

## **Operating Guideline # 316**

### **Rope Rescue Equipment**

**January 21, 2020**



#### **PURPOSE:**

The purpose of this Operating Guideline (OG) is to establish routine inspection and maintenance procedures for all equipment elements of the Low Angle/Low Slope Rescue equipment cache carried by the Muskoka Lakes Fire Department.

#### **ISSUE/RATIONALE:**

The proper and regular inspection and maintenance regime for all fire department equipment is essential if crews are to have the highest degree of confidence in it, and if we are going to rely on the equipment to function as intended under emergency conditions.

#### **GUIDELINE:**

##### **General**

1. The equipment cache for rope rescue being regularly utilized by our Department includes one or more of the following:

- a) Rescue Helmets
- b) Rescue Harness
- c) Life safety rope
- d) "MPD" (Multi-Purpose Device/Descent Belay Pulley)
- e) Carabiner
- f) Pulley (Single and Swivel)
- g) Prusik
- h) Webbing
- i) Rescue Litter

2. Each element or piece of equipment must be regularly inspected and maintained by a person who is properly trained in its use. As a minimum, each piece of equipment must be inspected monthly during apparatus checks, and following each use. Inspections shall be documented via the log books/sheets provided. Equipment that is damaged shall be taken out of service and repairs or replacement arranged by notifying the Deputy Chief.

3. Generally, each piece of equipment should be examined for the presence of one or more of the following conditions as applicable:

- |                               |                                |
|-------------------------------|--------------------------------|
| a) Cracks/dents               | j) Deformations                |
| b) Distortion                 | k) Excessive wear              |
| c) Gouges/deep scratches      | l) Cuts                        |
| d) Corrosion                  | m) Fraying                     |
| e) Sharp edges                | n) Abrasions                   |
| f) Function                   | o) Indication of shock loading |
| g) Discolouration             | p) Elongation                  |
| h) Chafing                    | q) Exposure to heat            |
| i) Foreign soft or hard spots | r) Dirt/grime                  |

4. Each rescue harness is to be fully inspected by examining each strap and buckle/closure/adjustment device. All straps are to be stored in their maximum extension and shall be both pliable and easily adjustable.

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5. Life safety rope shall be inspected by removing it completely from the storage bag and examining it along its entire length for cuts, abrasions and other damage to the outer protective sheath. If any portion of the rope has been exposed to water/moisture, it is to be thoroughly air dried before being re-bagged. The rope inspection log **MUST** be kept with each rope bag and shall be completed after each inspection. Rope should be re-loaded in transport bags by rotating after each use to maintain consistent wear.
6. Following each use (training or incident), life safety rope should be inspected by a qualified person. It shall not be reused if the rope:
  - a) Displays signs of visual damage
  - b) Has been exposed to heat, direct flame impingement or abrasion
  - c) Has been subject to an impact load
  - d) Has been exposed to any chemical that can cause deterioration
7. Life safety rope shall be retired from use in accordance with the service life recommendations.
8. All other elements of the equipment cache carried in a case or bag must be physically removed from their carrying case/bag and physically inspected.
9. Any "hardware" element of the equipment cache (MPD, carabiner, pulley, prusik, webbing) that is subjected to a significant unintended physical impact (i.e. - is accidentally dropped) shall be removed from service.
10. The larger components of the equipment cache shall be checked for significant damage and all clips and holding devices checked.
11. Clean and dry all equipment elements after each use to remove any dust, debris, and moisture. During use, carrying, and storage keep the equipment away from acids, alkalis, fuels and strong chemicals. Do not expose the equipment to flame or high temperatures.

#### **RESPONSIBILITY:**

It is the responsibility of all Emergency Operations Division staff to comply with the provisions of this Operating Guideline.

#### **REFERENCES:**

- Section 21 Committee Guidance Note GN-1-5, Life Safety Rope and Equipment
- Section 21 Committee Guidance Note GN-6-04, Rope Rescue
- Section 21 Committee Guidance Note GN-6-05, Confined Space Rescue
- O. Reg. 632/05 Confined Spaces
- NFPA 1670 Standard on Operations and Training for Technical Rescue Incidents
- NFPA 1006 Standard for Technical Rescuer Professional Qualifications
- MLFD OG 1407, Confined Space Rescue Incidents
- MLFD OG 1408, Trench Rescue Incidents
- MLFD OG 1417, Rope Rescue Incidents