Report Date: 08 May 2014

Summary Report for Individual Task
052-247-1207
Construct a Lowering System for Rope Rescues
Status: Approved

Distribution Restriction: Approved for public release; distribution is unlimited.

Destruction Notice: None

Foreign Disclosure: FD1 - The materials contained in this course have been reviewed by the course developers in coordination with the Ft Leonard Wood MO/MSCOE foreign disclosure authority. This course is releasable to students from all requesting foreign countries without restrictions.

Condition: You are a member of an Urban Search and Rescue (US&R) team and are given a rope rescue incident, an established single point anchor system connected to an anchor plate, brake bar rack, carabiners, edge protection and 200 feet of 1/2 inch life safety rope. This task should not be trained in MOPP 4.

Standard: Construct a lowering system used for US&R operations, ensuring the system can accommodate the load, control the descent, capable of holding load in place or lowering with minimal effort over required distance, and is connected to a load and an anchor system in accordance with (IAW) National Fire Protection Association (NFPA) 1006.

Special Condition: None

Safety Risk: Low

MOPP 4: Never

Task Statements

Cue: None

DANGER

None

WARNING

None

CAUTION

None

Remarks: All required references and technical manuals will be provided by the local US&R Command.

Notes: Always use a separate belay system in conjunction with a lowering system when performing a lowering operation.

Performance Steps

1. Attach the brake bar rack to the anchor system with a locking carabiner.
   Note: The term "brake bar rack" will be referred to as a "rack" throughout the rest of the task.

2. Rig the rack.

   a. Reave the rope around the brake bar by first laying the rope over the top bar.
      Note: If the top bar has a "training groove" the rope should go across the groove.

   b. Secure the second bar to the rack by lightly squeezing the frame to snap the bar into place.
      Note: The rope should now be between the top and the second bar.

   c. Pull the rope back up towards you making a bight that goes around the second bar and snap the third bar into place.

   d. Continue alternating the rope up and down, inserting the bars as you go, until all six bars are in place.

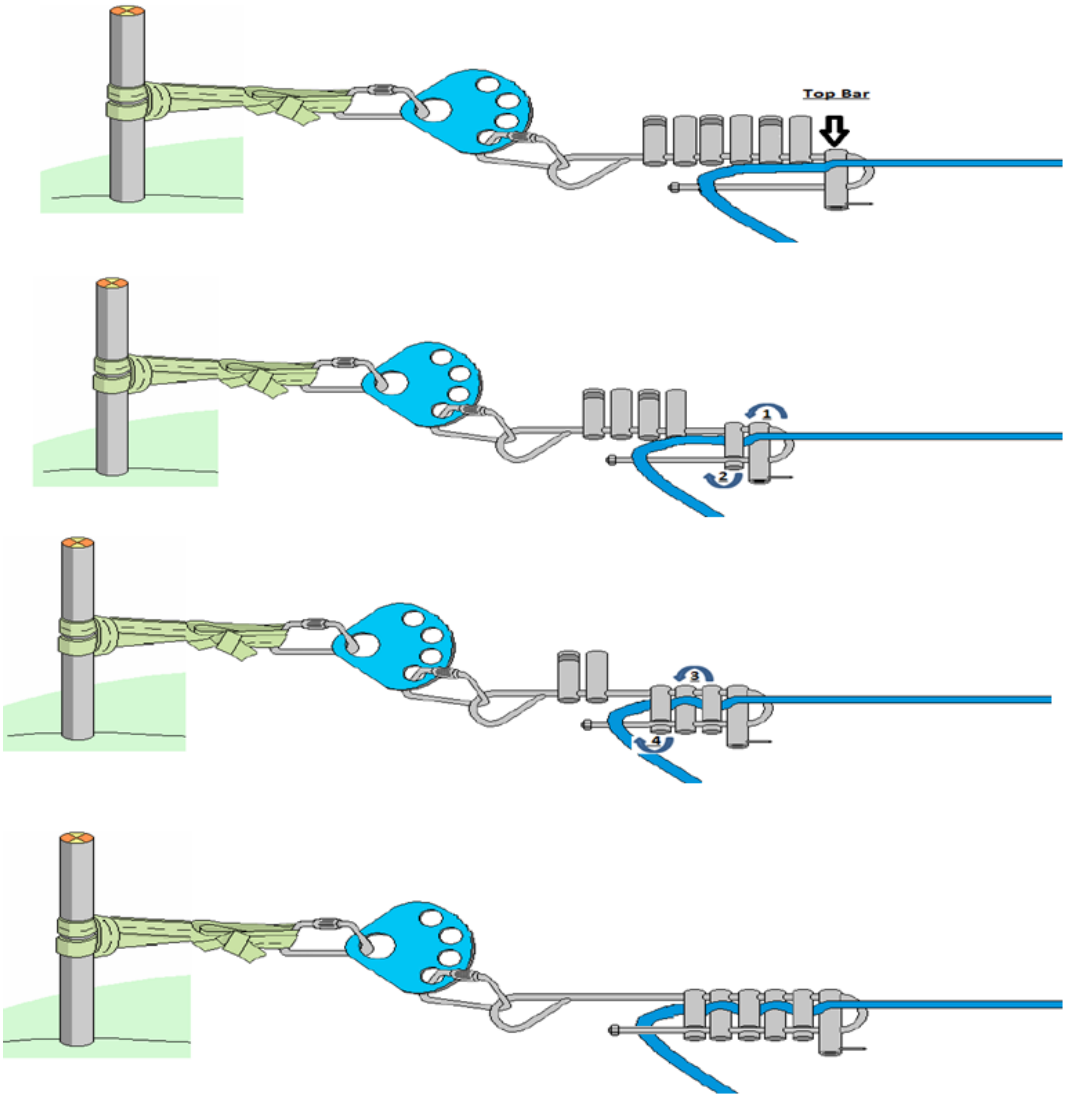

Figure 052-247-1207-1
Rig the Rack

3. Tie a figure eight on a bight on the running end of the rope. (See task 052-247-1301)

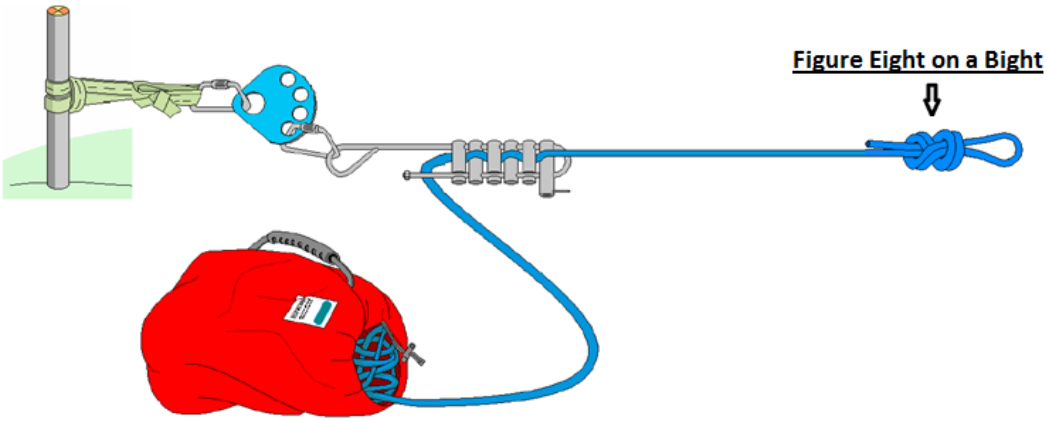

Figure 052-247-1207-2
Figure Eight on a Bight Knot

CAUTION

All lowering operations begin with a locked off brake bar rack for safety. Failure to adhere to this caution may result in injury to the rescuers.

4. Lock off the rack.

a. Take the rope with your brake hand and pull it away from you to the top of the rack and toward the anchor.

b. Pull the rope over to the side of the rack and across the hyperbar (with your brake hand) between the rack frame and the pin at the end of the hyperbar so that the rope runs across the top bar.

c. Bring the rope back toward you, pulling it taut so that it locks all of the bars together.

d. Bring the rope through the two legs of the rack and across the bottom bar.

e. Form a large bight of rope and tie a double overhand knot around the entire rack.

Figure 052-247-1207-3

5. Perform a load test prior to life loading the system.

Note: The load test is performed away from the edge in a safe area. You can either lean into the system with a rigged rescuer or have several rescuers pull on the system to ensure activation of the locked off bars on the rack.

6. Place edge protection as needed for the given incident.

7. Conduct a system safety check. (See task 031-627-2152)

(Asterisks indicates a leader performance step.)

Evaluation Guidance: Score the Soldier a GO if all measures are passed (P). Score the Soldier-GO if any measure is failed (F). If the Soldier fails any measure, show him how to do it correctly.

Evaluation Preparation: Setup: Provide the Soldier with all the items listed in the conditions.

Brief Soldier: Tell Soldier to construct a lowering system for rope rescue operations.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Attached the brake bar rack to the anchor system with a locking carabiner.			
2. Rigged the rack.			
3. Tied a figure eight on a bight knot on the running end of the rope.			
4. Locked off the rack.			
5. Performed a load test prior to life loading the system.			
6. Placed edge protection as needed for given incident.			
7. Conducted a system safety check. (See task 031-627-2152)			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	IFSTA	International Fire Service Training Association (IFSTA) Fire Service Search and Rescue, 7th Edition	No	No
	IFSTA - 1st Edition	IFSTA Technical Rescue for Structural Collapse, 1st Edition	No	No
	ISBN 13: 9781428320567	Technical Rescuer-Rope Levels 1 and 2	No	No
	NFPA 1006	Standard for Rescue Technician Professional Qualifications	Yes	Yes

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT.

Safety: In a training environment, leaders must perform a risk assessment in accordance with FM 5-19, Risk Management. Leaders will complete a DA Form 7566 COMPOSITE RISK MANAGEMENT WORKSHEET during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination.

Prerequisite Individual Tasks : None

Supporting Individual Tasks :

Task Number	Title	Proponent	Status
031-627-2153	Operate a Belay System	031 - CBRN (Individual)	Approved
031-627-2152	Conduct a System Safety Check	031 - CBRN (Individual)	Approved
031-627-2151	Construct a Belay System	031 - CBRN (Individual)	Approved
031-627-2148	Construct a Single Point Anchor System	031 - CBRN (Individual)	Approved
031-627-2146	Tie Knots, Bends and Hitches	031 - CBRN (Individual)	Approved

Supported Individual Tasks :

Task Number	Title	Proponent	Status
052-247-1315	Control Hazards of a Confined Space	052 - Engineer (Individual)	Analysis
052-247-1301	Tie Knots, Bends, and Hitches for Rope Rescues	052 - Engineer (Individual)	Reviewed
052-247-1330	Operate a Lowering System	052 - Engineer (Individual)	Approved
052-247-1218	Perform Rescue of an Injured or Unconscious Victim from a Confined Space	052 - Engineer (Individual)	Analysis
052-247-1308	Rappel a Fixed Rope System	052 - Engineer (Individual)	Approved
052-247-1208	Perform Litter Tender Duties for a Low Angle Rescue	052 - Engineer (Individual)	Approved

Supported Collective Tasks :

Task Number	Title	Proponent	Status
05-3-8012	Perform Trench Rescue Operations	05 - Engineers (Collective)	Approved
05-3-8013	Perform Confined Space Rescue Operations	05 - Engineers (Collective)	Approved
05-3-8014	Perform a Structural Collapse Rescue Operation	05 - Engineers (Collective)	Approved
05-3-8011	Perform Rope Rescue Operations	05 - Engineers (Collective)	Approved