

U.S. DEPARTMENT OF AGRICULTURE Forest Service	<b>WORK PROJECT/ACTIVITY:</b> Stream Ford Rigging Project	<b>LOCATION:</b> Warm Springs/Crazy Creek	<b>UNIT:</b> Bitterroot National Forest
<b>JOB HAZARD ANALYSIS (JHA)</b> References-FSH 6709.11 and -12	<b>NAME OF ANALYST:</b> Rena H. Pooley	<b>JOB TITLE:</b> Forestry Technician	<b>DATE PREPARED:</b> August 9, 2004

TASKS/PROCEDURES	HAZARDS	ABATEMENT ACTIONS
		Engineering Controls * Substitution * Administrative Controls * PPE
Use of cable, establishing the correct cable size and type for the workload	Failure of cable strength can result in loss of load and risk serious injury to ground crew	Use of four-strand wire rope. Cable should be inspected for frays or kinks in wire prior to use. Utilize grip hoist to manually lift and lower load.
Placement and stability of anchors	Unstable placement; the load exceeds the stability of the anchor. Climbing tree to place and maintain anchor. Elevating tripod upon boulders above trail.	Anchors must be strong enough to safely withstand the force required to move loads. Anchors set for hoists and winches should be set at a convenient height to provide safe and effective operation.
Working loads	Equipment failure, (hoist, cable, blocks)	Maintain a work load of 5:1, never load gear more than 1/5 the limit.
Working load calculations	Estimation on distance, and weight distribution	Properly calculate loads prior to use of rigging. Estimate load weight and size prior to tension.
Line Safety	Improper inspection of equipment. Faulty setup of equipment.	Crew members will be educated and trained on how to inspect, setup, and operate equipment. All equipment will be inspected prior to use. Use of Personal Protective Equipment at all times (hard hats, safety glasses, gloves, etc.)
Shear Pins	Incorrect placement or improper use of pins can lead to overloading rigging system	Only use pins rated for grip hoist. Do not use nails, files, drill bits or anything else in place of shear pins.
Communication	Noise level from creek. Lack of experience working with rigging equipment and understanding rigging terminology.	Coordinate how the crew will communicate prior to loading. Use verbal and nonverbal communication to move load (hand signals and radios). Always acknowledge that commands have been received and understood. The crew will be briefed and educated on the terminology and use of equipment prior to handling.
Stability of Worksite	Footing in the creek, footing on the rocks, climbing trees	Analyze work site for slippery or loose rocks, falling hazards on the ground or overhead (snags) hazards.
Fly Away Zone	Working under the rigging equipment. Exposure to anchor, block, or line failure	
Tripods	Tipping over Pin/Cotter Chain	Never have force vector outside of base of tripod Check and verify that cotter pins are engaged Placement of safety chains at base of tripod
Public Safety/Traffic Control	Debris falling onto trail Failure of rigging equipment	Crew member assigned to notify public of trail closure, dangerous equipment and estimated time travel through trail.

**JHA Instructions (References-FSH 6709.11 and 12)**

The JHA shall identify the location of the work project or activity, the name of the 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 flashpoint, 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 the victim's name).
- b. Type of assistance needed, if any (ground, air, or water evacuation).
- c. Location of the 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, temperature).
- 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 Acknowledgement**

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

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