	Job Performance Review	**Laser Level and Tripod**	**Individual Level Competency**

JPR Title

Laser Level and Tripod

JPR Number

JPR-TR-22

Reference

NFPA 1670 – Standard on Operations and Training for Technical Search and Rescue Incidents
NFPA 1006 – Standard for Technical Rescuer Professional Qualifications
IFSTA Essentials of Firefighting
Product Specifications
ATFD Standards of Cover and Risk Analysis

Performance Criteria

Firefighter is able to display competency with the use and circumstances in which the equipment may be utilized for technical rescue operations.

Firefighter is able to effectively demonstrate the applications for set up and use of the equipment for technical rescue operations.

Time Parameters

Safe and Efficient Manner

Safety Precautions

Space allocation to prevent injury to self or others while operating
Appropriate PPE
Attention to surroundings

Procedure

There are three basic components for set up of the equipment, as follows:

- ✓ The Laser Pointer
- ✓ The Tripod
- ✓ The Tripod Mounting Head

Tripod set up involves expanding the legs of the tripod and extending the legs as needed.

Tripod should be set on a firm stable surface.

Attach the Tripod Mounting Head to the tripod.

Within reason, set the tripod to level utilizing the level tool incorporated with the mounting head. For the laser application, a firm stable base, preventing the movement of the tripod, is more important than precise leveling of the tripod.

The laser tool itself has a leveling calibration built in, but is not necessary to be used for our needs. Also – the mounting head has an "up – down" adjustment if needed.

The laser pointer is battery operated and uses 3 AAA batteries. Place 3 fresh batteries in the laser and power on the device. Verify the laser beam operates.

Mount and secure the laser pointer to the mounting head.

To prevent accidental movement of the tripod and laser – place cones around the tripod.

Use of the laser pointer will vary greatly from daytime operations to night operations as bright sunlight will impact your ability to see the beam.

Use of the laser is best suited for a maximum distance of 150 feet but effectiveness will vary with day versus night time uses.

Scenario Based Usage – There are a variety of uses for a laser on the rescue scene. For our basic use scenario the following will be considered:

Structural Collapse – For a collapse scenario, the laser pointer will be used to mark the structure and track any subsequent or additional movement of the structure. Aim the laser at the structure and mark the laser beam with a piece of tape or other marking material. For our use, we will have access to various colors of vinyl tape.

Trench Operations – For a trench operation, the above instruction could be used to monitor shoring panels set in place for potential subsequent movement of the panels or perhaps the trench.

Scenario based usage would evolve around potential safety measures and assessment decision making for potential access concerns.

Operations conclude with the shutting down of the equipment, disassembly, and stowing the equipment for future use. This includes removal of the batteries from the laser pointer.

Note – photographs for the set up of the laser and tripod are shown below.

Firehouse Software Evaluator Notes

Link to "General Training in the Rescue Section" of FHS

L. Siefken
2020

Structural Collapse Training Prop – Tripod and Laser Pointer Reference

Above – Tripod and Laser set up is established on a firm base with cones to prevent accidental knocking or movement of the equipment.

If available manpower is abundant, position an individual at the tripod to verify that the tripod has not been moved.

Above – Wall marking, in this case colored vinyl tape, placed where laser beam is identified on the structure and monitored for potential movement of the structure. The red dot showing on the blue tape is the laser beam from the tripod.