U.S. Department of Agriculture Forest Service	1. WORK PROJECT/ACTIVITY Radio Communication	2. LOCATION Flathead National Forest	3. UNIT Spotted Bear Ranger District
JOB HAZARD ANALYSIS (JHA) References-FSH 6709.11 and -12 (Instructions on Reverse)	4. NAME OF ANALYST Sue Johnson/Dave Arbach	5. JOB TITLE Forest Technician	6. DATE PREPARED 03/28/2007

7. TASKS/PROCEDURES	8. HAZARDS	9. ABATEMENT ACTIONS Engineering Controls * Substitution * Administrative Controls * PPE
District—Radio Communication Evaluation	Process	Communication System for District: --Good Reception vs. poor reception --Location of "dead spots"; proper equipment to eliminate problems at key locations, be able to have: i. direct communication to Ranger Station Office ii. direct communication via local repeaters to Ranger Station and Dispatch Center iii. Use of other sites to have direct communication to Ranger Station, Work Center, Guard Station and Dispatch Center. --Refer to District Emergency Procedures & Communication Plan --Develop communications within geographic areas of drainages that lay within and adjacent to the District, to District Office and Dispatch Center.
Radio communication	Procedure	Train personnel in use of radio a. Radio Operators Handbook b. Training session
	Personnel	One radio per group (or satellite phone). Cellular phones generally not effective in the Wilderness Area One radio per individual—when working alone, or a crew Configuration is assigned to a geographic area. Appropriate communication device necessary while operating ATV, motorcycle, snow cat, snowmobile, watercraft
Routine Check-in Procedure	Loss of or poor Radio communication. Poor or no radio Communication From terrain and or Weather. No one in Office on weekends, evenings, after hours.	--Sign out at office, provide itinerary. Check-in daily or as agreed upon when changing from original itinerary. --Call either the office or dispatch when schedule changes. --Know where there are 'dead spots' and find locations for effective radio transmission. Use of vehicle mobile radio. --Relays: use lookouts, other personnel --Establish radio communication before starting work project --Replace batteries, check antenna, battery pack. All properly in place. --Upon return to office, notify supervisor, front desk, or station guard as to status.

		Proper frequency for project
Equipment	Radio frequency Equipment	Handheld/mobile 14 channel, knowledge of capabilities --Lookouts (tower) or other personnel --Cell phone, know limits --satellite capabilities --similar personal communication satellite capabilities --portable repeater --Courtesy Channel Do not operate satellite phone while operating equipment.
	Communication During lightning storm	--monitor radio from a distance when storm is 1-5 miles away --notify dispatch if you are going out of service, then turn off radio, if lightning is observed within 1 mile --notify dispatch when you are back in service.
Emergency Situation	Minor accident, Major accident, Death	Keep calm and determine seriousness of situation/injury. Make Radio contact with District Office or Dispatch Center. In case of Major injury or death, ask for radio silence. Use no names. Make request needs for resources (i.e. Alert, EMT, medical control). Arrange site for evacuation. If you have an emergency situation and can not contact anyone on the radio, send your message, you may be transmitting but not receiving. Change your location and try your message again.
Missing Check-in	Could be the result of a variety of situations: dead spots, radio failure, poor batteries, accidents, etc.	Dead spots: Move around and find a place to transmit to reach office. Radio: If another radio is not accessible, leave site and make contact with District/Dispatch Center. Explain situation and make corrections. Always carry spare batteries. After two scheduled check-ins have been missed, a search will be initiated.
Mitigation	Poor or no communication	Develop geographic plan.

10. LINE OFFICER SIGNATURE	11. TITLE	12. DATE
	District Ranger	

JHA Instructions (References-FSH 6709.11 and .12)

The JHA shall identify the location of the work project or activity, the name of employee(s) writing the JHA, the date(s) of development, and the name of the appropriate line officer approving it. The supervisor acknowledges that employees have read and understand the contents, have received the required training, and are qualified to perform the work project or activity.

Blocks 1, 2, 3, 4, 5, and 6: Self-explanatory.

Block 7: Identify all tasks and procedures associated with the work project or activity that have potential to cause injury or illness to personnel and damage to property or material. Include emergency evacuation procedures (EEP).

Block 8: Identify all known or suspect hazards associated with each respective task/procedure listed in block 7. For example:

a. Research past accidents/incidents

b. Research the Health and Safety Code, FSH 6709.11 or other appropriate literature.

c. Discuss the work project/activity with participants

d. Observe the work project/activity

e. A combination of the above

Block 9: Identify appropriate actions to reduce or eliminate the hazards identified in block 8. Abatement measures listed below are in the order of the preferred abatement method:

a. Engineering Controls (the most desirable method of abatement). For example, ergonomically designed tools, equipment, and furniture.

b. Substitution. For example, switching to high flash point, non-toxic solvents.

c. Administrative Controls. For example, limiting exposure by reducing the work schedule; establishing appropriate procedures and practices.

d. PPE (least desirable method of abatement). For example, using hearing protection when working with or close to portable machines (chain saws, rock drills portable water pumps)

e. A combination of the above.

Block 10: The JHA must be reviewed and approved by a line officer. Attach a copy of the JHA as justification for purchase orders when procuring PPE.

Blocks 11 and 12: Self-explanatory.

Emergency Evacuation Instructions (Reference FSH 6709.11)

Work supervisors and crew members are responsible for developing and discussing field emergency evacuation procedures (EEP) and alternatives in the event a person(s) becomes seriously ill or injured at the worksite.

Be prepared to provide the following information:

a. Nature of the accident or injury (avoid using victim's name).
b. Type of assistance needed, if any (ground, air, or water evacuation)
c. Location of accident or injury, best access route into the worksite (road name/number), identifiable ground/air landmarks.
d. Radio frequency(s).
e. Contact person.
f. Local hazards to ground vehicles or aviation.
g. Weather conditions (wind speed & direction, visibility, temp).
h. Topography.
i. Number of person(s) to be transported
j. Estimated weight of passengers for air/water evacuation.

The items listed above serve only as guidelines for the development of emergency evacuation procedures.

JHA and Emergency Evacuation Procedures Acknowledgment

We, the undersigned work leader and crew members, acknowledge participation in the development of this JHA (as applicable) and accompanying emergency evacuation procedures. We have thoroughly discussed and understand the provisions of each of these documents:

SIGNATURE	DATE	SIGNATURE	DATE
Work Leader			