

## **Practical Exercise Statement – Portable Anchoring - Tripods**

**Time Allotted:** 1 Hour

**Purpose:** The purpose of this training exercise is to review the principles associated with tripods used as a portable anchor. *(This Practical Exercise Statement may be used in conjunction with the Practical Exercise Statement for 4:1 Mechanical Advantage Systems.)*

**Terminal Learning Objective:** The student shall correctly erect a tripod and position it appropriately for use as an anchor.

**Enabling Learning Objectives:** Given a required equipment cache and a period of instruction, the student shall:

- Establish a tripod as a portable anchor
- Establish an anchor using a tripod on an unlevel surface.

### **Equipment Needed:**

- 1 – Tripod
- 1 – 30' Chain or 10mm rope
- 1 – ½" rope of suitable length to act as a back tie
- 3 – 'G' rated carabiners
- 1 – Anchor strap
- 1 – 8mm prusik
- 3 – pickets (optional)

**Instructor's Notes:** This exercise is for 4-6 students. Begin by discussing the advantages and uses of a tripod as a portable anchor. Highlight the importance of keeping the resultant forces within the footprint of the tripod base. Discuss the process of articulating the head of the tripod, and how to counteract that action by using tensioned back-ties. *(Review video on Tensioned Back-Ties as needed)*

Have the students erect the tripod over a designated access such as a man hole, (or simulated access). (Discuss with the students that we would attach our rigging elements prior to raising the tripod to full height.) Raise the tripod to the appropriate height, using the rated capacities on the tripod's chart as a reference. Have one student stand at a distance and visualize the tripod to a vertical position for the rest of the crew. Run the chain or rope through the feet of the tripod and secure it using the chain's screw link or a square knot in the rope. Pickets may also be used to anchor the feet of the tripod if on an appropriate base.

Simulate a situation where the tripod must be articulated, and have the students articulate the tripod as needed. Direct them to utilize tensioned back-ties to counter the movement, and discuss the importance of securing the feet to avoid catastrophic collapse of the tripod.

Discuss the rigging for a haul or lower system, and how change of directions must be routed within the footprint of the tripod.

This exercise may be combined with the practical exercise for 4:1 mechanical advantage systems.