

| | | | |
|--|---|--|---|
| U.S. DEPARTMENT OF AGRICULTURE Forest Service | 1. WORK PROJECT/ACTIVITY Rigging using Griphoists | 2. LOCATION Pacific Crest NST | 3. UNIT |
| JOB HAZARD ANALYSIS (JHA) References-FSH 6709.11 and -12 (Instructions on Reverse) | 4. NAME OF ANALYST | 5. JOB TITLE | 6. DATE PREPARED |
| 7. TASKS/PROCEDURES | | 8. HAZARDS | 9. ABATEMENT ACTIONS Engineering Controls * Substitution * Administrative Controls * PPE |
| <p><u>USE OF RIGGING EQUIPMENT</u></p> <p>Use of wire rope, establishing the correct wire rope size and type for the work load</p> <p>Placement and stability of anchors</p> <p>Working loads</p> <p>Working load calculations</p> <p>Line Safety</p> <p>Shear Pins</p> <p><u>WORK SITE SAFETY</u></p> <p>Communication</p> <p>Stability of Worksite</p> <p>Fly Away Zone</p> | | <p>Failure of rope strength can result in loss of load and risk serious injury to ground crew</p> <p>Unstable placement; the load exceeds the stability of the anchor. Climbing tree to place and maintain anchor. Elevating tripod upon boulders above trail.</p> <p>Equipment failure, (hoist, wire rope, blocks)</p> <p>Estimation on distance, and weight distribution</p> <p>Improper inspection of equipment. Faulty setup of equipment.</p> <p>Incorrect placement or improper use of pins can lead to overloading rigging system</p> <p>Noise level from creek. Lack of experience working with rigging equipment and understanding rigging terminology.</p> <p>Footing in the creek, footing on the rocks, climbing trees</p> <p>Working under the rigging equipment. Exposure to anchor, block, or line failure</p> | <p>Use of four-strand wire rope. Wire rope should be inspected for frays or kinks in wire prior to use. Utilize grip hoist to manually lift and lower load.</p> <p>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.</p> <p>Maintain a working load of 5:1, never load gear more than 1/5 the limit.</p> <p>Properly calculate loads prior to use of rigging. Estimate load weight and size prior to tension.</p> <p>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.)</p> <p>Only use pins rated for grip hoist. Do not use nails, files, drill bits or anything else in place of shear pins.</p> <p>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.</p> <p>Analyze work site for slippery or loose rocks, falling hazards on the ground or overhead (snags) hazards.</p> |

Tripods

Public Safety/Traffic Control

**Tipping over
Pin/Cotter
Chain**

**Debris falling onto trail
Failure of rigging equipment**

**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**

**Crew member assigned to notify public of trail closure, dangerous equipment
and estimated time travel through trail.**

