear without flashing as the slave radio is programmed (Slave radio's screen will flash VH-1)
  8. Turn off slave, and connect and program the next slave by pressing the [FCN] key once again.
- If display reads "FAIL" - an error has occurred. Seek Help.

## NOTES:

- **If you want to change a frequency from Narrowband to Wide band, here's what you do:**
  1. In step 4 above, after you enter in a channel number, 15 for example, you may see 15N. The N means the frequency is Narrowband.
  2. Press the # key. You should see the N disappear, and now the channel is Wideband
- If you have trouble keying in a tone or changing groups, your keypad may be locked. Look at your screen, and if it says "LOCKED" than press and hold the [FCN] key until you see "UNLOCKED."

## **LABEL EDITING**

### **Channel and Group Labels**

1. To enter a new label, press the **[FCN]** key. The display becomes blank.
2. Press the **[PRI]** key repeatedly to cycle through characters 0-9, A-Z, -, \*, \$, /, +, %, \, \_ , <, >, h, blank, then back to the start again. The characters appear in position eight. (if you pass the desired character, press the **[PRI]** key repeatedly until you reach that character again).
3. Press the **[FCN]** key to shift the display left by one position, leaving position eight blank.
4. Press the **[PRI]** key repeatedly to enter the next character, or press the **[FCN]** key a second time to enter a blank space.
5. Press number keys to enter 0-9 in positions one through seven. The digits start in position seven, then move left.
6. Press the **[#]** key to toggle a decimal on or off to the right of the character in position seven. The decimal moves left with the number in position seven as new numbers are entered.
7. To abandon changes, press the **[CLR]** key, restoring the original label.
8. Press the **[ENT]** key to store changes and go back to the starting point.

## **DIGITAL PROGRAMMING**

In order to use your DPH as a digital radio, there are several things that you need in order for it to work.

MODE: Must Be **D** (Digital) or **M** (Mixed)

NAC=Network Access Code: Essentially a digital “tone.” This code will be provided for you, and it is required for digital freqs to work. The code may be either HEX or DECIMAL. **MAKE SURE YOU KNOW WHICH ONE:** Hand programming requires Decimal inputs.

SQ OP: don’t change from default of “Normal”

TG=Talk Group ID: provided for you by management unit -usually talk group 1.

### **Things to remember:**

- DPH radios can be set up with digital and analog frequencies in a single group.
- When transmitting on a digital frequency, key your mic and wait one full second before speaking.
- Digital repeaters may not be set up with a transmission “tail” or “kick-back”. An actual voice transmission may be needed to verify contact with the repeater.
- If you know you’ll be using digital frequencies, plan ahead- you may have most success programming your radios with the laptop and the BK software.
- You can clone digital frequencies between DPH radios, just like analog frequencies.

### **NACS**

F7E is what you program in if you want to listen in. F7E will listen to any digital signal

F7e is hexadecimal= 3966 is decimal (Hand Programming Mode Requires Decimal)

F7e is a receive nac only

Convert hexadecimal to decimal and vice-versa with the Microsoft calculator in Scientific Mode.

# **KNG RADIO CHEAT SHEET**

## **KNG-KNG Cloning**

- 1.) Turn Both Radios ON, Connect Cloning Cable, Turn OFF Scan/Pri, Select Zone for cloning on both radios.
- 2.) On "Master" Radio, select "MENU", scroll to "CLONING" and select (ENT)
- 3.) Select "Clone Active Zone"
- 4.) Cloning will begin, wait for screen to show "successful" disconnect receiving Radio

## **KNG Channel Program**

- 1.) Turn Radio ON, Select "MENU", Scroll to "KEYPAD PROGRAM" and select (ENT)
- 2.) Enter password (000000)
- 3.) Select "KEYPAD"
- 4.) Select "CHANNEL"
- 5.) Select "EDIT CHANNEL"
- 6.) Select zone with targeted channel for programing
- 7.) Select channel targeted for programing
- 8.) Scroll through edit menu to edit "Channel Label", "RX Frequency", "RX Guard", "TX Frequency", "TX Guard", Using "ENT" and "ESC" to get in and out of menu options.
- 9.) Once channel/channels are changed press "ESC" until programing mode is exited.

## **KNG Channel Scanning**

- 1.) With Radio ON, Select "MENU", Scroll down to option "3. Chan Scan List" and select "ENT"
- 2.) Scroll UP or DOWN through the channels. Notice the check box to the right of the channel. Channels you are currently scanning will have a checked box, channels you are not scanning will have an empty box.
- 3.) To add or remove a channel select the button "+/-" this will add or remove a check from the box to the right of the channel and select/deselect the channels you will be scanning.
- 4.) Select "ESC" when done.

## **KNG Channel Priority**

- 1.) With Radio ON select "MENU". Scroll to option "7.KEYPAD PROG" and select.
- 2.) Prompt for password enter "000000" Keypad will be highlighted, select "ENT"
- 3.) Scroll to "SYSTEM" select "ENT"
- 4.) Select "SYSTEM P1 CHAN" select "ENT". Scroll to "SELECT:" select "ENT"
- 5.) Scroll to whichever Zone (Group) you are working in and select "ENT".
- 6.) Screen will show "Priority 1 Channel" scroll up or down to select the channel you would like to set as 1 Priority.
- 7.) Process is the same for the Priority 2.
- 8.) Select "ESC" to Exit back to regular operations.



The data contained in this document is Sensitive but Unclassified (SBU) and is not releasable under the Freedom of Information Act

| GROUP 1 - Bridger-Teton NF North |                                  |               |          |          |          |          |             |
|----------------------------------|----------------------------------|---------------|----------|----------|----------|----------|-------------|
| Chnl #                           | Site Name                        | Channel Label | RX Freq  | RX CTCSS | TX Freq  | TX CTCSS | Narrow/Wide |
| 1                                | Hawks Rest Repeater<br>2019 Plan | HAWK19        | 171.3875 |          | 164.1375 | 110.9    | N           |
| 2                                | Gravel Repeater                  | GRAVEL        | 171.3875 |          | 164.1375 | 123.0    | N           |
| 3                                | Lava Mtn Repeater                | LAVA          | 171.3875 |          | 164.1375 | 136.5    | N           |
| 4                                | Bradley Repeater North Net       | BRADLEYN      | 171.3875 |          | 164.1375 | 146.2    | N           |
| 5                                | Bacon Repeater                   | BACON         | 171.3875 |          | 164.1375 | 156.7    | N           |
| 6                                | Rendezvous Repeater              | RENDEZVU      | 171.3875 |          | 164.1375 | 167.9    | N           |
| 7                                | Pow Wow Repeater                 | POW WOW       | 171.5750 |          | 164.1750 | 156.7    | N           |
| 8                                | Bradley Repeater South Net       | BRADLEYS      | 169.9000 |          | 165.0125 | 146.2    | N           |
| 9                                | Ramshorn Repeater                | RAMSHORN      | 169.9000 |          | 165.0125 | 110.9    | N           |
| 10                               | Pinyon Repeater                  | PINYON        | 169.9000 |          | 165.0125 | 123.0    | N           |
| 11                               | Elkhart Repeater                 | ELKHART       | 169.9000 |          | 165.0125 | 131.8    | N           |
| 12                               | Muddy Repeater                   | MUDDY         | 169.9000 |          | 165.0125 | 136.5    | N           |
| 13                               | Deadline Repeater                | DEADLINE      | 169.9000 |          | 165.0125 | 156.7    | N           |
| 14                               | VMED 28 Air Medical              | VMED 28       | 155.3400 |          | 155.3400 | 156.7    | N           |
| 15                               | WORK 1                           | WORK 1        | 163.7125 |          | 163.7125 | 131.8    | N           |
| 16                               | WORK 2                           | WORK 2        | 168.6125 |          | 168.6125 | 131.8    | N           |

The data contained in this document is Sensitive but Unclassified (SBU) and is not releasable under the Freedom of Information Act

| GROUP 2 - Bridger-Teton NF South |                            |               |          |          |          |          |             |
|----------------------------------|----------------------------|---------------|----------|----------|----------|----------|-------------|
| Chnl #                           | Site Name                  | Channel Label | RX Freq  | RX CTCSS | TX Freq  | TX CTCSS | Narrow/Wide |
| 1                                | Lava Mtn Repeater          | LAVA          | 171.3875 |          | 164.1375 | 136.5    | N           |
| 2                                | Rendezvous Repeater        | RENDEZVU      | 171.3875 |          | 164.1375 | 167.9    | N           |
| 3                                | Bradley Repeater North Net | BRADLEYN      | 171.3875 |          | 164.1375 | 146.2    | N           |
| 4                                | Bradley Repeater South Net | BRADLEYS      | 169.9000 |          | 165.0125 | 146.2    | N           |
| 5                                | Ramshorn Repeater          | RAMSHORN      | 169.9000 |          | 165.0125 | 110.9    | N           |
| 6                                | Deadline Repeater          | DEADLINE      | 169.9000 |          | 165.0125 | 156.7    | N           |
| 7                                | Pow Wow Repeater           | POW WOW       | 171.5750 |          | 164.1750 | 156.7    | N           |
| 8                                | Sage Point Repeater        | SAGE PT       | 169.9000 |          | 165.0125 | 167.9    | N           |
| 9                                | Pinyon Repeater            | PINYON        | 169.9000 |          | 165.0125 | 123.0    | N           |
| 10                               | Elkhart Repeater           | ELKHART       | 169.9000 |          | 165.0125 | 131.8    | N           |
| 11                               | Muddy Repeater             | MUDDY         | 169.9000 |          | 165.0125 | 136.5    | N           |
| 12                               | Graham Repeater            | GRAHAM        | 169.9000 |          | 165.0125 | 100.0    | N           |
| 13                               | Green Knoll Repeater       | GREEN         | 169.9000 |          | 165.0125 | 107.2    | N           |
| 14                               | VMED 28 Air Medical        | VMED 28       | 155.3400 |          | 155.3400 | 156.7    | N           |
| 15                               | WORK 1                     | WORK 1        | 163.7125 |          | 163.7125 | 131.8    | N           |
| 16                               | WORK 2                     | WORK 2        | 168.6125 |          | 168.6125 | 131.8    | N           |

The data contained in this document is Sensitive but Unclassified (SBU) and is not releasable under the Freedom of Information Act

### GROUP 3 - Bridger-Teton West Fire

| Chnl # | Site Name                               | Channel Label | RX Freq  | RX CTCSS | TX Freq  | TX CTCSS | Narrow/Wide |
|--------|---|---------------|----------|----------|----------|----------|-------------|
| 1      | BT South Net Direct                     | BT S DIR      | 169.9000 |          | 169.9000 | 131.8    | N           |
| 2      | Bradley So. Repeater                    | BRADLEYS      | 169.9000 |          | 165.0125 | 146.2    | N           |
| 3      | Sage Point Repeater                     | SAGE PT       | 169.9000 |          | 165.0125 | 167.9    | N           |
| 4      | Graham Repeater                         | GRAHAM        | 169.9000 |          | 165.0125 | 100.0    | N           |
| 5      | Green Knoll Repeater                    | GREEN         | 169.9000 |          | 165.0125 | 107.2    | N           |
| 6      | Deadline Repeater                       | DEADLINE      | 169.9000 |          | 165.0125 | 156.7    | N           |
| 7      | Ramshorn Repeater                       | RAMSHORN      | 169.9000 |          | 165.0125 | 110.9    | N           |
| 8      | Region 4 Tac 1                          | R4 TAC 1      | 166.8125 |          | 166.8125 | 131.8    | N           |
| 9      | Region 4 Tac 2                          | R4 TAC 2      | 166.8875 |          | 166.8875 | 131.8    | N           |
| 10     | Region 4 Tac 3                          | R4 TAC 3      | 169.1750 |          | 169.1750 | 131.8    | N           |
| 11     | Air-to-Ground 10                        | A/G 10        | 166.9375 |          | 166.9375 | 000.0    | N           |
| 12     | Air-to-Ground 19                        | A/G 19        | 168.1250 |          | 168.1250 | 000.0    | N           |
| 13     | Air-to-Ground 12                        | A/G 12        | 167.0750 |          | 167.0750 | 000.0    | N           |
| 14     | Star Valley Fire Direct                 | SV FIR D      | 158.7600 |          | 158.7600 | 131.8    | N           |
| 15     | VFIRE21 (old FERN)                      | VFIRE21       | 154.2800 |          | 154.2800 | 000.0    | N           |
| 16     | Lincoln County Sheriff Repeater Bradley | LCSO RP       | 155.4300 |          | 154.6500 | 100.0    | N           |

The data contained in this document is Sensitive but Unclassified (SBU) and is not releasable under the Freedom of Information Act

| GROUP 4 - Bridger-Teton River Crew |                                     |               |          |          |          |          |                 |
|------------------------------------|-------------------------------------|---------------|----------|----------|----------|----------|-----------------|
| Chnl #                             | Site Name                           | Channel Label | RX Freq  | RX CTCSS | TX Freq  | TX CTCSS | Narrow/<br>Wide |
| 1                                  | BT North Net Direct                 | BT N DIR      | 171.3875 |          | 171.3875 | 131.8    | N               |
| 2                                  | Rendezvous Repeater                 | RENDEZVU      | 171.3875 |          | 164.1375 | 167.9    | N               |
| 3                                  | Bradley Repeater North              | BRADLEYN      | 171.3875 |          | 164.1375 | 146.2    | N               |
| 4                                  | Pow Wow Repeater                    | POW WOW       | 171.5750 |          | 164.1750 | 156.7    | N               |
| 5                                  | River Direct                        | RIVR DIR      | 171.5750 |          | 171.5750 | 156.7    | N               |
| 6                                  | Work 1                              | WORK 1        | 163.7125 |          | 163.7125 | 131.8    | N               |
| 7                                  | Lincoln County Sheriff Direct       | LCSO DIR      | 155.4300 |          | 155.4300 | 110.9    | N               |
| 8                                  | Lincoln County SAR Direct           | LCSAR D       | 154.0550 |          | 154.0550 | 107.2    | N               |
| 9                                  | Lincoln County SAR Repeat           | LCSAR RP      | 154.0550 |          | 158.8350 | 107.2    | N               |
| 10                                 | Lincoln County Fire Direct          | LCFIR D       | 158.7600 |          | 158.7600 | 131.8    | N               |
| 11                                 | Teton County Sheriff Direct         | TCSO DIR      | 155.4150 |          | 155.4150 | 100.0    | N               |
| 12                                 | Teton County E-NET Repeater Pow Wow | ENET PW       | 156.0150 |          | 154.0850 | 156.7    | N               |
| 13                                 | Jackson Hole Fire Repeater          | JHF RP        | 155.7150 |          | 158.9250 | 107.2    | N               |
| 14                                 | Lincoln County Sheriff Repeater     | LCSO RP       | 155.4300 |          | 154.6500 | 100.0    | N               |
| 15                                 | Teton Co Search and Rescue          | TSARDIR       | 151.1975 |          | 151.1975 | 127.3    | N               |
| 16                                 | VMED 28 Air Medical                 | VMED 28       | 155.3400 |          | 155.3400 | 156.7    | N               |

The data contained in this document is Sensitive but Unclassified (SBU) and is not releasable under the Freedom of Information Act

## GROUP 5 - Bridger-Teton North Fire

| Chnl # | Site Name                   | Channel Label | RX Freq  | RX CTCSS | TX Freq  | TX CTCSS | Narrow/<br>Wide |
|--------|-----------------------------|---------------|----------|----------|----------|----------|-----------------|
| 1      | BT North Net Direct         | BT N DIR      | 171.3875 |          | 171.3875 | 107.2    | N               |
| 2      | BT North Net Repeat         | BT N RP       | 171.3875 |          | 164.1375 | 110.9    | N               |
| 3      | BT South Net Direct         | BT S DIR      | 169.9000 |          | 169.9000 | 123.0    | N               |
| 4      | BT South Net Repeat         | BT S RP       | 169.9000 |          | 165.0125 | 131.8    | N               |
| 5      | Region 4 Tac 1              | R4 TAC 1      | 166.8125 |          | 166.8125 | 136.5    | N               |
| 6      | Region 4 Tac 2              | R4 TAC 2      | 166.8875 |          | 166.8875 | 146.2    | N               |
| 7      | Region 4 Tac 3              | R4 TAC 3      | 169.1750 |          | 169.1750 | 156.7    | N               |
| 8      | Air-to-Ground 10            | A/G 10        | 166.9375 |          | 166.9375 | 167.9    | N               |
| 9      | Air-to-Ground 19            | A/G 19        | 168.1250 |          | 168.1250 | 000.0    | N               |
| 10     | Air-to-Ground 12            | A/G 12        | 167.0750 |          | 167.0750 | 000.0    | N               |
| 11     | Grand Teton NP Repeat       | GT NP RP      | 171.6750 |          | 164.9500 | 123.0    | N               |
| 12     | Teton County E-NET Repeater | E-NET         | 156.0150 |          | 154.0850 | 100.0    | N               |
| 13     | VMED 28 Air Medical         | VMED 28       | 155.3400 |          | 155.3400 | 156.7    | N               |
| 14     | Jackson Hole Fire Direct    | JHF DIR       | 155.7150 |          | 155.7150 | 107.2    | N               |
| 15     | Teton Co Search and Rescue  | SAR DIR       | 151.1975 |          | 151.1975 | 127.3    | N               |
| 16     | Air Guard                   | AIRGUARD      | 168.6250 |          | 168.6250 | 110.9    | N               |

### GPH/DPH Radio Tone # Select

1-107.2 Green Knoll Repeater  
 2-110.9 Ramshorn, Hawks Rest Repeaters  
 3-123.0 Gravel, Pinyon Repeaters  
 4-131.8 Elkhart Repeater, TACs  
 5-136.5 Lava, Muddy Repeaters  
 6-146.2 Bradley Repeater (North and South)  
 7-156.7 Bacon, Deadline Repeaters  
 8-167.9 Rendezvous, Sage Repeaters  
 12-100.0 Graham Repeater  
 (To select tone 12, press # then 1 and 2 keys)

### KNG Radio Picklist Tone Select

107.2 Green Knoll Repeater  
 110.9 Ramshorn, Hawks Rest Repeaters  
 123.0 Gravel, Pinyon Repeaters  
 131.8 Elkhart Repeater, TACs  
 136.5 Lava, Muddy Repeaters  
 146.2 Bradley Repeater (North and South)  
 156.7 Bacon, Deadline Repeaters  
 167.9 Rendezvous, Sage Repeaters  
 100.0 Graham Repeater

### Channel 12 Teton County ENET Repeaters

Snow King: #0 Tone 100.0  
 Rosies Ridge: #1 Tone 107.2  
 Pow Wow: #7 Tone 156.7  
Gros Ventre  
 RX 171.675 #11 Tone 123.0  
 TX 163.125 #1 Tone 107.2  
GRTE Repeaters (Must be field programmed in)  
 Flagg  
 RX 171.675 #11 Tone 123.0  
 TX 168.350 #12 Tone 100.0

The data contained in this document is Sensitive but Unclassified (SBU) and is not releasable under the Freedom of Information Act

| GROUP 6 - Bridger-Teton East Fire |                                   |               |          |          |          |          |                 |
|-----------------------------------|-----------------------------------|---------------|----------|----------|----------|----------|-----------------|
| Chnl #                            | Site Name                         | Channel Label | RX Freq  | RX CTCSS | TX Freq  | TX CTCSS | Narrow/<br>Wide |
| 1                                 | BT South Net Direct               | BT S DIR      | 169.9000 |          | 169.9000 | 131.8    | N               |
| 2                                 | Ramshorn Repeater                 | RAMSHORN      | 169.9000 |          | 165.0125 | 110.9    | N               |
| 3                                 | Pinyon Repeater                   | PINYON        | 169.9000 |          | 165.0125 | 123.0    | N               |
| 4                                 | Elkhart Repeater                  | ELKHART       | 169.9000 |          | 165.0125 | 131.8    | N               |
| 5                                 | Muddy Ridge Repeater              | MUDDY         | 169.9000 |          | 165.0125 | 136.5    | N               |
| 6                                 | Deadline Repeater                 | DEADLINE      | 169.9000 |          | 165.0125 | 156.7    | N               |
| 7                                 | Air-to-Ground 10                  | A/G 10        | 166.9375 |          | 166.9375 | 000.0    | N               |
| 8                                 | Air-to-Ground 19                  | A/G 19        | 168.1250 |          | 168.1250 | 000.0    | N               |
| 9                                 | Air-to-Ground 12                  | A/G 12        | 167.0750 |          | 167.0750 | 000.0    | N               |
| 10                                | Region 4 Tac 1                    | R4 TAC 1      | 166.8125 |          | 166.8125 | 131.8    | N               |
| 11                                | Region 4 Tac 2                    | R4 TAC 2      | 166.8875 |          | 166.8875 | 131.8    | N               |
| 12                                | Region 4 Tac 3                    | R4 TAC 3      | 169.1750 |          | 169.1750 | 131.8    | N               |
| 13                                | VFIRE21 (old FERN)                | VFIRE21       | 154.2800 |          | 154.2800 | 000.0    | N               |
| 14                                | Sub. Co. Fire Kismet Repeater     | KISMET        | 154.9800 |          | 155.8650 | 82.5     | N               |
| 15                                | Sub. Co. Fire White Pine Repeater | WHITEPINE     | 154.9800 |          | 155.8650 | 100.0    | N               |
| 16                                | VMED 28 Air Medical               | VMED 28       | 155.3400 |          | 155.3400 | 156.7    | N               |

The data contained in this document is Sensitive but Unclassified (SBU) and is not releasable under the Freedom of Information Act

| GROUP 7 - Teton County Initial Attack |                                 |               |          |          |          |          |             |
|---------------------------------------|---------------------------------|---------------|----------|----------|----------|----------|-------------|
| Chnl #                                | Site Name                       | Channel Label | RX Freq  | RX CTCSS | TX Freq  | TX CTCSS | Narrow/Wide |
| 1                                     | E-NET Snow King                 | ENET SK       | 156.0150 |          | 154.0850 | 100.0    | N           |
| 2                                     | E-NET Rosies Ridge              | ENET RR       | 156.0150 |          | 154.0850 | 107.2    | N           |
| 3                                     | E-NET Pow Wow                   | ENET PW       | 156.0150 |          | 154.0850 | 156.7    | N           |
| 4                                     | Rendezvous Repeater             | RENDEZVU      | 171.3875 |          | 164.1375 | 167.9    | N           |
| 5                                     | Lava Mtn Repeater               | LAVA          | 171.3875 |          | 164.1375 | 136.5    | N           |
| 6                                     | Ramshorn Repeater               | RAMSHORN      | 169.9000 |          | 165.0125 | 110.9    | N           |
| 7                                     | JH Fire EMS Repeater            | JHFEMS R      | 155.7150 |          | 158.9250 | 107.2    | N           |
| 8                                     | Grand Teton Park Primary Repeat | GT PRI RP     | 171.6750 |          | 164.9500 | 123.0    | N           |
| 9                                     | Region 4 Tac 1                  | R4 TAC 1      | 166.8125 |          | 166.8125 | 131.8    | N           |
| 10                                    | Region 4 Tac 2                  | R4 TAC 2      | 166.8875 |          | 166.8875 | 131.8    | N           |
| 11                                    | JH Fire TAC 3                   | JHFTAC3       | 154.3250 |          | 154.3250 | 107.2    | N           |
| 12                                    | JH Fire TAC 4                   | JHFTAC4       | 155.0400 |          | 155.0400 | 107.2    | N           |
| 13                                    | VMED 28 Air Medical             | VMED 28       | 155.3400 |          | 155.3400 | 156.7    | N           |
| 14                                    | Air-to-Ground 10                | A/G 10        | 166.9375 |          | 166.9375 | 000.0    | N           |
| 15                                    | Air-to-Ground 19                | A/G 19        | 168.1250 |          | 168.1250 | 000.0    | N           |
| 16                                    | Air Guard                       | AIRGUARD      | 168.6250 |          | 168.6250 | 110.9    | N           |

| GROUP 8 - Sublette County Initial Attack |                                      |               |          |          |          |          |             |
|--|--------------------------------------|---------------|----------|----------|----------|----------|-------------|
| Chnl #                                   | Site Name                            | Channel Label | RX Freq  | RX CTCSS | TX Freq  | TX CTCSS | Narrow/Wide |
| 1  | FS Elkhart Repeater                  | ELKHART       | 169.9000 |          | 165.0125 | 131.8    | N           |
| 2  | FS Deadline Repeater                 | DEADLINE      | 169.9000 |          | 165.0125 | 156.7    | N           |
| 3  | FS Ramshorn Repeater                 | RAMSHORN      | 169.9000 |          | 165.0125 | 110.9    | N           |
| 4  | Air-to-Ground 10                     | A/G 10        | 166.9375 |          | 166.9375 | 000.0    | N           |
| 5  | Air-to-Ground 12                     | A/G 12        | 167.0750 |          | 167.0750 | 000.0    | N           |
| 6  | Air-to-Ground 35                     | A/G 35        | 167.2250 |          | 167.2250 | 000.0    | N           |
| 7  | Region 4 Tac 1                       | R4 TAC 1      | 166.8125 |          | 166.8125 | 131.8    | N           |
| 8  | Region 4 Tac 2                       | R4 TAC 2      | 166.8875 |          | 166.8875 | 131.8    | N           |
| 9  | BLM Hogsback Repeater                | HOGSBACK      | 168.5750 |          | 165.0000 | 110.9    | N           |
| 10                                       | BLM Twin Butte Repeater              | TWINBUTE      | 168.5750 |          | 165.0000 | 123.0    | N           |
| 11                                       | BLM Fire 2 (Tac)                     | BLMFIRE2      | 166.8250 |          | 166.8250 | 000.0    | N           |
| 12                                       | Sub. Co. Sheriff White Pine Repeater | SO WHITE      | 155.7300 |          | 155.2500 | 141.3    | N           |
| 13                                       | Sub. Co. Fire Kismet Repeater        | KISMET        | 154.9800 |          | 155.8650 | 82.5     | N           |
| 14                                       | Sub. Co. Fire White Pine Repeater    | WHITEPINE     | 154.9800 |          | 155.8650 | 100.0    | N           |
| 15                                       | Sub. Co. Fire Hogsback Repeater      | SUB HOGS      | 154.9800 |          | 155.8650 | 114.8    | N           |
| 16                                       | VFIRE21W (FERN)                      | VFIRE21W      | 154.2800 |          | 154.2800 | 000.0    | N           |



The data contained in this document is Sensitive but Unclassified (SBU) and is not releasable under the Freedom of Information Act

| <b>GROUP 9 - Bridger-Teton South Fire</b> |                                  |                      |                |                 |                |                 |                    |
|---|----------------------------------|----------------------|----------------|-----------------|----------------|-----------------|--------------------|
| <b>Chnl #</b>                             | <b>Site Name</b>                 | <b>Channel Label</b> | <b>RX Freq</b> | <b>RX CTCSS</b> | <b>TX Freq</b> | <b>TX CTCSS</b> | <b>Narrow/Wide</b> |
| 1   | Deadline Repeater                | DEADLINE             | 169.9000       |                 | 165.0125       | 156.7           | N                  |
| 2   | Sage Point Repeater              | SAGE PT              | 169.9000       |                 | 165.0125       | 167.9           | N                  |
| 3   | Graham Repeater                  | GRAHAM               | 169.9000       |                 | 165.0125       | 100.0           | N                  |
| 4   | Green Knoll Repeater             | GREEN                | 169.9000       |                 | 165.0125       | 107.2           | N                  |
| 5   | Air-to-Ground 10                 | A/G 10               | 166.9375       |                 | 166.9375       | 000.0           | N                  |
| 6   | Air-to-Ground 19                 | A/G 19               | 168.1250       |                 | 168.1250       | 000.0           | N                  |
| 7   | Region 4 Tac 2                   | R4 TAC 2             | 166.8875       |                 | 166.8875       | 131.8           | N                  |
| 8   | Region 4 Tac 3                   | R4 TAC 3             | 169.1750       |                 | 169.1750       | 131.8           | N                  |
| 9   | Fire 2                           | FIRE 2               | 166.8250       |                 | 166.8250       | 000.0           | N                  |
| 10  | Hogback Repeater                 | HOGSBACK             | 168.5750       |                 | 165.0000       | 110.9           | N                  |
| 11  | Twin Butte Repeater              | TWINBUTE             | 168.5750       |                 | 165.0000       | 123.0           | N                  |
| 12  | Air-to-Ground 35(BLM)            | A/G 35               | 167.2250       |                 | 167.2250       | 110.9           | N                  |
| 13  | South Lincoln County Fire Direct | SLCFIR D             | 154.4150       |                 | 154.4150       | 173.8           | N                  |
| 14  | South Lincoln County Fire RP     | SLCFIR R             | 154.4150       |                 | 153.7700       | 173.8           | N                  |
| 15  | VFIRE21 (old FERN)               | VFIRE21              | 154.2800       |                 | 154.2800       | 000.0           | N                  |
| 16  | VMED 28 Air Medical              | VMED 28              | 155.3400       |                 | 155.3400       | 156.7           | N                  |

The data contained in this document is Sensitive but Unclassified (SBU) and is not releasable under the Freedom of Information Act

## GROUP 10 - Teton Interagency Helitack

| Chnl # | Site Name                  | Channel Label | RX Freq  | RX CTCSS | TX Freq  | TX CTCSS | Narrow/Wide |
|--------|----------------------------|---------------|----------|----------|----------|----------|-------------|
| 1      | BT North Net Direct        | BT N DIR      | 171.3875 |          | 171.3875 | 107.2    | N           |
| 2      | BT North Net Repeat        | BT N RP       | 171.3875 |          | 164.1375 | 110.9    | N           |
| 3      | BT South Net Direct        | BT S DIR      | 169.9000 |          | 169.9000 | 123.0    | N           |
| 4      | BT South Net Repeat        | BT S RP       | 169.9000 |          | 165.0125 | 131.8    | N           |
| 5      | Air-to-Ground 10           | A/G 10        | 166.9375 |          | 166.9375 | 136.5    | N           |
| 6      | Air-to-Ground 19           | A/G 19        | 168.1250 |          | 168.1250 | 146.2    | N           |
| 7      | Air-to-Ground 12           | A/G 12        | 167.0750 |          | 167.0750 | 156.7    | N           |
| 8      | Region 4 Tac 1             | R4 TAC 1      | 166.8125 |          | 166.8125 | 167.9    | N           |
| 9      | Region 4 Tac 2             | R4 TAC 2      | 166.8875 |          | 166.8875 | 131.8    | N           |
| 10     | Region 4 Tac 3             | R4 TAC 3      | 169.1750 |          | 169.1750 | 131.8    | N           |
| 11     | Teton Co Search and Rescue | SAR DIR       | 151.1975 |          | 151.1975 | 127.3    | N           |
| 12     | DECK                       | DECK          | 163.1000 |          | 163.1000 | 000.0    | N           |
| 13     | Grand Teton SAR            | GT SAR        | 172.4250 |          | 172.4250 | 123.0    | N           |
| 14     | Grand Teton NP Direct      | GT DIR        | 171.6750 |          | 171.6750 | 123.0    | N           |
| 15     | Grand Teton NP Repeat      | GT RP         | 171.6750 |          | 164.9500 | 123.0    | N           |
| 16     | Air Guard                  | AIRGUARD      | 168.6250 |          | 168.6250 | 110.9    | N           |

### GPH/DPH Radio Tone # Select

1-107.2 Green Knoll Repeater  
 2-110.9 Ramshorn, Hawks Rest Repeaters  
 3-123.0 Gravel, Pinyon Repeaters  
 4-131.8 Elkhart Repeater, TACs  
 5-136.5 Lava, Muddy Repeaters  
 6-146.2 Bradley Repeater (North and South)  
 7-156.7 Bacon, Deadline Repeaters  
 8-167.9 Rendezvous, Sage Repeaters  
 12-100.0 Graham Repeater

### KNG Radio Picklist Tone Select

107.2 Green Knoll Repeater  
 110.9 Ramshorn, Hawks Rest Repeaters  
 123.0 Gravel, Pinyon Repeaters  
 131.8 Elkhart Repeater, TACs  
 136.5 Lava, Muddy Repeaters  
 146.2 Bradley Repeater (North and South)  
 156.7 Bacon, Deadline Repeaters  
 167.9 Rendezvous, Sage Repeaters  
 100.0 Graham Repeater

### Channel 12 Teton County ENET Repeaters

Snow King: #0 Tone 100.0  
 Rosies Ridge: #1 Tone 107.2  
 Pow Wow: #7 Tone 156.7

#### Gros Ventre

RX 171.675 #11 Tone 123.0  
 TX 163.125 #1 Tone 107.2

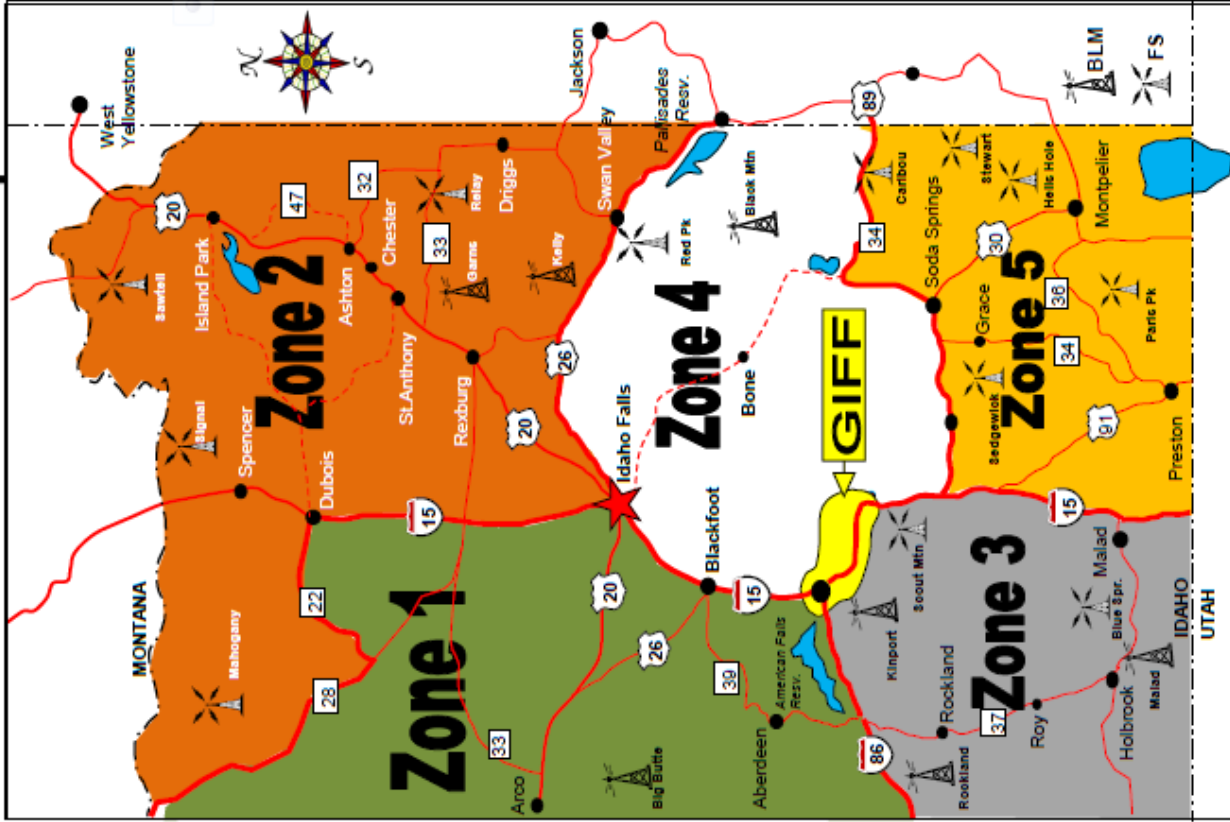
#### GRTE Repeaters (Must be field programmed in)

Flagg  
 RX 171.675 #11 Tone 123.0  
 TX 168.350 #12 Tone 100.0

The data contained in this document is Sensitive but Unclassified (SBU) and is not releasable under the Freedom of Information Act

| <b>GROUPS 11 TETON Interagency group</b> |                                   |                      |                |                 |                |                 |                    |
|--|-----------------------------------|----------------------|----------------|-----------------|----------------|-----------------|--------------------|
| <b>Chnl #</b>                            | <b>Site Name</b>                  | <b>Channel Label</b> | <b>RX Freq</b> | <b>RX CTCSS</b> | <b>TX Freq</b> | <b>TX CTCSS</b> | <b>Narrow/Wide</b> |
| 1  | SO Dispatch Repeater SK           | SO Rptr              | 155.4150       |                 | 154.9500       | 100.0           | N                  |
| 2  | VTAC 17 Repeater                  | VTAC 17R             | 161.8500       |                 | 157.2500       | 156.7           | N                  |
| 3  | E-Net Rosies Ridge Repeater       | ENET RR              | 156.0150       |                 | 154.0850       | 107.2           | N                  |
| 4  | E-Net Pow Wow Repeater            | ENET PW              | 156.0150       |                 | 154.0850       | 156.7           | N                  |
| 5  | E-Net Snow King Repeater          | ENET SK              | 156.0150       |                 | 154.0850       | 100.0           | N                  |
| 6  | VTAC 12 VHF Tac 12                | VTAC 12              | 154.4525       |                 | 154.4525       | 156.7           | N                  |
| 7  | VTAC 13 VHF Tac 13                | VTAC 13              | 158.7375       |                 | 158.7375       | 156.7           | N                  |
| 8  | VTAC 14 VHF Tac 14                | VTAC 14              | 159.4725       |                 | 159.4725       | 156.7           | N                  |
| 9  | SAR Repeater on Rendezvous        | SAR RPT              | 151.1975       |                 | 159.2475       | 127.3           | N                  |
| 10                                       | GTNP Backcountry Rangers          | GT SAR               | 172.4250       |                 | 172.4250       | 123.0           | N                  |
| 11                                       | MA 1 Direct No Cheyenne Dispatch  | MUT AID              | 154.8750       |                 | 154.8750       | 107.2           | N                  |
| 12                                       | Airport Incident Command Repeater | ARFF RPT             | 153.4550       |                 | 158.2350       | 123.0           | N                  |
| 13                                       | USFS Rendezvous Repeater          | BTF REND             | 171.3875       |                 | 164.1375       | 167.9           | N                  |
| 14                                       | GTNP Primary Signal Mtn Repeater  | GTP PRIM             | 171.6750       |                 | 164.9500       | 123.0           | N                  |
| 15                                       | St. Johns ER                      | EMS ER               | 155.3400       |                 | 155.3400       | 82.5            | N                  |
| 16                                       | Jackson Hole Fire Repeaters       | JHF RPTR             | 155.7150       |                 | 158.9250       | 107.2           | N                  |

# ElIFC Initial Attack Zones and Radio Frequencies



Bear Lake

## Dispatch (208) 524-7600

| Air / Ground |          |          |      |  |
|--------------|----------|----------|------|--|
| Description  | Rx       | Tx       | Tone |  |
| A/G 15       | 167.5250 | 167.5250 |      |  |
| A/G 17       | 167.9875 | 167.9875 |      |  |

| ZONE 1                    |          |          |       |  |
|---------------------------|----------|----------|-------|--|
| Description               | Rx       | Tx       | Tone  |  |
| Command-1 (BLM Big Butte) | 169.7750 | 163.1500 | 114.8 |  |
| Command-2 (FS Mahogany)   | 169.1750 | 170.5250 | 131.8 |  |
| Tactical (BLM Tac 1)      | 172.7750 | 172.7750 |       |  |

| ZONE 2                  |          |          |       |  |
|-------------------------|----------|----------|-------|--|
| Description             | Rx       | Tx       | Tone  |  |
| Command-1 (FS Relay)    | 169.1750 | 170.5250 | 123.0 |  |
| Command-2 (FS Sawtell)  | 169.1750 | 170.5250 | 146.2 |  |
| Command-3 (FS Mahogany) | 169.1750 | 170.5250 | 131.8 |  |
| Command-4 (BLM Gams)    | 169.7750 | 163.1500 | 107.2 |  |
| Tactical (FS Tac 2)     | 168.1750 | 168.1750 |       |  |

| ZONE 3 AND GIFF          |          |          |       |  |
|--------------------------|----------|----------|-------|--|
| Description              | Rx       | Tx       | Tone  |  |
| Command-1 (BLM Kinport)  | 169.7750 | 163.1500 | 100.0 |  |
| Command-2 (BLM Malad)    | 169.7750 | 163.1500 | 151.4 |  |
| Command-3 (FS Scout Mtn) | 172.2250 | 168.1500 | 136.5 |  |
| Tactical (BLM Tac 4)     | 166.8000 | 166.8000 |       |  |

| ZONE 4                    |          |          |       |  |
|---------------------------|----------|----------|-------|--|
| Description               | Rx       | Tx       | Tone  |  |
| Command-1 (FS Sedgewick)  | 172.2250 | 168.1500 | 100.0 |  |
| Command-2 (BLM Kelly)     | 169.7750 | 163.1500 | 141.3 |  |
| Command-3 (FS Caribou)    | 172.2250 | 168.1500 | 131.8 |  |
| Command-4 (BLM Big Butte) | 169.7750 | 163.1500 | 114.8 |  |
| Tactical (FS Tac 3)       | 164.8250 | 164.8250 |       |  |

| ZONE 5                     |          |          |       |  |
|----------------------------|----------|----------|-------|--|
| Description                | Rx       | Tx       | Tone  |  |
| Command-1 (FS Paris Pk.)   | 172.2250 | 168.1500 | 107.2 |  |
| Command-2 (BLM Sedgewick)  | 169.7750 | 163.1500 | 131.8 |  |
| Command-3 (FS Stewart Pk.) | 172.2250 | 168.1500 | 123.0 |  |
| Tactical (BLM Tac 1)       | 172.7750 | 172.7750 |       |  |

|                            |          |          |       |  |
|----------------------------|----------|----------|-------|--|
| Tactical (BLM Tac 4)       | 166.8000 | 166.8000 |       |  |
| EMS 2                      | 155.2800 | 155.2800 |       |  |
| BLM Portable Fire Repeater | 169.7750 | 163.1500 | 167.9 |  |

FOR OFFICIAL USE ONLY

The data contained in this document is Sensitive but Unclassified (SBU) and is not releasable under the Freedom of Information Act

| GROUP 12 Caribou-Targhee NF |                     |               |          |          |          |          |              |
|-----------------------------|---------------------|---------------|----------|----------|----------|----------|--------------|
| Chnl #                      | Site Name           | Channel Label | RX Freq  | RX CTCSS | TX Freq  | TX CTCSS | Narrow/ Wide |
| 1                           | Targhee Repeater    | TAF RPT       | 170.5250 |          | 164.9875 | 107.2    | N            |
| 2                           | Caribou Repeater    | CAF RPT       | 170.5500 |          | 164.9625 | 114.8    | N            |
| 3                           | IF BLM Repeater     | IF RPT        | 169.7750 |          | 163.1500 | 123.0    | N            |
| 4                           | FS Tactical 2       | FS TAC 2      | 168.1750 |          | 168.1750 | 131.8    | N            |
| 5                           | FS Tactical 3       | FS TAC 3      | 166.9875 |          | 166.9875 | 136.5    | N            |
| 6                           | BLM Tactical 1      | IF TAC 1      | 172.7750 |          | 172.7750 | 146.2    | N            |
| 7                           | BLM Tactical 3      | IF TAC 3      | 168.6375 |          | 168.6375 | 141.3    | N            |
| 8                           | BLM Tactical 4      | IF TAC 4      | 166.8000 |          | 166.8000 | 167.9    | N            |
| 9                           | Lemhi Tactical 5    | IF TAC 5      | 171.5250 |          | 171.5250 | 100.0    | N            |
| 10                          | Air To Ground 49    | A/G 49        | 168.0375 |          | 168.0375 | 110.9    | N            |
| 11                          | Air To Ground 17    | A/G 17        | 167.9875 |          | 167.9875 | 110.9    | N            |
| 12                          | Deck                | DECK          | 163.1000 |          | 163.1000 | 000.0    | N            |
| 13                          | Common Use          | COMM          | 168.3500 |          | 168.3500 | 000.0    | N            |
| 14                          | EMS 2               | EMS 2         | 155.2800 |          | 155.2800 | 156.7    | N            |
| 15                          | Local Flight Follow | LOC FF        | 167.1500 |          | 167.1500 | 114.8    | N            |
| 16                          | Air Guard           | GUARD         | 168.6250 |          | 168.6250 | 110.9    | N            |

**Dispatch for Caribou-Targhee is identified as Eastern Idaho Dispatch**

| Tones: Set radio to desired command channel (CH 1 - 3) and press numbers 1-9 on keypad to enter desired repeater.                           |                      |                     |   |  |
|---|----------------------|---------------------|---|--|
| Channel 1<br>TAF RPT  | Channel 2<br>CAF RPT | Channel 3<br>IF RPT | ≡ |  |
|   | Paris Peak           | Garns               | 1 |  |
|   | Hells Hole           | Big Butte           | 2 |  |
| Relay Ridge   | Stewart Peak         |                     | 3 |  |
| Mahogany Peak   | Caribou Mtn.         | Sedgewick           | 4 |  |
| Signal Peak   | Scout Mtn.           |                     | 5 |  |
| Sawtell Peak  | Blue Springs         |                     | 6 |  |
|   |                      | Kelly               | 7 |  |
| Red Peak  | Sedgewick            |                     | 8 |  |
|   |                      | Sedgewick           | 9 |  |
| <p><b>Use To Talk To All Idaho Air Ambulances</b></p> <p>Radio on Channel 15, Select tone 15</p> <p>Radio on Channel 16, Select tone 16</p> |                      |                     |   |  |

The data contained in this document is Sensitive but Unclassified (SBU) and is not releasable under the Freedom of Information Act

| GROUP 13 Shoshone NF |                              |               |          |          |          |          |              |
|----------------------|------------------------------|---------------|----------|----------|----------|----------|--------------|
| Chnl #               | Site Name                    | Channel Label | RX Freq  | RX CTCSS | TX Freq  | TX CTCSS | Narrow/ Wide |
| 1                    | NZ Direct                    | NZ DIRECT     | 170.5000 |          | 170.5000 | 110.9    | N            |
| 2                    | Dead Indian Repeater         | DEAD IND      | 170.5000 |          | 164.1000 | 156.7    | N            |
| 3                    | Meadow Lake Repeater         | MEADOWLK      | 170.5000 |          | 164.1000 | 123.0    | N            |
| 4                    | Clayton Repeater             | CLAYTON       | 170.5000 |          | 164.1000 | 131.8    | N            |
| 5                    | Carter Mtn. Repeater         | CARTER MTN    | 170.5000 |          | 164.1000 | 146.2    | N            |
| 6                    | Wood Ridge Repeater          | WOOD RIDGE    | 170.5000 |          | 164.1000 | 103.5    | N            |
| 7                    | Clarks Fork/Washakie Direct  | CF/WK DIRECT  | 172.3250 |          | 172.3250 | 110.9    | N            |
| 8                    | Washakie Black Mtn. Repeater | WK BLACK      | 172.3250 |          | 164.8250 | 131.8    | N            |
| 9                    | Cyclone Repeater             | CYCLONE       | 172.3250 |          | 164.8250 | 156.7    | N            |
| 10                   | South Pass Repeater          | SOUTH PASS    | 172.3250 |          | 164.8250 | 123.0    | N            |
| 11                   | Blue Ridge Repeater          | BLUE RIDGE    | 172.3250 |          | 164.8250 | 167.9    | N            |
| 12                   | WR Direct                    | WR DIRECT     | 172.3750 |          | 172.3750 | 110.9    | N            |
| 13                   | WR Black Mtn. Repeater       | WR BLACK      | 172.3750 |          | 164.8750 | 131.8    | N            |
| 14                   | Indian Ridge Repeater        | INDIAN RIDGE  | 172.3750 |          | 164.8750 | 146.2    | N            |
| 15                   | Lava Mtn. Repeater           | LAVA          | 172.3750 |          | 164.8750 | 103.5    | N            |
| 16                   | Windy Ridge Repeater         | WINDY RIDG    | 172.3750 |          | 164.8750 | 110.9    | N            |

The data contained in this document is Sensitive but Unclassified (SBU) and is not releasable under the Freedom of Information Act

| GROUP 14 Shoshone NF |  |               |          |          |          |          |             |
|----------------------|--|---------------|----------|----------|----------|----------|-------------|
| Chnl #               | Site Name  | Channel Label | RX Freq  | RX CTCSS | TX Freq  | TX CTCSS | Narrow/Wide |
| 1                    | WK Direct  | WK DIR        | 172.3250 |          | 172.3250 | 110.9    | N           |
| 2                    | WK Black Mtn. Repeater                                   | WK BLACK      | 172.3250 |          | 164.8250 | 131.8    | N           |
| 3                    | Cyclone Pass Repeater                                    | CYCLONE       | 172.3250 |          | 164.8250 | 156.7    | N           |
| 4                    | South Pass Repeater                                      | SOUTH PASS    | 172.3250 |          | 164.8250 | 123.0    | N           |
| 5                    | Blue Ridge Repeater                                      | BLUE RDG      | 172.3250 |          | 164.8250 | 167.9    | N           |
| 6                    | WR Direct  | WR DIR        | 172.3750 |          | 172.3750 | 110.9    | N           |
| 7                    | WR Black Mtn. Repeater                                   | WR BLACK      | 172.3750 |          | 164.8750 | 131.8    | N           |
| 8                    | Lava Mtn. Repeater                                       | LAVA          | 172.3750 |          | 164.8750 | 103.5    | N           |
| 9                    | Indian Ridge Repeater                                    | INDIAN        | 172.3750 |          | 164.8750 | 146.2    | N           |
| 10                   | Windy Ridge Repeater                                     | WINDY RDG     | 172.3750 |          | 164.8750 | 123.0    | N           |
| 11                   | Shoshone TAC   | SHO TAC       | 168.7500 |          | 168.7500 | 000.0    | N           |
| 12                   | BLM Copper Mtn Repeater                                  | BLM COPPER    | 168.5250 |          | 172.4375 | 131.8    | N           |
| 13                   | Fremont Cnty Sheriff Copper Repeater<br>(Emergency ONLY) | FREMONT SO    | 155.5650 |          | 154.7100 | 107.2    | N           |
| 14                   | National Search & Rescue                                 | NAT SAR       | 155.1600 |          | 155.1600 | 000.0    | N           |
| 15                   | Work 2   | WORK 2        | 168.6125 |          | 168.6125 | 000.0    | N           |
| 16                   | WY State Mutual Aid<br>(Emergency ONLY)                  | MUT AID       | 154.8750 |          | 159.1950 | 100.0    | N           |

The data contained in this document is Sensitive but Unclassified (SBU) and is not releasable under the Freedom of Information Act

| GROUP 15- Yellowstone NP |                |               |          |          |          |          |                 |
|--------------------------|----------------|---------------|----------|----------|----------|----------|-----------------|
| Chnl #                   | Site Name      | Channel Label | RX Freq  | RX CTCSS | TX Freq  | TX CTCSS | Narrow/<br>Wide |
| 1                        | Fire Cache OPS | FC OPS        | 172.5000 |          | 172.5000 | 103.5    | N               |
| 2                        | Direct         | NO DIR        | 166.3250 |          | 166.3250 | 167.9    | N               |
| 3                        | North Rptr     | NO RP         | 166.3250 |          | 166.9250 | 167.9    | N               |
| 4                        | Direct         | DIR           | 166.3750 |          | 166.3750 | 192.8    | N               |
| 5                        | Lamar Rptr     | LAMAR         | 166.3750 |          | 166.9750 | 192.8    | N               |
| 6                        | Cooke Rptr     | COOKE         | 166.3750 |          | 166.9750 | 179.9    | N               |
| 7                        | Direct         | SO DIR        | 165.5875 |          | 165.5875 | 110.9    | N               |
| 8                        | South Rptr     | SOUTH RP      | 165.5875 |          | 164.8000 | 110.9    | N               |
| 9                        | Top Notch Rptr | TOP NOCH      | 165.5875 |          | 164.8000 | 118.8    | N               |
| 10                       | Bechler Rptr   | BECHLER       | 165.5875 |          | 164.8000 | 127.3    | N               |
| 11                       | Direct         | W DIR         | 166.8750 |          | 166.8750 | 136.5    | N               |
| 12                       | West Rptr      | WEST RP       | 166.8750 |          | 169.4000 | 136.5    | N               |
| 13                       | Holmes Rptr    | HOLMES        | 166.8750 |          | 169.4000 | 146.2    | N               |
| 14                       | Direct         | DIR           | 167.1500 |          | 167.1500 | 206.5    | N               |
| 15                       | Work 2         | WORK 2        | 168.6125 |          | 168.6125 | 131.8    | N               |
| 16                       | NPS Direct     | NPS DIR       | 168.6125 |          | 168.6125 | 136.5    | N               |



The data contained in this document is Sensitive but Unclassified (SBU) and is not releasable under the Freedom of Information Act

| GROUP 16- BLM |                          |               |          |          |          |          |             |
|---------------|--------------------------|---------------|----------|----------|----------|----------|-------------|
| Chnl #        | Site Name                | Channel Label | RX Freq  | RX CTCSS | TX Freq  | TX CTCSS | Narrow/Wide |
| 1             | Mutual Aid Tac           | VFIRE 21      | 154.2800 |          | 154.2800 | 000.0    | N           |
| 2             | Law/Mutual Aid           | LMA           | 154.8750 |          | 154.8750 | 000.0    | N           |
| 3             | Tactical Simplex Channel | SCENE         | 166.0875 |          | 166.0875 | 000.0    | N           |
| 4             | Common-Use Incident      | HORSE 1       | 163.1000 |          | 163.1000 | 173.8    | N           |
| 5             | Common-Use Incident      | HORSE 2       | 168.3500 |          | 168.3500 | 173.8    | N           |
| 6             | HDD-BLM Rock Springs     | RKSP BASE     | 168.5750 |          | 168.5750 | 000.0    | N           |
| 7             | HDD-BLM Repeater         | HOGSBACK      | 168.5750 |          | 165.0000 | 110.9    | N           |
| 8             | HDD-BLM Repeater         | TWINBUTTE     | 168.5750 |          | 165.0000 | 123.0    | N           |
| 9             | HDD-BLM Repeater         | EVANSTON      | 168.5750 |          | 165.0000 | 131.8    | N           |
| 10            | HDD-BLM Repeater         | LITTLE MTN    | 168.5750 |          | 165.0000 | 136.5    | N           |
| 11            | BLM Portable Repeater    | PORT RPTR     | 168.5750 |          | 165.0000 | 167.9    | N           |
| 12            | BLM Fire 2 Tactical      | BLMFIRE2      | 166.8250 |          | 166.8250 | 000.0    | N           |
| 13            | A/G 35                   | A/G 35        | 167.2250 |          | 167.2250 | 110.9    | N           |
| 14            | A/G 14                   | A/G 14        | 167.5000 |          | 167.5000 | 110.9    | N           |
| 15            | Air Medical VMED 28      | VMED28        | 155.3400 |          | 155.3400 | 156.7    | N           |
| 16            | Air Guard                | AIRGRD        | 168.6250 |          | 168.6250 | 110.9    | N           |

The data contained in this document is Sensitive but Unclassified (SBU) and is not releasable under the Freedom of Information Act

| GROUPS 17 - 25 Weather - Clone to these groups |                      |               |          |          |         |          |              |
|--|----------------------|---------------|----------|----------|---------|----------|--------------|
| Chnl #   | Site Name            | Channel Label | RX Freq  | RX CTCSS | TX Freq | TX CTCSS | Narrow/ Wide |
| 1  | NOAA Weather Radio 1 | WX 1          | 162.4000 |          |         |          | N            |
| 2  | NOAA Weather Radio 2 | WX 2          | 162.4250 |          |         |          | N            |
| 3  | NOAA Weather Radio 3 | WX 3          | 162.4500 |          |         |          | N            |
| 4  | NOAA Weather Radio 4 | WX 4          | 162.4750 |          |         |          | N            |
| 5  | NOAA Weather Radio 5 | WX 5          | 162.5000 |          |         |          | N            |
| 6  | NOAA Weather Radio 6 | WX 6          | 162.5250 |          |         |          | N            |
| 7  | NOAA Weather Radio 7 | WX 7          | 162.5500 |          |         |          | N            |
| 8  |                      |               |          |          |         |          |              |
| 9  |                      |               |          |          |         |          |              |
| 10   |                      |               |          |          |         |          |              |
| 11   |                      |               |          |          |         |          |              |
| 12   |                      |               |          |          |         |          |              |
| 13   |                      |               |          |          |         |          |              |
| 14   |                      |               |          |          |         |          |              |
| 15   |                      |               |          |          |         |          |              |
| 16   |                      |               |          |          |         |          |              |

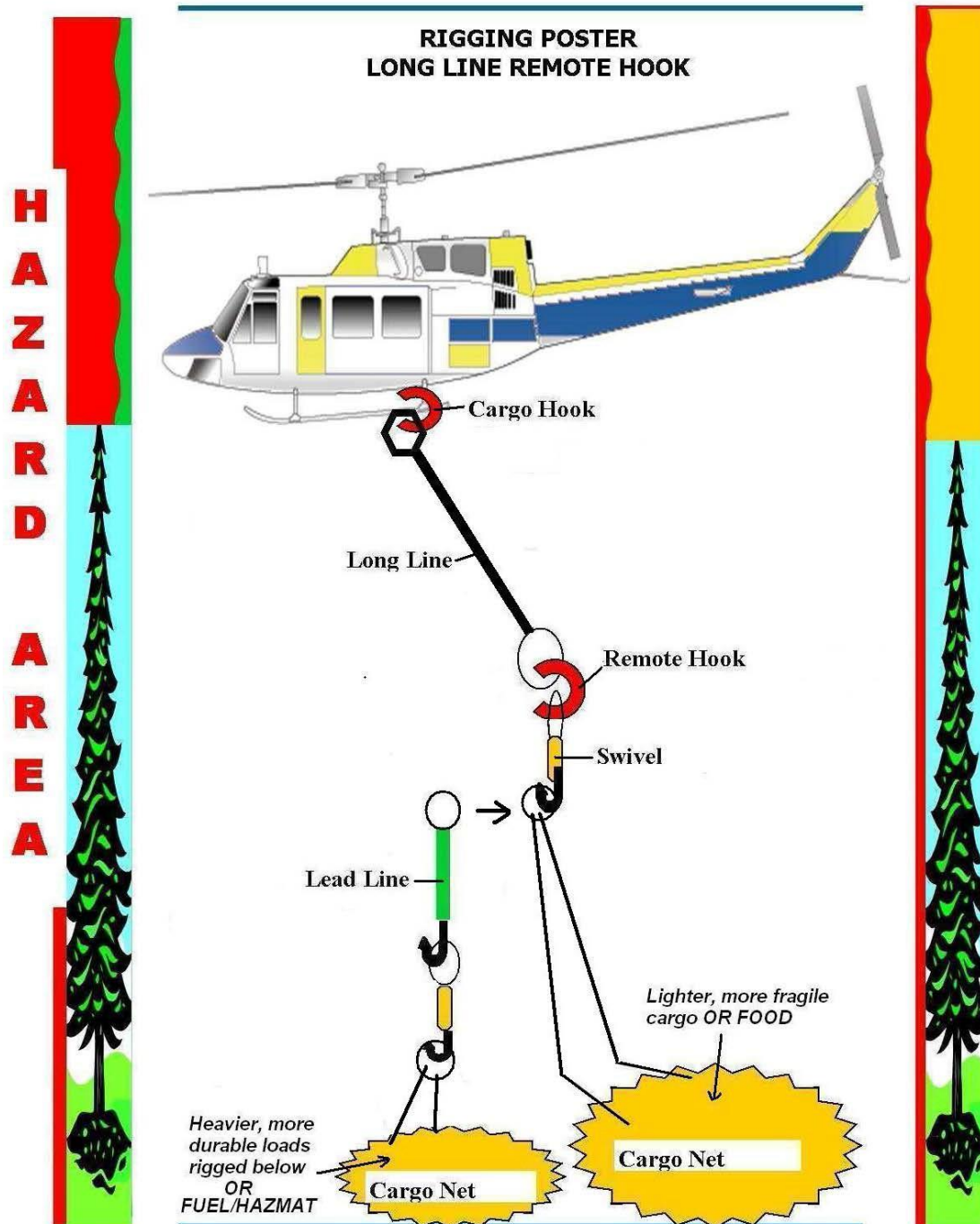
**Note:** All groups must have at least one channel programmed to allow for cloning. Otherwise the group will show disabled and require a PC to program.

# AVIATION

Long line operations  
BTF Helispots  
Common weights  
12 Standard Aviation Watch Outs



## BTF Aerial Hazard Map



## BTNF Helispots

| Waypoint                 | Elev   | Lat          | Long          | Type          |
|--------------------------|--------|--------------|---------------|---------------|
| Afton                    | 6200'  | 42° 42.81' N | 110° 56.38' W | Temp Helibase |
| Blackrock                | 6900'  | 43° 49.64' N | 110° 20.93' W | Temp Helibase |
| Bradley                  | 9300'  | 43° 12.32' N | 110° 15.32' W | Repeater      |
| Bacon Ridge              | 10000' | 43° 23.98' N | 110° 07.01' W | Repeater      |
| Bryan Flat               | 6300'  | 43° 16.58' N | 110° 38.76' W | Temp Helibase |
| Colter Bay Dump          | 7100'  | 43° 54.54' N | 110° 37.24' W | Temp Helibase |
| Deadline                 | 10200' | 42° 25.68' N | 110° 29.59' W | Repeater      |
| Elkhart                  | 9400'  | 43° 00.23' N | 109° 42.06' W | Repeater      |
| Flagg Ranch              | 6800'  | 44° 05.48' N | 110° 40.79' W | Helispot      |
| Grahm                    | 10300' | 42° 27.27' N | 110° 40.56' W | Repeater      |
| Gros Ventre River Site   | 6600'  | 43° 38.44' N | 110° 35.04' W | Helispot      |
| Hoback Guard Station     | 6600'  | 43° 13.13' N | 110° 25.29' W | Helispot      |
| LaBarge Meadows          | 8500'  | 42° 30.65' N | 110° 41.26' W | Temp Helibase |
| Lava                     | 10400' | 43° 49.49' N | 110° 05.14' W | Repeater      |
| Lower Saddle             | 11600' | 43° 44.08' N | 110° 48.64' W | Helispot      |
| Lupine Meadows           | 6600'  | 43° 44.60' N | 110° 43.82' W | Temp Helibase |
| McCain Meadows           | 6800'  | 43° 05.31' N | 110° 43.26' W | Temp Helibase |
| Moran Ball Fields        | 6800'  | 43° 50.49' N | 110° 30.37' W | Temp Helibase |
| Muddy                    | 9300'  | 42° 36.92' N | 109° 18.81' W | Repeater      |
| North Fork Pine Creek    | 6000'  | 43° 37.21' N | 111° 15.63' W | Helispot      |
| Pinyon                   | 9700'  | 43° 23.11' N | 109° 54.06' W | Repeater      |
| Pow Wow                  | 9600'  | 43° 14.04' N | 110° 43.42' W | Repeater      |
| Ramshorn                 | 10200' | 43° 13.68' N | 110° 34.04' W | Repeater      |
| Rendevous                | 10500' | 43° 34.58' N | 110° 32.19' W | Repeater      |
| Shadow Mountain          | 6400'  | 43° 42.35' N | 110° 37.20' W | Helispot      |
| St. Johns Medical Center | 6300'  | 43° 28.81' N | 110° 44.93' W | Hospital      |
| Swan Valley              | 5300'  | 43° 26.84' N | 111° 19.80' W | Helibase      |

### Airport Gate Codes:

**Big Piney:** 2222  
**Kemmerer:** 9009  
**Pinedale:** 3254

**Alpine:** 1111  
**Afton:** 1228

## HELICOPTER EXTERNAL CARGO OPS

**Determine:** Ensure adequate long-lines by providing helibase with accurate tree heights!

- Helicopter/Departure path- (ie 1 way or 2 way)
- Longline Length needed
- Best site location
- Adequate Safety Circle

### Give Pilot Your:

- Wind Speed/Direction
- Weight of Load
- Where load is going
- Hazards- ground and aerial
- If there is Hazmat in load

### Hook-up/Daisy Chain

- Each Net requires a swivel
- Lead line attaches from swivel to swivel
- Hazmat on bottom, (if no -Hazmat heavier load on bottom)

**Above All:** Make sure a swivel is always hooked to the remote hook. Let hook hit the ground before touching.

## KEEP YOUR EYES ON THE HOOK /HELICOPTER AT ALL TIMES

**\*LONG LINE AND REMOTE HOOK WEIGHTS ARE AIRCRAFT SPECIFIC, ASK BEFORE MANIFESTING \***

TIH=Teton Interagency Helitack

| WEIGHTS                  |     |                        |     |
|--------------------------|-----|------------------------|-----|
| ITEMS                    | LBS | ITEMS                  | LBS |
| 50' Longline (TIH)       | 17  | MRE Case               | 25  |
| 100' Longline(TIH)       | 26  | Batteries Case         | 10  |
| 150' Longline (TIH)      | 32  | Trauma Bag             | 25  |
| Remote Hook (TIH)        | 16  | Fusee Case             | 36  |
| Swivel                   | 5   | Hose 3/4" (case 1000') | 30  |
| Cargo Net 12' x 12'      | 20  | Hose100' 1"- Dry       | 15  |
| Cargo Net 20' x 20'      | 45  | Hose 100' 1 1/2"-Dry   | 25  |
| Cargo Net - Tuna         | 5   | Hose-Draft 2"x 8'      | 10  |
| Lead Line                | 10  | Gated Wye 1 1/2"       | 5   |
| 20lb Fire Extinguisher   | 25  | Chainsaw               | 25  |
| Jerry/Fuel Can-Full      | 45  | Drip Torch Full        | 15  |
| Dolmar-Full              | 15  | Cubie-Full             | 45  |
| Backpack Pump Empty      | 5   | Hand Tool              | 8   |
| Backpack Pump Full       | 45  | Mark III pump w/kit    | 150 |
| 72 gallon Blivet (Empty) | 15  |                        |     |
| 72 Gallon Blivet (Full): | 670 |                        |     |
|                          |     |                        |     |
|                          |     |                        |     |
|                          |     |                        |     |
|                          |     |                        |     |

### 12 Standard Aviation Watch Out ?'s

1. Is this flight necessary?
2. Who is in charge?
3. Are all hazards identified and have you made them known?
4. Should you stop the operation on the flight due to change in conditions? (Comms, weather, confusion, Turbulence, Personnel, Conflicting Priorities)
5. Is there a better way to do it?
6. Are you driven by an Overwhelming sense of urgency?
7. Can you justify your actions?
8. Are there other aircraft in the area?
9. Do you have an escape route?
10. Are there any rules being broken?
11. Are communications getting tense?
12. Are you deviating from the assigned ops of the flight?

Anyone can refuse or curtail a flight when an unsafe condition may exist. Never let undue pressure (expressed or implied) influence your judgment or decisions. Avoid mistakes, don't hurry!

**TETON INTERAGENCY FIRE RESOURCES - Updated 04/23/2019**  
**FOR OFFICIAL USE ONLY (Area Code 307 unless specified)**

**FIRE MANAGEMENT**

| <b>Name:</b>      | <b>Work Location</b> | <b>Title</b>              | <b>Work</b>  | <b>Home</b> | <b>Gov Cell</b> | <b>Personal Cell</b> |
|-------------------|----------------------|---------------------------|--------------|-------------|-----------------|----------------------|
| Tobin Kelley      | Supervisor's Office  | Fire Mgt Officer/FAO      | 739-5576     |             | 413-2028        |                      |
| Mike Johnston     | Supervisor's Office  | Asst. Fire Mgt Officer    | 739-5581     |             | 413-2022        |                      |
| Andy Norman       | Supervisor's Office  | Fuels Specialist          | 739-5571     | 733-0396    | 413-2033        |                      |
| David Gomez       | Moose/Jackson SO     | Aviation Officer          | 739-3339     |             |                 | 307-413-4209         |
| Eric Neiswanger   | Moose/Jackson RD     | Fire Planner              |              |             |                 | 321-277-4489         |
| Leslie Porter     | Big Piney            | Fire Buss Mgmt officer    | 276-5824     | 276-5347    | 413-2482        |                      |
| Heidi Zardus      | Supervisor's Office  | Fire Cache                | 739-5079     | 733-6104    | 690-1294        | FAX 739-5579         |
| Mark Monti        | Supervisor's Office  | Fire Cache Assistant      | 739-5547     |             |                 | 330-310-7926         |
| Sharon Smitherman | Jackson RD           | B&F Ofc. (CO for FS TRVL) | 739-5586     |             |                 |                      |
| Mike Reed         | Draper, UT           | R4 FS Radio Supervisor    | 801-777-9100 |             | 801-663-1849    |                      |
| Mark Willer       | Idaho Falls, ID      | CTF Radio Technician      | 208-270-9803 |             |                 |                      |
| Kara Stringer     | GBCC                 | Deputy Center Mgr         | 801-531-5320 |             |                 | 406-471-4600         |
| Tonya Campbell    | Ogden, UT            | R4 Fire Contracting Ofc   |              |             |                 | 801-625-5811         |

| Wyoming State Forestry Division |          | Title               | Work     | Home | Gov Cell | Personal Cell |
|---------------------------------|----------|---------------------|----------|------|----------|---------------|
| Anthony Schultz                 | Cheyenne | State FMO           | 777-3368 |      | 286-6315 |               |
| Chris Fallbeck                  | Cheyenne | State AFMO          | 777-8017 |      | 631-2594 |               |
| Shielah Esterhodt               | Cheyenne | Fire Bus. Mgr       | 777-7060 |      | 241-2757 |               |
| Barry Tye                       | Lyman    | District 4 Forester | 787-6148 |      |          |               |

| <b>Law Enforcement:</b> | <b>Station</b>    | <b>Title</b>          | <b>Work</b>  | <b>Home</b> | <b>Gov Cell</b> | <b>Personal Cell</b> |
|-------------------------|-------------------|-----------------------|--------------|-------------|-----------------|----------------------|
| Adam Dale               | Pinedale D1/D2/D7 | LEO/Fire Investigator | 886-5332     |             | 699-1990        |                      |
| Veronica Gooding        | Blackrock D4/D6   | LEO/Fire Investigator | 739-5573     |             | 208-520-1323    |                      |
| Matt Jemmett            | Idaho Falls D3    | LEO/Fire Investigator | 208-542-5819 |             | 208-270-4248    |                      |

| <b>North Zone:</b> | <b>Station</b> | <b>Title</b>          | <b>Work</b> | <b>Home</b>  | <b>Gov Cell</b> | <b>Personal Cell</b> |
|--------------------|----------------|-----------------------|-------------|--------------|-----------------|----------------------|
| Steve Markason     | Jackson        | North Zone FMO        | 739-5431    | 732-0047     | 413-2032        | 307-690-5185         |
| Dave Wilkins       | Jackson        | AFMO-Ops              | 739-5418    |              |                 | 307-690-5366         |
| Andy Hall          | Jackson        | AFMO-Fuels            | 739-5425    |              | 699-4230        | 208-716-0763         |
| Lesley Williams    | Jackson        | Prevention 741        | 739-5424    | 208-354-0070 | 413-2483 (2nd)  | 307-774-4209         |
| Jacob Henrie       | Jackson        | North Zone Fuels Tech |             |              |                 | 307-699-2542         |
| Annette Ayala      | Jackson        | North Zone Apprentice |             |              |                 |                      |

| <b>Engine 441:</b> | <b>Station</b> | <b>Title</b>             | <b>Work</b> | <b>Home</b> | <b>Gov Cell</b> | <b>Personal Cell</b> |
|--------------------|----------------|--------------------------|-------------|-------------|-----------------|----------------------|
| Chip Gerdin        | Jackson        | Engine 441 Captain       | 739-5419    |             | 307-413-4086    | 307-248-1271         |
| Patrick Tenney     | Jackson        | Engine 441 Captain       | 739-5429    |             | 307-200-1411    | 307-752-0343         |
| Ross Dary          | Jackson        | Engine 441 Asst. Captain | 739-5438    |             |                 | 920-318-6515         |
| Adrienne Hines     | Jackson        | Engine 441 Senior FF     | 739-5421    |             |                 | 651-492-1798         |
| Michael Kirby      | Jackson        | Engine 441 Crew          | 739-5419    |             |                 | 910-639-2034         |
| Henry Sollet       | Jackson        | Engine 441 Crew          | 739-5419    |             |                 | 307-690-0980         |
| Eric Jacobson      | Jackson        | Engine 441 Crew          | 739-5419    |             |                 | 307-699-1102         |

| <b>Teton Fire Module</b> | <b>Station</b> | <b>Title</b>         | <b>Work</b> | <b>Home</b> | <b>Gov Cell</b> | <b>Personal Cell</b> |
|--------------------------|----------------|----------------------|-------------|-------------|-----------------|----------------------|
| Izaak McHenry            | Blackrock      | Crew Supervisor      | 543-3901    |             |                 | 435-669-4794         |
| Eric Hawes               | Blackrock      | Asst Crew Supervisor | 543-3907    |             | 699-1705        | 518-281-6417         |
| Jonathan Bontrager       | Blackrock      | Squad Boss           | 543-3908    |             |                 | 906-450-5979         |
| Andrew Dockins           | Blackrock      | Squad Boss           | 543-3908    |             |                 | 573-382-3601         |
| Rachel Helmerichs        | Blackrock      | Crewmember           | 543-3908    |             |                 | 217-381-7425         |
| Dove Henry               | Blackrock      | Crewmember           | 543-3908    |             |                 | 406-317-3688         |
| Eli Berman               | Blackrock      | Crewmember           | 543-3908    |             |                 | 847-924-2656         |
| Kyler Knapp              | Blackrock      | Crewmember           | 543-3908    |             |                 | 815-842-7831         |
| Garrett Blodgett         | Blackrock      | Crewmember           | 543-3908    |             |                 | 704-654-6073         |

| <b>Teton Co Fire&amp;EMS</b> |              |                     |          |  |          |  |
|------------------------------|--------------|---------------------|----------|--|----------|--|
| TCSO                         | Teton County | Sheriff Office      | 733-2331 |  |          |  |
| Brady Hansen                 | Teton County | Teton Co Fire Chief | 733-4732 |  | 699-8188 |  |

| <b>National Elk Refuge</b> | <b>Station</b> | <b>Title</b> | <b>Work</b> | <b>Home</b> | <b>Gov Cell</b> | <b>Personal Cell</b> |
|----------------------------|----------------|--------------|-------------|-------------|-----------------|----------------------|
|----------------------------|----------------|--------------|-------------|-------------|-----------------|----------------------|

|   |                |                           |                   |                        |                 |                      |
|---|----------------|---------------------------|-------------------|------------------------|-----------------|----------------------|
| Brian Glaspell  | Jackson        | Refuge Manager            | 201-5409          |                        | 690-0905        |                      |
| Cris Dippel   | Jackson        | Deputy Refuge Mgr         | 201-5436          | 970-818-6622           | 307-203-6798    |                      |
| Bryan Yetter  | Jackson        | LEO                       | 201-5435          |                        | 699-3665        |                      |
| Lori Iverson  | Jackson        | Outdoor Rec Planner       | 201-5433          | 733-2791               | 690-4375        |                      |
| Tracy Swenson   | Utah           | Regional FMO FWS          | 435 734-6449      |                        | 435-740-0572    |                      |
| Erik Haberstick   | Utah           | Regional AFMO             | 435-734-6425      |                        | 435-881-5715    |                      |
| <b>TETON INTERAGENCY FIRE RESOURCES - Updated 05/20/2019</b>  |                |                           |                   |                        |                 |                      |
| <b>FOR OFFICIAL USE ONLY (Area Code 307 unless specified)</b> |                |                           |                   |                        |                 |                      |
| <b>East Zone:</b>   | <b>Station</b> | <b>Title</b>              | <b>Work</b>       | <b>Home</b>            | <b>Gov Cell</b> | <b>Personal Cell</b> |
| Paul Hutta  | Pinedale       | East Zone FMO             | 367-5735          | 367-7197               | 413-0542        |                      |
| Brian Nate  | Big Piney      | AFMO-Ops                  | 367-5732          |                        |                 | 208-221-6236         |
| Paul Swenson  | Pinedale       | AFMO-Fuels                | 367-5711          |                        |                 | 231-9180             |
| Nan Stinson   | Big Piney      | Prevention 21             | 367-5748          | 231-5731               | 413-0285        |                      |
| Paul Marone   | Pinedale       | Fuels Tech                | 367-5721          |                        |                 | 307-231-5721         |
| <b>Engine 671:</b>  | <b>Station</b> | <b>Title</b>              | <b>Work</b>       | <b>Home</b>            | <b>Gov Cell</b> | <b>Personal Cell</b> |
| Kendra Jackson  | Pinedale       | Engine 671 Captain        | 367-5713          |                        |                 | 702-830-1742         |
| Rock Byrd   | Pinedale       | Engine 671 FEO            | 367-5737          |                        |                 | 406-570-7487         |
| Stephen Anderson  | Pinedale       | Engine 671 AFEO           | 367-5720          |                        |                 | 208-993-3668         |
| Danny Chappell  | Pinedale       | Engine 671 SRFF           |                   |                        |                 | 845-701-6972         |
| Titus Perkins   | Pinedale       | Engine 671 Crew           |                   |                        |                 | 970-231-4734         |
| Leslie Pratt  | Pinedale       | Engine 671 Crew           |                   |                        |                 | 970-381-9027         |
| Carson Stinson  | Pinedale       | Engine 671 Crew           |                   |                        |                 | 307-231-9575         |
| <b>Engine 421:</b>  | <b>Station</b> | <b>Title</b>              | <b>Work</b>       | <b>Home</b>            | <b>Gov Cell</b> | <b>Personal Cell</b> |
| Mike Greer  | Big Piney      | Engine 421 Capt.          | 276-5822          |                        |                 | 602-400-1142         |
| Phillip Karius  | Big Piney      | Engine 671 FEO            | 276-5825          |                        |                 | 970-568-2659         |
| Vacant  | Big Piney      | Engine 421 AFEO           | 276-5833          |                        |                 |                      |
| Hayden Hoelscher  | Big Piney      | Engine 421 SRFF           | 276-5833          |                        |                 | 802-558-3261         |
| Patrick Breen   | Big Piney      | Engine 421 Crew           | 276-5833          | 276-5469               |                 | 585-576-0010         |
| Sam Wasserman   | Big Piney      | Engine 421 Crew           | 276-5833          |                        |                 | 617-960-7721         |
| Joslynn Quintero  | Big Piney      | Engine 421 Crew           | 276-5833          |                        |                 | 208-847-5654         |
| Sam Drangeid  | Big Piney      | Engine 421 Crew           | 276-5833          |                        |                 | 715-432-7900         |
| <b>Sublette Co Fire:</b>                                      |                | <b>Dispatch- Non Emer</b> | <b>367-4378X6</b> |                        |                 |                      |
| Shad Cooper   | Sublette Co    | County Fire Warden        | 367-4550          |                        | 360-3110        |                      |
| John Ball   | Sublette Co    | Deputy County Fire Warden | 276-4883          |                        | 260-8203        | 307-360-8180         |
| <b>West Zone</b>  | <b>Station</b> | <b>Title</b>              | <b>Work</b>       | <b>Home</b>            | <b>Gov Cell</b> | <b>Personal Cell</b> |
| Eddie Taylor  | Afton          | FMO (detailed)            | 828-5112          |                        | 200-1767        |                      |
| Chad Machmer  | Kemmerer       | AFMO Fuels                | 828-5117          | 877-2284               |                 | 208-357-8895         |
| Vacant  | Kemmerer       | AFMO Operations           | 828-5116          |                        |                 |                      |
| Angie Crook   | Afton          | Prevention 31             | 886-5336          |                        | 413-2146        | 413-7299             |
| <b>Engine 631:</b>  | <b>Station</b> | <b>Title</b>              | <b>Work</b>       | <b>Home</b>            | <b>Gov Cell</b> | <b>Personal Cell</b> |
| Adam Hansen   | Afton          | Engine 631 SFEO           | 886-5335          |                        | 413-2145        | 435-232-3943         |
| Tracy Fluckiger   | Afton          | Engine 631 FEO            | 886-5340          |                        |                 | 307-248-1288         |
| Vacant  | Afton          | Engine 631 AFEO           |                   |                        |                 |                      |
| Jedediah Barnes   | Afton          | Engine 631 Senior FF      | 886-5334          |                        |                 | 307-739-9431         |
| Josh Preciado   | Afton          | Engine 631Crew            | 886-5334          |                        |                 | 321-522-8050         |
| Jacqueline Buce   | Afton          | Engine 631 Crew           | 886-5334          |                        |                 | 360-303-7656         |
| Steve McGrath   | Afton          | Engine 631 Crew           | 886-5334          |                        |                 | 617-966-1480         |
| <b>Engine 411:</b>  | <b>Station</b> | <b>Title</b>              | <b>Work</b>       | <b>Home</b>            | <b>Gov Cell</b> | <b>Personal Cell</b> |
| Cody McFarland  | Kemmerer       | Engine 411 Captain        | 828-5124          |                        |                 | 605-490-9011         |
| Thomas (Derek) Harbour  | Kemmerer       | Engine 411 FEO            | 828-5125          |                        |                 | 406-360-5978         |
| Clancy Compton  | Kemmerer       | Engine 411 AFEO           | 828-5123          |                        |                 | 435-881-1324         |
| Erik Becker   | Kemmerer       | Engine 411 Crew           | 828-5117          |                        |                 | 402-649-8701         |
| Jacob Noren   | Kemmerer       | Engine 411 Crew           | 828-5125          |                        |                 | 307-401-0379         |
| Ryan Souto  | Kemmerer       | Engine 411 Crew           | 828-5124          |                        |                 | 845-551-7170         |
| Clea Bertholet  | Kemmerer       | Engine 411 Crew           | 828-5125          |                        |                 | 401-741-6450         |
| <b>Lincoln Co Fire:</b>                                       |                | Afton non emergency       | 885-5231X2        | Kemmerer non emergency |                 | 877-3971             |
| Kelly Hoffman   | Cokeville      | County Fire Warden        | 279-3241          | 279-3625               | 270-8103        |                      |
| Mike Duran  | Cokeville      | Cokeville Fire Chief      | 279-3229          |                        |                 |                      |
| Dennis McDonald   | Afton          | Afton Fire Chief          |                   |                        | 884-8104        |                      |
| Mike Vogt   | Alpine         | Alpine Fire Chief         |                   |                        |                 |                      |

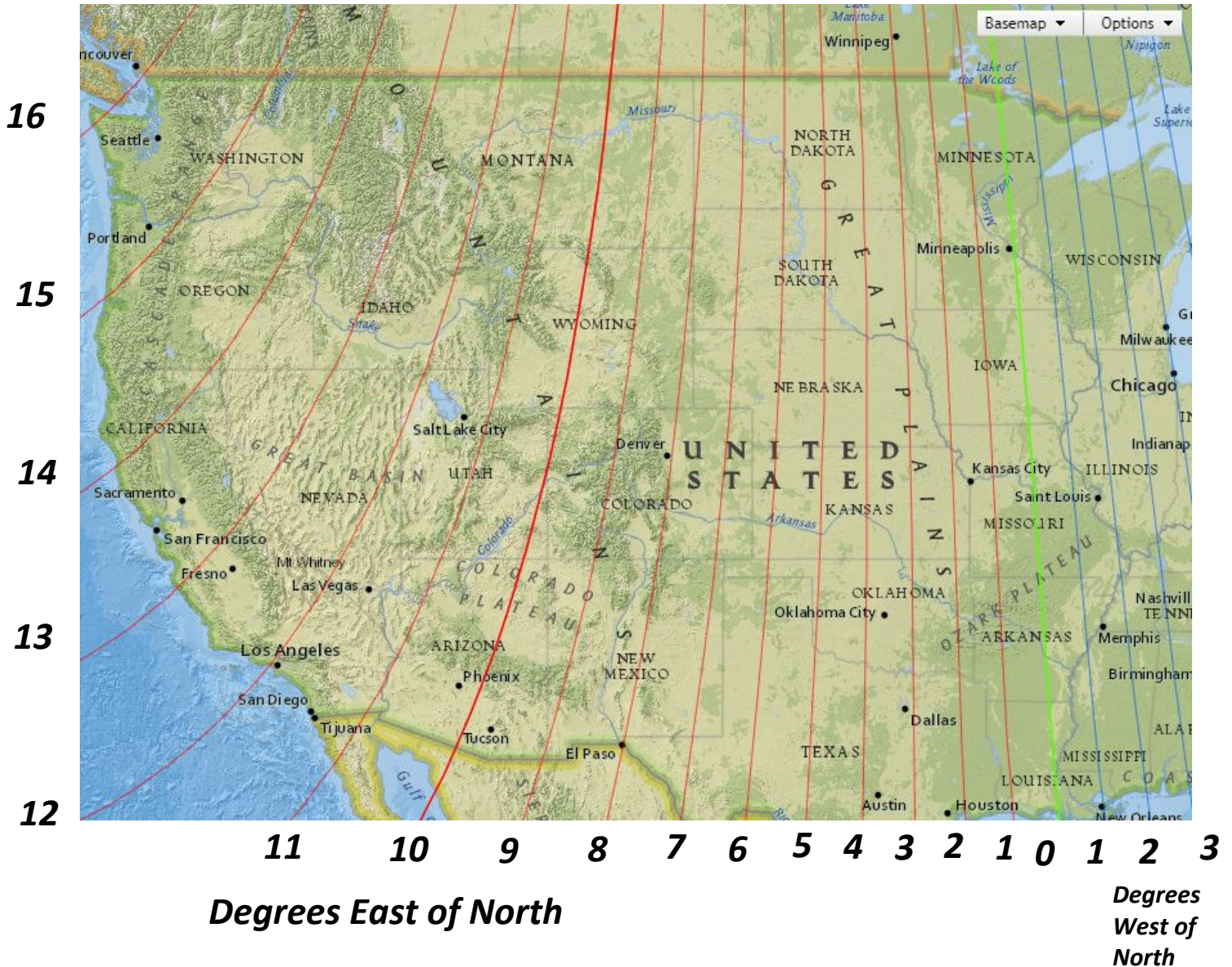


|   |                |                                   |                    |                      |                   |                      |
|---|----------------|-----------------------------------|--------------------|----------------------|-------------------|----------------------|
| Larry Stepp   | LaBarge        | LaBarge Fire Chief                | 390-8299           |                      |                   |                      |
| Delmar Suter  | Thayne         | Thayne Fire Chief                 | 883-2714           |                      |                   |                      |
| Paul Dever  | Kemmerer       | Kemmerer Fire Chief               | 828-2726           | 877-9826             | 727-7745          |                      |
| <b>TETON INTERAGENCY FIRE RESOURCES - Updated 07/18/2018</b>  |                |                                   |                    |                      |                   |                      |
| <b>FOR OFFICIAL USE ONLY (Area Code 307 unless specified)</b> |                |                                   |                    |                      |                   |                      |
| <b>AVIATION PROGRAM:</b>                                      |                |                                   | <b>Work #:</b>     | <b>Home #:</b>       | <b>Cell #:</b>    | <b>Pers Cell #:</b>  |
| David Gomez   | Moose          | Interagency Aviation Officer      | 739-5524           |                      | 413-4209          |                      |
|   |                |                                   |                    |                      |                   |                      |
| <b>Ellsworth AFB</b>  | South Dakota   | IR-499                            | 605-385-4246       |                      |                   |                      |
|   |                |                                   |                    |                      |                   |                      |
| <b>JAC Airport</b>  | Manager        |                                   | 733-7682/7683/7693 |                      |                   |                      |
| JAC Airport   | FAA Tower      |                                   | 732-5499           | **Unlisted number**  |                   |                      |
| JAC Airport   | Security       |                                   | 733-5454           | After hours 413-1519 |                   |                      |
| <b>Heli Express</b>   | Main Office    | <b>Owner/Pilot:</b> Scott Runyon  |                    |                      | 770-722-6522      |                      |
| <b>H-35HX</b>   | JAC Airport    | <b>Pilot:</b> Steve Wilson        |                    |                      | 808-346-2659      |                      |
| <b>H-38HX</b>   | JAC Airport    | <b>Pilot:</b> Cobi Stafford       |                    |                      | 541-968-6390      |                      |
|   | JAC Airport    | <b>Relief Pilot:</b> Zaron Welch  |                    |                      | 602-315-9350      |                      |
|   | JAC Airport    | <b>Mechanic:</b> Cole Deins       |                    |                      | 970-744-0445      |                      |
|   | JAC Airport    | <b>Mechanic:</b> Arturo Baderrama |                    |                      | 702-673-8927      |                      |
|   | JAC Airport    | <b>Relief Mechanic:</b> Don Morey |                    |                      | 970-222-2118      |                      |
| <b>Teton Helibase</b>   | JAC Airport    |                                   | 739-5557           | FAX: 734-1458        | Analog # 734-5177 |                      |
| Jim Dotson  |                | Air Base Manager                  | 739-5572           |                      | 307-413-2024      |                      |
| <b>TETON HELITACK:</b>  | <b>Station</b> | <b>Title</b>                      | <b>Work</b>        | <b>Home</b>          | <b>Gov Cell</b>   | <b>Personal Cell</b> |
| Mike Bentley  | JH Airport     | Helitack Supervisor               | 739-5555           |                      |                   | 307-760-5428         |
| Matt Lancaster  | JH Airport     | Asst. Supervisor                  | 739-5551           |                      |                   | 307-259-3397         |
| Travis Nichols  | JH Airport     | Asst. Supervisor                  | 739-5552           |                      |                   | 541-206-2751         |
| Brianna Bolton  | JH Airport     | Asst. Supervisor (detail)         | 739-5553           |                      |                   | 801-602-2553         |
| Mac Bones   | JH Airport     | Squad Leader                      | 739-5557           |                      |                   | 406-212-4515         |
| Mary Lee  | JH Airport     | Squad Leader                      | 739-5557           |                      |                   | 718-570-7285         |
| Jebediah Quinn  | JH Airport     | Squad Leader                      | 739-5557           |                      |                   | 530-966-3481         |
| Kara Pankratz   | JH Airport     | Senior Firefighter                | 739-5412           |                      |                   | 208-303-0543         |
| Evan Guzik  | JH Airport     | Senior Firefighter                | 739-5412           |                      |                   | 206-473-0477         |
| Ryan Campbell   | JH Airport     | Senior Firefighter                | 739-5412           |                      |                   | 406-544-2066         |
| Brian Bogdanoff   | JH Airport     | Senior Firefighter                | 739-5412           |                      |                   | 406-369-8502         |
| Michael Wales   | JH Airport     | Senior Firefighter                | 739-5412           |                      |                   | 813-326-2469         |
| Michael Rose  | JH Airport     | Senior Firefighter                | 739-5412           |                      |                   | 650-868-0007         |
| Edward Brooks   | JH Airport     | Senior Firefighter                | 739-5412           |                      |                   | 801-389-0917         |
| Annette Ayala   | JH Airport     | Senior Firefighter (apprentice)   | 739-5412           |                      |                   | 520-732-8448         |
| Bill Moe  | JH Airport     | Senior Firefighter                | 739-5412           |                      |                   | 307-399-1310         |
| Zac Johnson   | JH Airport     | Senior Firefighter                | 739-5412           |                      |                   | 906-236-2592         |
| Jocelyn Shoemake  | JH Airport     | Crewmember                        | 739-5412           |                      |                   | 909-896-2278         |
| Ava Laubach   | JH Airport     | Crewmember                        | 739-5412           |                      |                   | 512-761-0873         |
| Jeremiah Coleman  | JH Airport     | Crewmember                        | 739-5412           |                      |                   | 706-691-1413         |
| Kat Sullivan  | JH Airport     | Crewmember                        | 739-5412           |                      |                   | 615-551-1276         |



# Maps & Conversions:

## Township & Range Conversions UTM Declination



# CONVERTING LATITUDE LONGITUDE

Latitude and Longitude may be shown in three different formats:

| FORMAT  | WHAT IT LOOKS LIKE          | HOW YOU SAY IT<br>(Radio Etiquette)                           |
|---|-----------------------------|---|
| A. Degrees Decimal Minutes<br>( <i>Aircraft</i> )   | 48° 36.12'<br>114° 08.12'   | "Four-eight degrees, three six point one two minutes."        |
| B. Degrees Minutes Seconds<br>( <i>many maps</i> )  | 48° 36' 12"<br>114° 08' 12" | "Four-eight degrees, three six minutes, and one two seconds." |
| C. Degrees Decimal Degree<br>( <i>seldom used</i> ) | 48.3612°<br>114.0812°       | "Four-eight point three six one two degrees."                 |

Most handheld GPS units can be set up to display any format

**If you do not have that option, do this:**

To convert **Degrees Minutes Seconds** to **Degrees Decimal Minutes**, divide seconds by 60.

- Example: 48° 20' 30"  $\Rightarrow$  (30")/60 = .5'  $\Rightarrow$  48° 20.5'

To convert **Degrees Decimal Minutes** to **Degrees Minutes Seconds**, multiply hundredths (i.e. .12) by 60.

- Example: 48° 20.5'  $\Rightarrow$  .5' x 60 = 30"  $\Rightarrow$  48° 20' 30"

- One degree of latitude or longitude = 60 minutes (60')
- One minute of latitude or longitude = 60 seconds (60")
- A 7.5 minute quad covers 7.5 minutes of longitude and 7.5 minutes of latitude

**Aviation**  
**Datum=WGS 84**  
**Units: Decimal/Minutes**  
**(ddd°mm.mmm')**

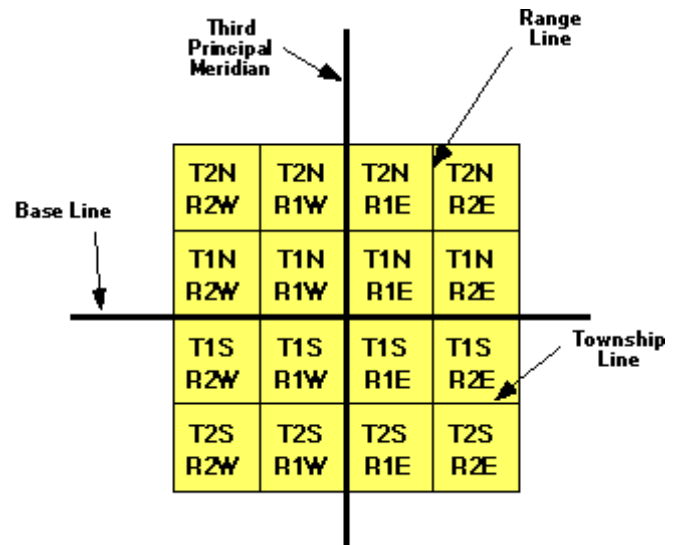
# TOWNSHIP/RANGE SYSTEM OF LAND MEASURE

Township Lines run EAST to WEST six miles apart  
Range Line run NORTH to SOUTH six miles apart

Within each township are 36 sections, each one mile square. Each section contains 640 acres.

|    |    |    |    |    |    |
|----|----|----|----|----|----|
| 6  | 5  | 4  | 3  | 2  | 1  |
| 7  | 8  | 9  | 10 | 11 | 12 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |

Section Numbers in a Typical Township



Within each section, the land is referred to as half and quarter sections. A one-sixteenth division is called a quarter of a quarter, as in the NW1/4 of the NW1/4.

The descriptions are read from the smallest division to the largest. ↓↓

|                        |                        |                       |                       |
|------------------------|------------------------|-----------------------|-----------------------|
| NW 1/4<br>of<br>NW 1/4 | NE 1/4<br>of<br>NW 1/4 | NE 1/4<br>=160 acres  |                       |
| SW 1/4<br>of<br>NW 1/4 | SE 1/4<br>of<br>NW 1/4 |                       |                       |
| N 1/2<br>of<br>SW 1/4  |                        | W 1/2<br>of<br>SE 1/4 | E 1/2<br>of<br>SE 1/4 |
| S 1/2<br>of<br>SW 1/4  |                        |                       |                       |

## CONVERSION CHARTS

| UNITS OF MEASURE   |  |
|--------------------|--|
| <b>1 inch</b>      | 2.54 centimeters   |
| <b>1 foot</b>      | .3048 meters   |
| <b>1 Meter</b>     | 3.28 feet<br>39.37 inches  |
| <b>1 Kilometer</b> | .623 miles<br>1,093.6 yards<br>3280.8ft                                  |
| <b>1 Chain</b>     | 66 feet<br>20.11 meters  |
| <b>1 Acre</b>      | 10 square chains<br>208.7 x 208.7 ft<br>43,560 sq. feet<br>.405 hectares |
| <b>1 Mile</b>      | 5280 feet<br>80 chains<br>1.6 kilometers                                 |
| <b>Township</b>    | 36 square miles  |
| <b>Section</b>     | 1 square mile<br>640 acres   |

| Wind Conversation |                             |
|-------------------|-----------------------------|
| MPH to KPH        | MPH * 1.61 = Km per hour    |
| MPH to Knots      | MPH * 0.869= Knots per hour |
| Knots to MPH      | Knots * 1.151= MPH          |
| Knots to KPH      | Knots *1.852= KPH           |
| KPH to MPH        | KPH *.621= MPH              |
| KPH to Knots      | KPH * .539= Knots per Hour  |

| MAP SCALE CONVERSION            |  |                                       |
|---------------------------------|--|---------------------------------------|
| MAP SCALE                       | 1 inch on the map=                         | 1 Mile on the Earth= ___inches on map |
| 1:5,000                         | 416.67 feet<br>127.00 meters               | 12.67                                 |
| 1:10,000                        | 833.33 feet<br>254.00 meters               | 6.34                                  |
| 1:12,500                        | 1,041.66 feet<br>317.00 meters             | 5.07                                  |
| 1:20,000                        | 1,666.70 feet<br>508.00 meters             | 3.17                                  |
| <b>1:24,000<br/>7.5" Quad</b>   | 2,000 feet<br>609.6 meters                 | 2.64                                  |
| 1:25,000<br>7.5" Quad           | 2,083.30 feet<br>635.00 meters             | 2.53                                  |
| 1:50,000                        | 4,166.70 feet<br>1,270.0 meters            | 1.27                                  |
| 1:62,500<br>15" Quad            | .986 Miles<br>5206.1 feet<br>1586.8 meters | 1.014                                 |
| <b>1:63,360<br/>Alaska Maps</b> | 5,280.00 feet<br>1,609.3 meters            | 1                                     |
| 1:100,000                       | 8,333.30 feet<br>2,540.0 meters            | .634                                  |
| 1:250,000                       | 20,833.00 feet<br>6,350.0 meters           | .253                                  |
| 1:500,000                       | 41,667.00 feet<br>12,700.0 meters          | .127                                  |

# **Fire Weather & Fire Behavior:**

**Clouds**

**Wind Adjustment for Exposure of Fuels to Wind**

**Rate of Spread**

**Anderson Fuel Model (13)**

**Sling Psychrometer Use**

**Weather Tables**

**Fine Dead Fuel Moisture Tables**

## **FIRE BEHAVIOR TERMINOLOGY**

**Smoldering** – no flame, barely spreading

**Creeping** – low flame, slow spread

**Running** – definite flames, rapid spread in surface fuels with well-defined head

**Torching** – fire runs up ladder fuels into crowns of individual trees with no crown to crown spread

**Crowning** – fire spreading from crown to crown, either dependent or independent of surface fire

**Flame length** – length from base to tip, not vertically

**Rate of spread** – chains per hour = feet per minute

**Ground fire** – fire burning in organic material below surface litter

**Surface fire** – fire that burns surface litter, other loose debris of the forest floor and small vegetation

**Backing** – fire spreading against the wind, or spreading on level or downward-sloping ground with no wind  
**Flanking** – fire spreading perpendicular to the wind

**Backfire** – fire used as an indirect attack method to stop, slow or turn a wildfire

**Burnout** – fire set to fuels inside the control line, to strengthen line, as a part of line construction

**Flare-up** – any sudden acceleration of fire spread or intensification of the fire. A flare-up is of relatively short-duration and doesn't radically change existing control plans.

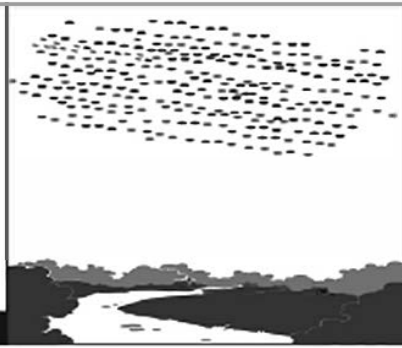
**Spot Fire** – fire outside the perimeter of the main fire started by flying, or rolling sparks or embers

# Cloud Types

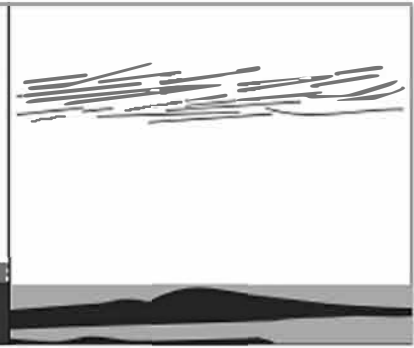
High Clouds



Cirrus (Ci)

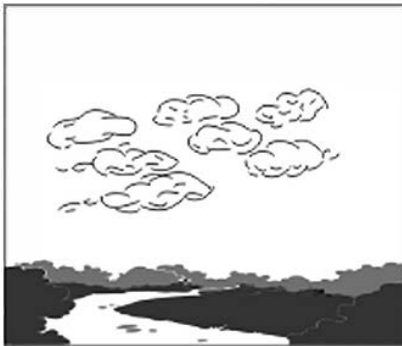


Cirrocumulus (Cc)

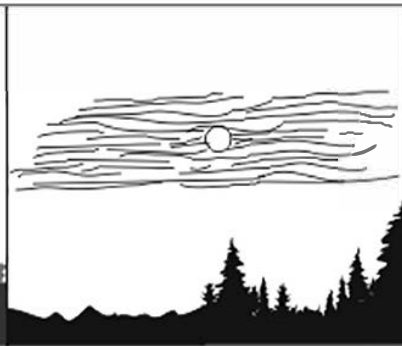


Cirrostratus (Cs)

Middle Clouds

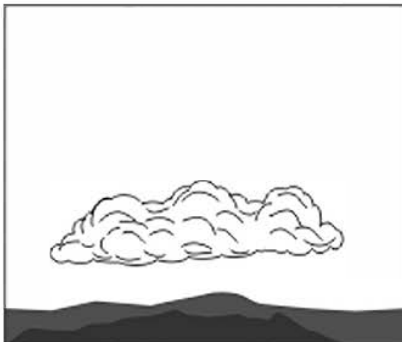


Altocumulus (Ac)



Altostratus (As)

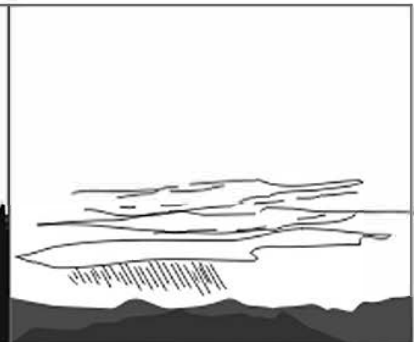
Low Clouds



Stratocumulus (Sc)

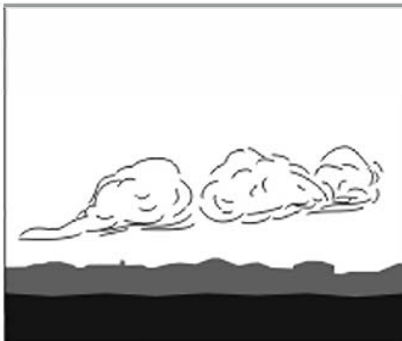


Stratus (St)

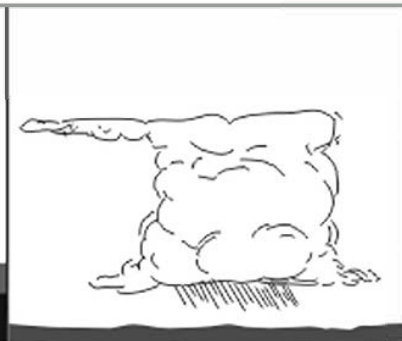


Nimbostratus (Ns)

clouds of Vertical Development

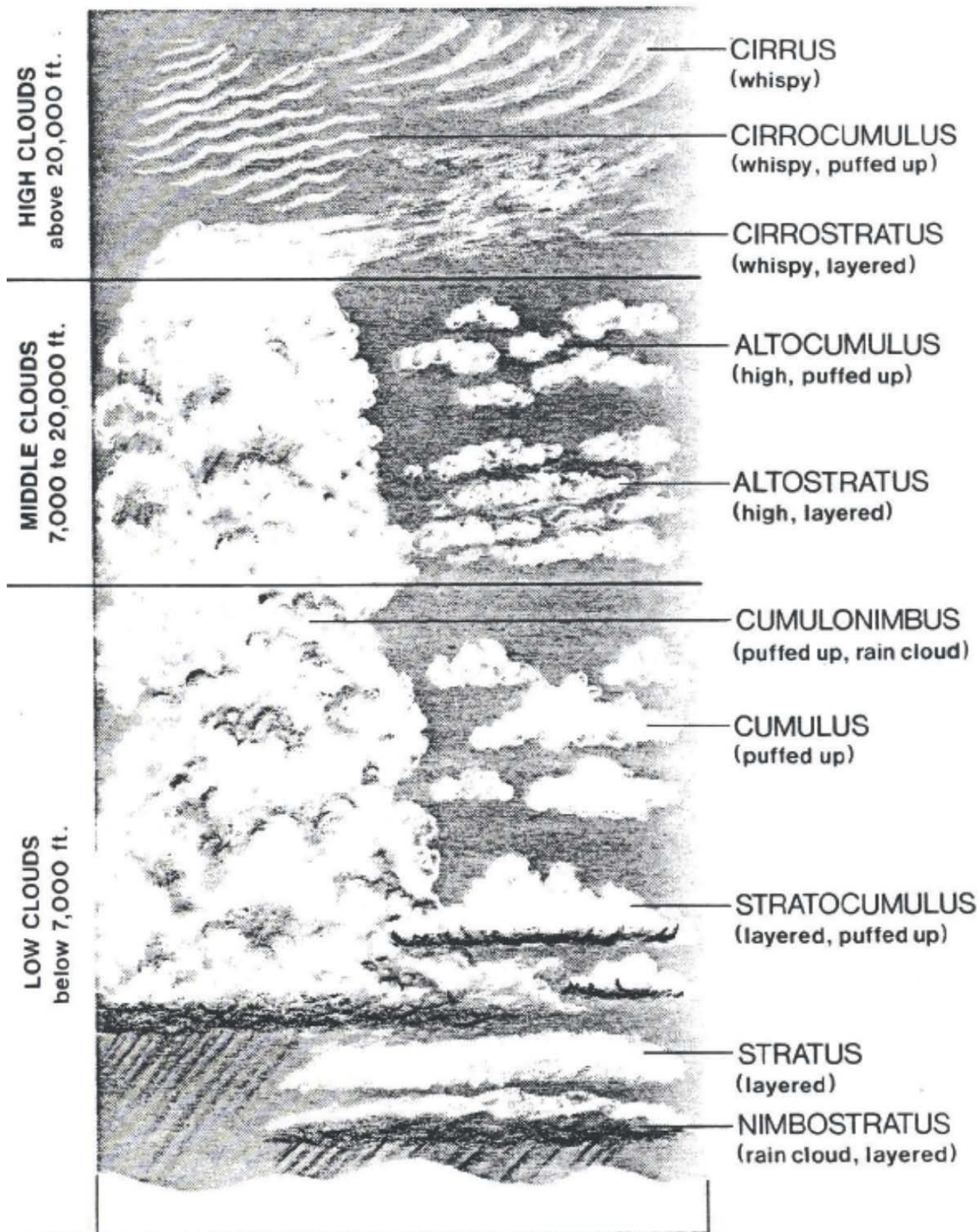


Cumulus (Cu)



Cumulonimbus (Cb)





**Cloud Base Height:**  
 $\text{Temperature} - \text{Dew Point} / 4.4 \times 1000$

# RATE OF SPREAD ESTIMATOR

| Spread distance (ft)              |        |        |        | ROS<br>ch/hr |
|-----------------------------------|--------|--------|--------|--------------|
| 1                                 | 3      | 5      | 10     |              |
| Time in Minutes(') and Seconds(") |        |        |        |              |
| 3'38"                             | 10'55" | 18'10" | 36'22" | 0.25         |
| 1'49"                             | 5'27"  | 9'05"  | 18'10" | 0.5          |
| 55"                               | 2'44"  | 4'33"  | 9'05"  | 1            |
| 36"                               | 1'49"  | 3'02"  | 6'04"  | 1.5          |
| 27"                               | 1'22"  | 2'16"  | 4'33"  | 2            |
| 18"                               | 55"    | 1'31"  | 3'02"  | 3            |
| 14"                               | 41"    | 1'08"  | 2'16"  | 4            |
| 11"                               | 33"    | 55"    | 1'49"  | 5            |
| 9"                                | 27"    | 45"    | 1'31"  | 6            |
| 8"                                | 23"    | 39"    | 1'18"  | 7            |
| 7"                                | 20"    | 34"    | 1'08"  | 8            |
| 6"                                | 18"    | 30"    | 1'01"  | 9            |
| 5"                                | 16"    | 27"    | 55"    | 10           |
| 4"                                | 11"    | 18"    | 36"    | 15           |
| 3"                                | 8"     | 14"    | 27"    | 20           |
| 2"                                | 7"     | 11"    | 22"    | 25           |
| 2"                                | 5"     | 9"     | 18"    | 30           |
| 2"                                | 5"     | 8"     | 16"    | 35           |
| 1"                                | 4"     | 7"     | 14"    | 40           |
| 1"                                | 3"     | 5"     | 11"    | 50           |
| 1                                 | 3      | 5      | 10     |              |
| Spread distance (ft)              |        |        |        |              |

Use this chart as an aid to *estimate* rate of spread

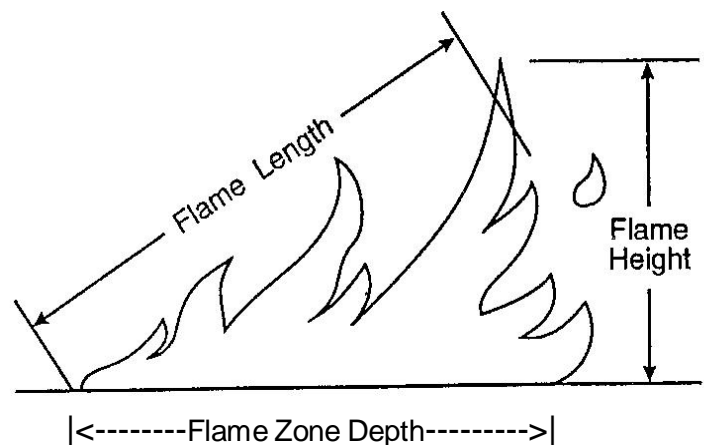
Here's how:

1. Measure out 1, 3, 5 or 10 feet. Mark distance with two points.
2. Time fire as it spreads between your two points and record this time.
3. Using the appropriate spread distance column (1, 3, 5 or 10), place your time on the sheet between two times listed, your "bracketed" times.
4. Move to the right with the bracket times. This is your ROS range.

## Time Key

1' 49" = 1 minute and 49 seconds  
36" = 36 seconds

Example: Say you're monitoring a backing fire burning in light ponderosa needle cast. You measure out **3 feet**, and place two stones at each of the points. You time the fire as it moves between the stones. In this case, say the fire takes 1 minute 6 seconds (1'6") to move 3 feet. Looking at the 3 column, you move down until you see two times which bracket our time: 1'22" and 55". You then scroll right and see that the rate of spread is between 2 and 3 chains per hour.





# **ANDERSON FUEL MODELS - "THE ORIGINAL 13"**

## **Primary carrier of the fire is GRASS**

**FM1**-Grass is fine structured, generally below knee level, and cured primarily. Grass is essentially continuous. Spread rate moderate; flame length low. ***Grasslands, savanna, grass tundra***

**FM2**-Grass is usually under an open timber or brush overstory. Litter from overstory is involved, but grass carries the fire. Expected ROS is < FM1 and intensity is < FM3. Spread rate moderate; flame length moderate. ***Open shrub land and pine stands, some pinon-juniper***

**FM3**-Grass is coarse structured, above knee level (average about 3ft. deep) and can be difficult to walk through. 1/3 of stand is dead or cured. Spread rate high; flame length high.

## **Primary Carrier of the fire is BRUSH or litter beneath the BRUSH.**

**FM4**-Brush is head height (>6ft.), with heavy loadings of dead woody fuel. Fire may involve foliage, live and dead woody material and canopy. Spread rate very high; flame length very high. ***Mixed chaparral, high pocosins, pine barrens of New Jersey, closed jack pine stands of north central states***

**FM5**-Brush is about 2ft. high, with light loading of brush litter underneath. Litter may carry fire, especially at low wind speeds. Spread rate low to moderate; flame length low to moderate ***Young green stands with little or no deadwood. Laurel, vine maple, alder, manzanita***

**FM6**-Live fuels are absent or sparse. Brush averages 2 to 4ft. high. Brush requires moderate winds to carry fire. Spread rate high (with wind); flame length high. FM6 may not predict rate of spread accurately in mature PJ or taller oak brush. ***Chaparral, chamise, oak brush, low pocosin, Alaskan black spruce, taiga, shrub tundra, PJ at high winds (20mph at 20' level)***

**FM7**-Fires burn through the surface and shrub strata with equal ease and can occur at higher dead fuel moisture contents due to the flammability of live foliage and other live material. Stands of shrubs are generally between 2 and 6ft. high. Spread rate high; flame length high. ***Palmetto-gallberry understory with pine overstory, Alaskan black spruce with shrub***

## **Primary Carrier of the fire is LITTER beneath a TIMBER stand.**

**FM8**-Dead foliage is tightly compacted, short needle (2 in. or less) conifer or hardwood litter. Spread rate low; flame length low with occasional jackpot of heavy fuels increasing intensity. ***White and lodgepole pine, spruce, true firs, larches***

**FM9**-Dead foliage litter is loosely compacted long needle pine or hardwoods. Spread rate moderate; flame length moderate. Concentrations of dead-down woody material will contribute to possible torching out of trees, spotting, and crowning. ***Closed stands of long needle pine- Jeffrey ponderosa, and southern pine plantations***

**FM10**-There is a significant amount of larger fuels with attached branches and twigs, or has rotted enough that it is splintered and broken. The larger fuels are fairly well distributed over the area. Some green fuel may be present. Overall depth of the fuel is primarily below knees, but some fuel may be higher. Any forest type may be considered if heavy down material is present. Crowning out, spotting, and torching of individual trees are more frequent in this fuel situation, leading to potential fire control difficulties. Spread rate moderate to high; flame length high. ***Insect- or disease-ridden stands, windthrown stands, overmature situations with deadfall, and aged light thinning or partial-cut slash***

## **Primary Carrier of the fire is LOGGING SLASH.**

**FM11**-Slash is not continuous. Needle litter or small amounts of grass or shrubs must be present to carry the fire, but primary carrier is still slash. Live fuels are absent or do not play a significant role in fire behavior. Spread Rate low; flame length moderate. ***Light partial cuts or thinning ops in mixed conifer or hardwood stands and southern pine harvests***

**FM12**-Slash generally covers the ground (heavier loadings than FM11), though there may be some bare spots or areas of light coverage. Average slash depth is about 2ft. Slash is not excessively compacted. Approximately ½ of the needles may still be on the branches but are not red. Live fuels are absent, or are not expected to affect fire behavior.

Spread rate low; flame length moderate to high. *Heavily thinned conifer stands, clear cuts and med to heavy partial cuts*

**FM13**-Slash is continuous or nearly so (heavier loadings than FM12). Slash is not extremely compacted and has an average depth of 3ft. Approximately ½ of the needles are still present and are red, or all of the needles are still on the branches but are green. Live fuels are not expected to influence fire behavior. Spread rate low; flame length high. *Clear cuts and heavy partial cuts in mature or over mature stands where slash is dominated by >3" material or load like FM12 but with "red" needles still attached*

# Weather Observations

## \* LOCAL BTNF/GTNP CRITICAL WEATHER FACTORS \*

LOCAL WINDS OVER 20MPH

RELATIVE HUMIDITY LESS THAN 17%

\* 1,000HR FUEL MOISTURE LESS THAN 12% HAINES 5 OR 6 \*

### SLING PSYCHROMETER USE

The following are instructions for determining wet and dry bulb temperatures using the sling psychrometer. These instructions are based on those from page 259 of the S-290 Instructors Manual. Several additional comments have been added.

1. Stand in a shaded, open area away from objects that might be struck during whirling. If in open country, use your body shade to shade the psychrometer. If possible, take your weather observations over a fuel bed that is representative of the fuels that the fire is burning in.
2. If your sling has been in your pack, you may need to hang it in a tree, in the shade, to let it adjust to the outside air temperature.
3. Face the wind to avoid influence of body heat on the thermometers.
4. Saturate the wick of the wet bulb with clean, mineral free water (distilled).
5. Ventilate the thermometers by whirling at full arms length. Your arm should be parallel to the ground. Whirl for 1 minute.
6. Note the wet bulb temperature. Whirl for another 40 or 50 times and read again. If the wet bulb is lower than the first reading, continue to whirl and read until it will go no lower. Read and record the lowest point. If the wet bulb is not read at the lowest point, the calculated relative humidity will be too high.
7. **Read the dry bulb immediately after the lowest wet bulb reading is obtained.**
8. Determine the relative humidity from the tables.

**Important Tips:** Sometimes beginners do not take accurate psychrometer readings because of the following common mistakes:

1. not ventilating the psychrometer long enough to reach equilibrium;
2. not getting the wick wet enough, or letting it dry out;
3. holding it too close to the body or taking too long to read the thermometers;
4. touching the bulb ends with the hands while reading;
5. not facing into the breeze.

*Rule of thumb: RH in % divided by 5 = estimate of FDFM*

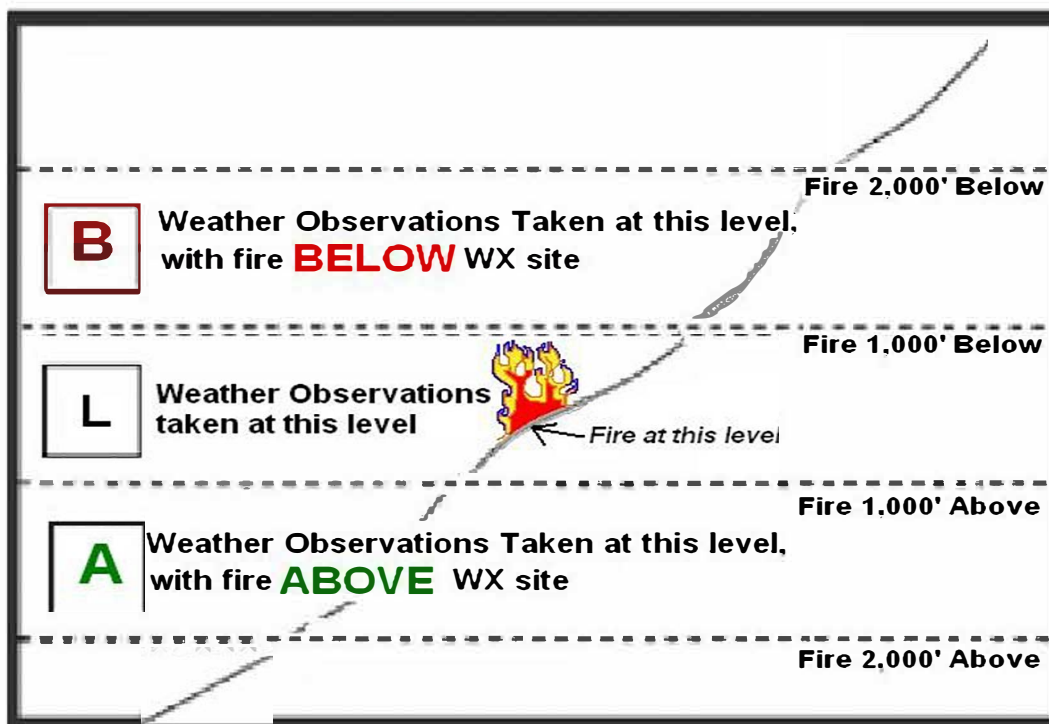
## Determining A, L, B For Fine Dead Fuel Moisture Calculations

- A – Weather observations are taken between 1,000' and 2,000' **ABOVE** the fire behavior observations/projections.
- L – Weather observations are taken between 1,000' above and 1,000' below or **Level** with the fire behavior observations/projections.
- B – Weather observations are taken between 1,000' and 2,000' **BELOW** the fire behavior observations/projections.

The question is simple: "Where is the Fire?"

Is the fire **ABOVE** your WX site? If so, use **A**

Is the Fire **BELOW** your WX site? If so, use **B**



\*Link to download weather calculations ap\*

# Teton Interagency Fire Danger Operating Plan (FDOP) Quick Reference Guide 2019

The Teton Interagency Fire Danger Operating Plan (FDOP) is intended to document a decision-making process for agency administrators, fire managers, dispatchers, and firefighters by establishing interagency planning and response levels.

The Fire Danger Rating Areas are the Teton, Wind, and Wyoming FDRA for Grand Teton Park and the Bridger-Teton Forest.

The components of the Plan are organized in the diagram to the right in how they relate to local fire response.



## Staffing Level Work Sheet

| Energy Release Component   | (0-14) | (15-31) | (32-45) | (46-60) | (61-67) | (68+)  |
|--|--------|---------|---------|---------|---------|--------|
| Model G (FDRA Teton)   | (0-14) | (15-31) | (32-45) | (46-60) | (61-67) | (68+)  |
| Model G (FDRA Wind)  | (0-17) | (18-31) | (32-49) | (50-62) | (63-69) | (70+)  |
| Model G (FDRA Wyoming)   | (0-15) | (16-33) | (34-47) | (48-61) | (62-69) | (70+)  |
| High Risk Triggers (Y/N)<br>Defined by GB 7 Day Outlook<br>If Yes, then bump up one level<br>for final staffing level. | N or Y | N or Y  | N or Y  | N or Y  | N or Y  | N or Y |
| Staffing/Dispatch Level  | I      | II      | III Lo  | III Hi  | IV      | V      |

| Unit/FDRA      | SL 1                    | SL 2                     | SL3Lo                    | SL3HI                       | SL4  | SL5  |
|----------------|-------------------------|--------------------------|--------------------------|-----------------------------|--|--|
| TIF Resources  | 0* Helicopters<br>0 WFM | 1 T3 Helicopter<br>0 WFM | 1 T3 Helicopter<br>0 WFM | 1 T3<br>Helicopter<br>0 WFM | 2 T3<br>Helicopter<br>1 WFM or<br>T2IA<br>Handcrew | 2 T3<br>Helicopter<br>1 WFM or<br>T2IA<br>Handcrew |
| Teton          | 1 engine any<br>type    | 1 engine any<br>type     | 1 engine any type        | 1 engine<br>any type        | 2 engines<br>any type                              | 2 engines<br>any type                              |
| Wind           | 0 engine                | 0 engine                 | 1 engine any type        | 1 engine<br>any type        | 1 engine<br>any type                               | 1 engine<br>any type                               |
| Wyoming        | 1 engine any<br>type    | 1 engine any<br>type     | 1 engine any type        | 1 engine<br>any type        | 2 engines<br>any type                              | 3 engines<br>any type                              |
| Total Engines* | 2                       | 2                        | 3                        | 4                           | 5  | 6  |

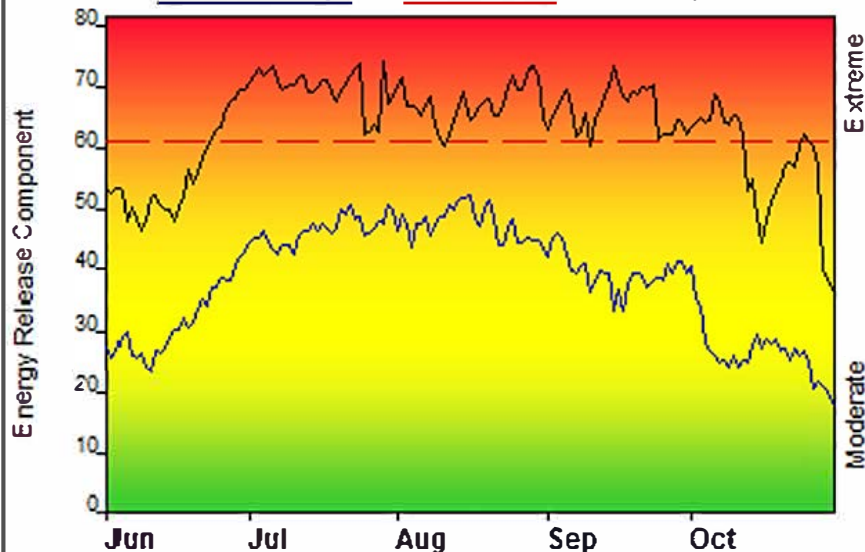
\*Usually 1 helicopter will be maintained on unit during the fire season but at SL 1, the staffing plan allows flexibility for the period where we do not have helicopters on contract and/or to allow both helicopters to go off unit.

\*\*Engine coverage between zones will be coordinated so that the total engine needs are met.



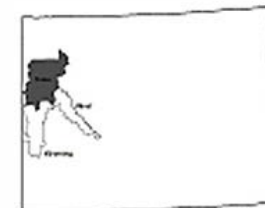
## FIRE DANGER -- Teton

Maximum, Average, and 90th Percentile, based on 15 years data



## Fire Danger Area:

- ◆ Teton Interagency Zone
- ◆ NWS Zone 415
- ◆ RAWS 480708/481307/481302
- ◆ Meets NWCG Wx Station Standards



## Fire Danger Interpretation:



- EXTREME** -- Use extreme caution
- (Caution)** -- Watch for change
- Moderate** -- Lower Potential, but always be aware

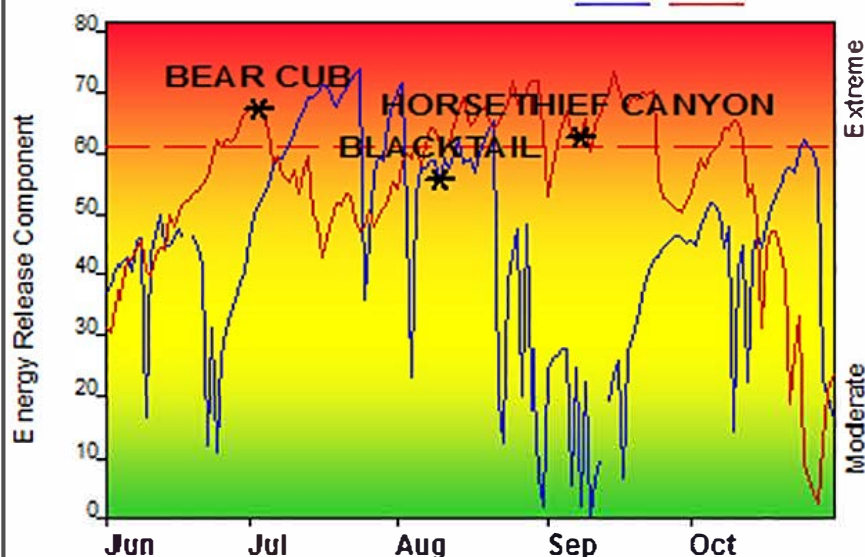
Maximum -- Highest Energy Release Component by day for 2001 - 2015

Average -- shows peak fire season over 15 years (2279 observations)

90th Percentile -- Only 10% of the 2279 days from 2001 - 2015 had an Energy Release Component above 61

**Local Thresholds - Watch out:** Combinations of any of these factors can greatly increase fire behavior:  
 20' Wind Speed over 20 mph, RH less than 17%,  
 Temperature over 88, 1000-Hour Fuel Moisture less than 12  
 Woody Fuels less than 90% Herbaceous Fuels less than 80%

## Years to Remember: 2003 2012



Fuel Model: G - Short-Needle (Heavy Dead)

## Remember what Fire Danger tells you:

- ✓ Energy Release Component gives seasonal trends calculated from 2 pm temperature, humidity, daily temperature & rh ranges, and precip duration.
- ✓ Wind is NOT part of ERC calculation.
- ✓ Watch local conditions and variations across the landscape -- Fuel, Weather, Topography.
- ✓ Listen to weather forecasts -- especially WIND.

## Past Experience:

Bear Cub and Horsethief: 2012 The warmest summer on record for WY. The Bear Cub fire started in early July Horsethief in early September. Other large fires burned actively into October.

Blacktail - 2003 Fire was a wind driven fire supported by abundant/dense sagebrush with a smooth brome (non-native) understory. Increased fire growth due to wind with temp/Rh contributing to fine fuel curing rapidly during the day.

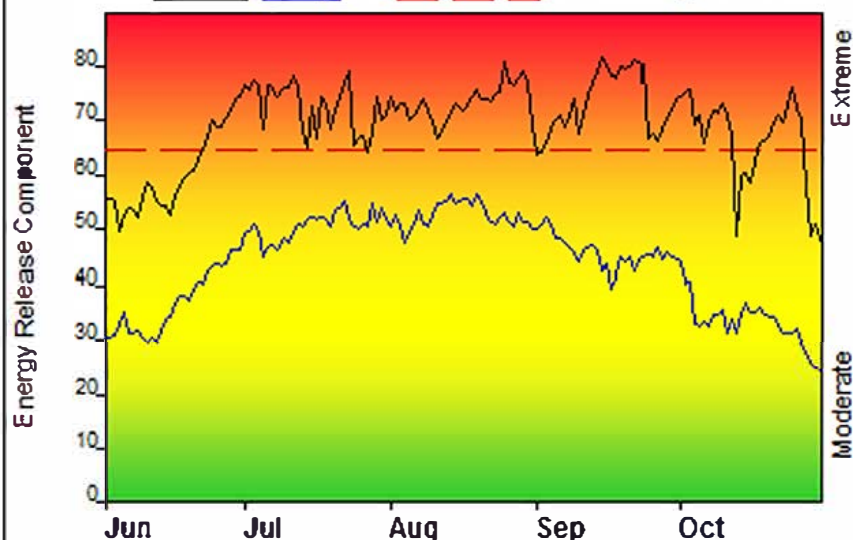
**Additional Info:** <http://gacc.nifc.gov/gbcc/dispatch/wy-tdc/>

Responsible Agency: Bridger-Teton NF and Grand Teton NP  
 FF+4.1 build 1622 05/10/2016-13:17 (C:\Users\ericane...WYBTF\_by\_FDRA\_2000-2014 edit)

Design by NWCG Fire Danger Working Team

## FIRE DANGER -- Wyoming

Maximum, Average, and 90th Percentile, based on 15 years data



## Fire Danger Area:

- ◆ Teton Interagency Fire
- ◆ NWS Zone 414
- ◆ RAWS 481208/481306/103904/481302
- \* Meets NWCG Wx Station Standards



## Fire Danger Interpretation:



- EXTREME** – Use extreme caution
- (Caution)** – Watch for change
- Moderate** – Lower Potential, but always be aware

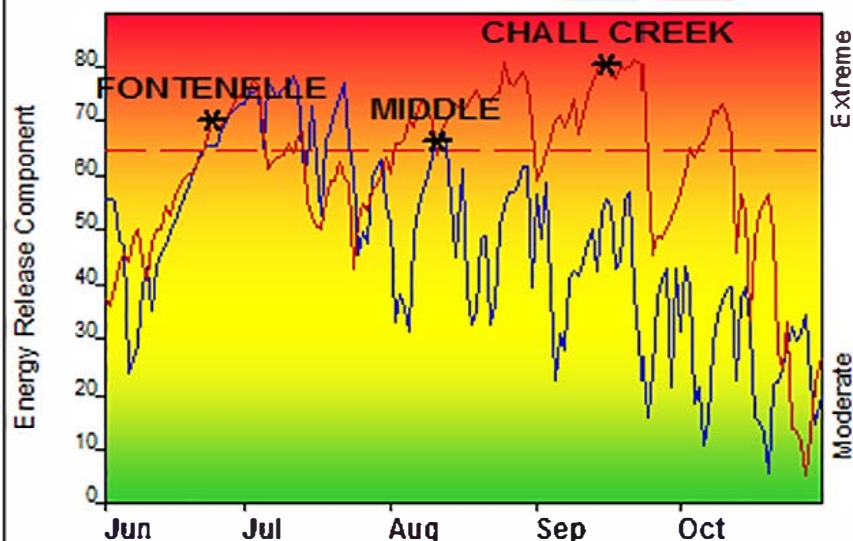
Maximum – Highest Energy Release Component by day for 2001 - 2015

Average – shows peak fire season over 15 years (2295 observations)

90th Percentile – Only 10% of the 2295 days from 2001 - 2015 had an Energy Release Component above 64

**Local Thresholds - Watch out:** Combinations of any of these factors can greatly increase fire behavior:  
 20' Wind Speed over 20 mph, RH less than 17%,  
 Temperature over 86, 1000-Hour Fuel Moisture less than 12  
 Woody Fuels less than 90% Herbaceous Fuels less than 80%

## Years to Remember: 2007 2012



Fuel Model: G - Short-Needle (Heavy Dead)

## Remember what Fire Danger tells you:

- ✓ Energy Release Component gives seasonal trends calculated from 2 pm temperature, humidity, daily temperature & rh ranges, and precip duration.
- ✓ Wind is NOT part of ERC calculation.
- ✓ Watch local conditions and variations across the landscape -- Fuel, Weather, Topography.
- ✓ Listen to weather forecasts -- especially WIND.

## Past Experience:

Fontenelle and Chall Creek- 2012 The warmest summer on record for WY. The Fontenelle fire started in late June/early July and Chall creek mid-September. Very warm, dry, and extremely windy May and June led to accelerated drying of 1000 fuels. Live fuels in drought stressed condition. High winds led to very large fire growth.

Middle - The Middle fire started in early August. High winds and long range spotting led to large fire growth. Fire started during a period of above average temperatures.

**Additional Info:** <http://gacc.nifc.gov/gbcc/dispatch/wy-tdc/>

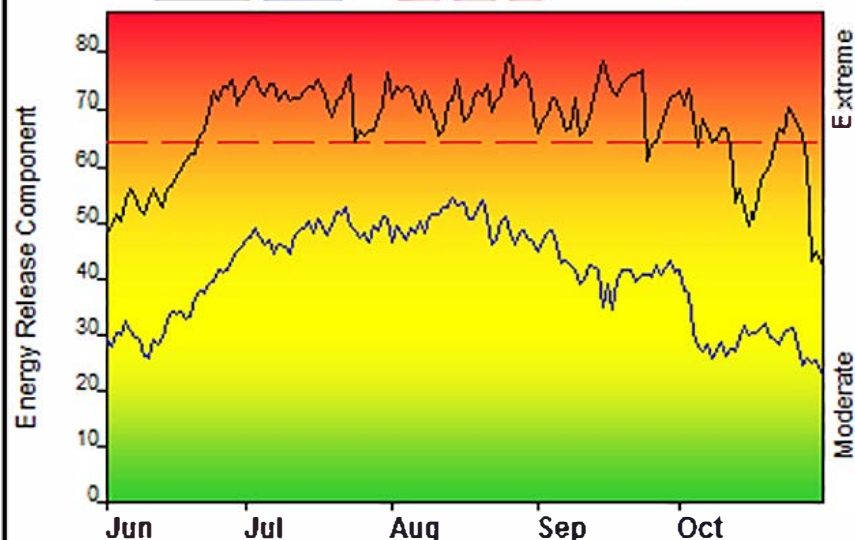
Responsible Agency: Bridger-Teton NF

FF+4.1 build 1622 05/09/2016-22:05 (C:\Users\ericaneiswang... \Pocket card wyoming 15 yr)

Design by NWCG Fire Danger Working Team

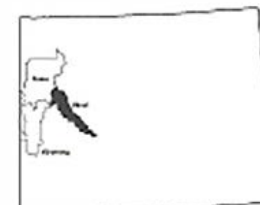
## FIRE DANGER -- Wind

Maximum, Average, and 90th Percentile, based on 15 years data



## Fire Danger Area:

- Teton Interagency Zone
- NWS Zone 418
- RAWS: 481309/481307
- \* Meets NWCG Wx Station Standards



## Fire Danger Interpretation:



- EXTREME** – Use extreme caution
- (Caution)** – Watch for change
- Moderate** – Lower Potential, but always be aware

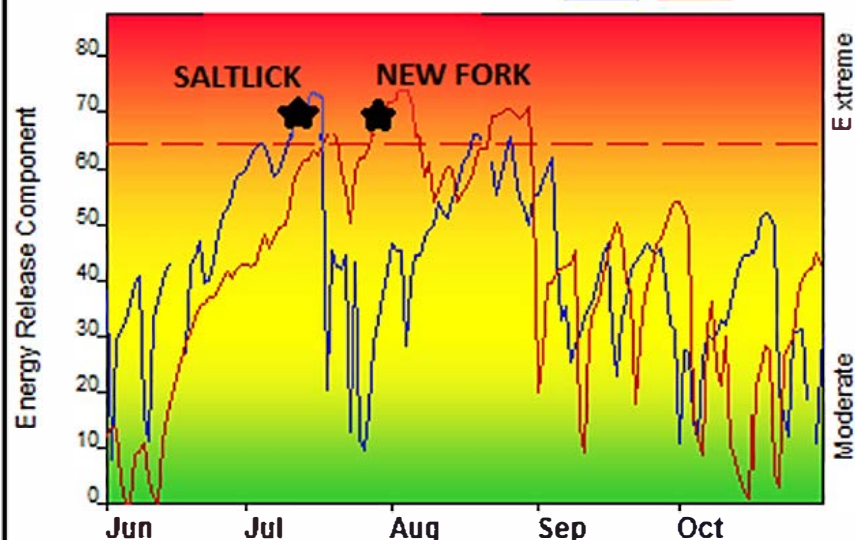
**Maximum** – Highest Energy Release Component by day for 2001 - 2015

**Average** – shows peak fire season over 15 years (2285 observations)

**90th Percentile** – Only 10% of the 2285 days from 2001 - 2015 had an Energy Release Component above 64

**Local Thresholds - Watch out:** Combinations of any of these factors can greatly increase fire behavior:  
 20+ Wind Speed over 20 mph, RH less than 17%,  
 Temperature over 85, 1000-Hour Fuel Moisture less than 12  
 Woody Fuels less than 90% Herbaceous Fuels less than 80%

Years to Remember: 2002 2008



Fuel Model: G - Short-Needle (Heavy Dead)

## Remember what Fire Danger tells you:

- ✓ Energy Release Component gives seasonal trends calculated from 2 pm temperature, humidity, daily temperature & rh ranges, and precip duration.
- ✓ Wind is NOT part of ERC calculation.
- ✓ Watch local conditions and variations across the landscape – Fuel, Weather, Topography.
- ✓ Listen to weather forecasts – especially WIND.

## Past Experience:

**New Fork** - Winds aligned with topographical features to allow for large fire growth the first few burn periods. The fire burned through beetle killed lodgepole pine. Monsoon was predominantly dry allowing 1000 hour fuels to dry at an accelerated rate leading up to the fire.

**Salt Lick** - large fire growth occurred with wind and drainage alignment. The fire burned a majority of the south gypsum creek drainage in a half of a burn period. The same day the Pole Creek fire burned just outside the town of Pinedale.

**Additional Info:** <http://gacc.nifc.gov/gbcc/dispatch/wy-tdc/>

Responsible Agency: Bridger-Teton NF

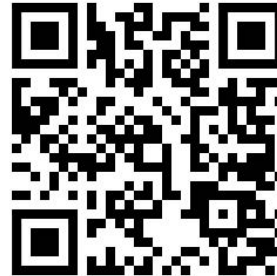
FF#4.1 build 1622 05/09/2016-22:50 (C:\Users\ericaneiswanger\Desktop\pocket card wind 15)

Design by NWCG Fire Danger Working Team



[illegible]





**Pinedale RD North Half   Pinedale RD South Half**

**Jackson RD**

**Blackrock RD**



**Big Piney ,  
Greys River RD  
North Half**

**Big Piney,  
Greys  
River,  
Kemmerer  
RD South  
Half**

**Grand Teton NP**