

**Summary Report for Individual Task
052-247-1308
Rappel a Fixed Rope System
Status: Approved**

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

DESTRUCTION NOTICE: None

Condition: You are a member of an Urban Search and Rescue (US&R) team and are given a high angle rope rescue incident scenario, a belay system, a life safety harness, carabiners, brake bar rack, an anchored fixed rope system and Personal Protective Equipment (PPE). This task should not be trained in MOPP 4.

Standard: Rappel a fixed rope system in a high angle environment ensuring that you are attached to the rope rescue system by a descent control device, your speed of descent is controlled, and you can stop at any point on the rope and rest suspended by your own life safety harness.

Special Condition: None

Safety Level: Low

MOPP: 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: None

Performance Steps

1. Ensure the belayer is in position and ready to start belay.

2. Don the life safety harness and other required PPE.

3. Attach the belay line to the life safety harness with a carabiner.

4. Attach the brake bar rack to the pelvic d-ring on the life safety harness with a carabiner.

Note: The term "brake bar rack" will be referred to as a "rack" throughout the rest of the task.

5. Attach the rack to the main-line rope system.

Note: Always rig the brake bar rack with all six bars engaged and then adjust as necessary once you start your descent.

a. Face the anchor with the rope on the brake-hand side.

b. Hold the rack in front of the body with the guide hand.

c. Disengage all the bars except the top one on the rack by sliding them one at a time toward the bottom of the rack.

d. Squeeze the two legs of the rack together with one hand, and flip back each bar with the other hand.

Note: Do not pull the rope down so it is too tight. If the rope is pulled below the first bar, you will need to perform a self-rescue or be rescued by a team member.

e. Pick up the rope with your brake hand and guide the rope between the two legs on the rack and across the top bar.

Note: Do not pass the rope between the top bar and the bend on the rack. This results in pinching of the rope, making the descender harder to control and causing excessive wear on the rack.

f. Reach down below the rack, grab the rope, and pull it across the top bar away from you (toward the anchor), pulling the slack out of it.

g. Clip in the second bar at the bottom of the rack with the other hand, and slide it up to trap the rope between it and the top bar.

h. Bring the running end of the rope back across the second bar, pulling it toward the anchor so that the second bar is snugged in by the force of the rope pulling against it.

Note:

The rope must be on the side of the bar opposite the notch to hold the bar in place on the rack frame.

i. Repeat the process with the remainder of the bars until all six have been clipped in.

6. Request a system safety check. (See task 031-627-2152)

7. Give the command "on rappel".

Note: Rapeller receives the confirmation command from the belayer to acknowledge his command.

WARNING

A major concern with getting over the edge with a rack is the possibility of catching the device on the edge. This can happen with any rappel device. However, because of the rack's length, you need to be particularly careful not to catch it on the edge. The solution to this problem is to avoid the edge catch. As you go over the edge, make sure you lean out enough and push back with your feet before you step down so that the rappel device clears the edge before the rope lies across the edge.

8. Move into position on the edge of the platform once you have been instructed to do so, and received confirmation command of "belay on" from the belayer.

- a. Begin backing toward the edge.
- b. Lean back against the rope and put weight on the system.
- c. Stand with the arches of your feet on the edge, with a slight bend in your knees.
- d. Position your brake hand (dominant hand) 30 degrees from the rack next to your body.
- e. Position your control hand just above the rack on the rope and out of the way of the bars.

9. Begin rappel.

- a. Step down with one foot, then a short step with the other, to regain a balanced position.
- b. Maneuver down the side of the rappel site into a good "L" position by spreading the bars apart toward you as you ease your grip on the rope with your brake hand.
- c. Continue the descent down slope in a controlled manner by controlling your descent with the brake hand and if necessary, with the guide hand on the bars.

Note: If you are unable to move, use the guide hand to pull the bars down toward you.

10. Lock off the rack.

- a. Lean back so that the rope between the rack and the anchor is taut.
 - b. Take the rope with your brake hand and pull it away from you, to the top of the rack and toward the anchor.
 - c. 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.
 - d. Bring the rope back toward you, pulling it taut so that it locks all of the bars together.
 - e. Bring the rope through the two legs of the rack and across the bottom bar.
 - f. Pull the rope away from you, toward the anchor, in the same path as you did before to the "stop" position.
- Note: Pull the rope firmly so that all rope sections are taut and the bars are locked together.

- g. Form a large bight of rope and tie a double overhand knot on the standing part of the rope just above the rack.

Note: If you are unable to reach above the rack to tie the knot, tie the double overhand knot around the entire rack. Ensure there is no slack in the rope running over the bar, nor space between the bars.

11. Unlock the rack.

Note: When unlocking the rack, always keep a firm grip on the rope and allow no slack in the brake end of the rope.

- a. Untie the overhand knot, while maintaining constant tension on the rope with your brake hand.
- b. Slowly lower the rope to return to the "stop" position.
- c. Resume your guide hand's normal position of cradling the bars.

12. Continue to rappel down in a controlled manner until you reach the desired ending point.

13. Remove the rack from the main-line rope system.

- a. Squat down to get slack in the rappel line.
- b. Stand up to disconnect the rappel line.
- c. Pull the rope back in the direction of the anchor with your brake hand so that it uncovers the bottom bar completely.
- d. Squeeze the legs of the rack together using your guide hand and unclip the bottom bar.
- e. Let the bar slide to the bottom of the rack.
- f. Move the rope back through the leg of the rack with your brake hand, uncovering the next bar up and pulling the rope back toward the anchor.
- g. Unclip the next bar up with your guide hand.
- h. Continue this procedure until all bars have been disengaged.

14. Give the command "off rappel".

Note: Rapeller receives the confirmation command from the belayer to acknowledge his command.

(Asterisks indicates a leader performance step.)

Evaluation Guidance: Score the student GO if all measures are passed (P). Score the student NO-GO if any measure is failed (F). If the student 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 the Soldier to Rappel a Fixed Rope System.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Ensured the belayer is in position and ready to start belay.			
2. Donned the life safety harness and other required PPE.			
3. Attached the belay line to the life safety harness with a carabiner.			
4. Attached the brake bar rack to pelvic harness on the life safety harness with carabiner.			
5. Attached the rack to the main-line rope system.			
6. Requested a system safety check. (See task 031-627-2152)			
7. Gave the command "on rappel".			
8. Moved into position on edge of platform once you have received confirmation and command of "on belay".			
9. Began the rappel.			
10. Locked off the rack.			
11. Unlocked the rack.			
12. Continued to rappel in a controlled manner until reaching the desired ending point.			
13. Removed the rack from the main-line rope system.			
14. Gave the command "off rappel".			

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
052-247-1207	Construct a Lowering System for Rope Rescues	052 - Engineer (Individual)	Analysis
052-247-1303	Belay a Falling Load	052 - Engineer (Individual)	Approved
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
052-247-1301	Tie Knots, Bends, and Hitches for Rope Rescues	052 - Engineer (Individual)	Analysis

Supported Individual Tasks :

Task Number	Title	Proponent	Status
052-247-1310	Rescue a Conscious Victim from a Suspended Location	052 - Engineer (Individual)	Analysis
052-247-1301	Tie Knots, Bends, and Hitches for Rope Rescues	052 - Engineer (Individual)	Analysis
052-247-1304	Construct a Fixed Rope System	052 - Engineer (Individual)	Analysis
052-247-1303	Belay a Falling Load	052 - Engineer (Individual)	Approved
052-247-1307	Ascend a Fixed Rope System	052 - Engineer (Individual)	Analysis
052-247-1309	Perform a Self Rescue from a Jammed Rack	052 - Engineer (Individual)	Analysis

Supported Collective Tasks :

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