

Appendix C - Practical Exercises and Solutions

PRACTICAL EXERCISE(S)/SOLUTION(S) FOR LESSON 071-FREBB001 Version 02.0 ©

PRACTICAL EXERCISE SHEET 071-FREBB001 PE1

Time: 4 hours 0 minutes

Title Identify ground signs in an Improvised Explosive Devices (IEDs) environment

Lesson Number/Title 071-FREBB001 Version 02.0 © / Ground Sign Awareness

Security Classification For Official Use Only

Introduction Once students are broken down into groups, the Instructor orients the students to the terrain, gives a very brief threat overview, and places the students where they need to go at the start point.

Motivator On today's modern battlefield, Soldiers are being faced with new threats such as IED's. There is still the challenge of trying to win the hearts and minds of the population that resides in our theater of operation. To be effective, every Soldier needs to learn and adapt to the enemies tactics while being sensitive to the culture and religions of the region.

Terminal Learning Objective **NOTE.** Inform the students of the following Terminal Learning Objective requirements.
At the completion of this lesson, you [the student] will:

Action:	Identify ground signs in an IED environment
Conditions:	In a classroom setting and field environment, given PowerPoint presentation, students resources, instructional materials, doctrinal references, and equipment.
Standards:	Identify ground signs IAW doctrinal references including ATP 3-90.37, STP 33-CIED-SM-TG and must achieve a score of 80% or greater on course examination rubrics. The identification includes: <ol style="list-style-type: none">1. Define Observation Theory2. Recognize Indicators of Ground Signs and IED markers3. Identify IED Emplacement Learning Domain: Cognitive Learning Level: (C1) Knowledge

Safety Requirements

Safety Requirements in a Classroom Setting:

Safety is of the utmost importance in any training environment. During the training process, commanders will utilize the 5-Step Risk Management process to determine the safest and most complete method to train. Every precaution will be taken during the conduct of training. Safety is everyone's responsibility to recognize, mitigate, and report hazardous conditions.

Instructor note: The instructor will brief the students on the unit/facility SOP for classroom

contingencies (i.e. what doors will be used to exit the classroom, rally points, severe weather, WBGT/Kestrel set up, etc).

Safety Requirements other than Classroom Settings:

Safety must be paramount in the complex outdoor environment. During the training process, commanders will utilize the 5-Step Risk Management process to determine the safest and most complete method to train. Every precaution will be taken while replicating realistic battlefield conditions. Safety is everyone's responsibility to recognize, mitigate, and report hazardous conditions. The instructor will brief the unit/site SOP and Risk Management Worksheet for all potential contingencies encountered during that training period/event (i.e. WBGT/Kestrel set up, trail vehicles for PT/foot marches, severe weather, fire, evacuation routes, muzzle awareness, range safety briefs, required medical FLA with driver and medics with emergency equipment, student injury procedures, and rally points etc).

Risk Assessment Level

Low

Environmental Considerations

NOTE: Instructor should conduct a Risk Assessment to include Environmental Considerations IAW FM 3-34.5, Environmental Considerations {MCRP 4-11B}, and ensure students are briefed on hazards and control measures.

Training will be conducted in the proper designated areas only. This ensures natural and environmental resources are maintained properly for continued training realism. Using the proper designated areas also eliminates conflicting or controversial situations. Equipment will be operated to conform to environmental operating permits. Improper disposal of trash and refuse, inadequate clean up of training areas, pollutes ground and water resources. This may result in a potential health/safety hazard.

Evaluation

Identify 7 out of 10 Indicators of an IED as prescribed in the practical exercise to reduce the probability of injury to personnel or damage to equipment.

Instructional Lead-in

Soldiers must be vigilant in performing their duties, remain alert, and maintain a strong security posture to avoid becoming a victim of an IED ambush. Soldiers must have a good appreciation of the type of devices and employment techniques that they may encounter. All Soldiers must be able to identify improvised explosive devices.

Note: Use this statement or develop one of your own relating to the material.

Resource Requirements

Instructor Materials:

1. Lesson plan with Appendix A, C, and D as applicable
2. All references linked to this lesson plan
3. Visitor Book on DVD and automation equipment. I.E Warrior University.
4. Risk Assessment worksheet.

Student Materials:

1. Lesson plan with Appendix A, C, and D as applicable
2. All references linked to this lesson plan
3. Visitor Book on DVD and automation equipment. I.E Warrior University.
4. Risk Assessment worksheet.

**Special
Instructions**

Note to the Instructor/Facilitator (I/F). Inform the students of the following prior to starting the PE:

1. This part of the Ground Sign Awareness class can be presented through **Problem Based Instruction (PBI)** method.
2. The 40 minutes academic material of the class can be covered at the beginning of this PE.
3. The following is a simple/generic scenario that can be issue to the students in order to add realism to the training.
4. **The 5Ws for this PE are as follows:**
 - a. **Who:** Team TF of which you are a member
 - b. **What:** Establish safe conditions which include identifying potential IED threats.
 - c. **Where:** Designated area starting approximately 1000 meters before the town entrance
 - d. **When:** In the next 24-36 hours
 - e. **Why:** For the a convoy transporting high ranking US diplomats to meet with local town officials
5. **Background.** You are a DCT-MT member of a Tm TF tasked with establishing safe conditions for a convoy that transports US Diplomats into a local town. US Troops have experienced several IED related attacks and incidents in that particular area in the last 10 months. You know that your life, the life of senior US official and your career it's at stake. Today you are preparing to rehearse what you learned in the Ground sign awareness class when you attended the DCT-MT course which includes:
 - a. Review Observation Principles
 - b. Recognize Indicators of Ground Signs
 - c. Identify the Markers of IEDs
 - d. Identify IED Emplacement
6. Feel free to modify this PBI or create your own as long as you are meet the objective of this exercise.

Procedures

Note for the Instructor/Facilitator (I/F)

1. Instructors will need to locate a piece of terrain that will support all three events, have a central location for starting, and all are within walking distance of each other. 1 hour per station is the planning requirement. Students are encouraged to bring optics from their unit. Actual round robin rotation will be determined by the Lead Instructor on site.
2. **This PE is designed for three stations; observation, Hasty/Deliberate IED Emplacement, and Ground Sign Awareness.**

a. **Observation Station:**

Material Requirements: Various recognizable items such as inert mortar rounds, inert grenades, inert mines, inert artillery rounds, etc. 10 x clip boards with paper lane marking

material (high visibility marking tape).

1) This station will require at least 1 hour for set up.

Items are placed in a defined lane (left, right, near, far limits are marked and clearly identified for the students). Care is taken during emplacement to ensure that the items are placed at distances ranging between 5 meters from the observation point out to (no farther than) 200 meters. Items should not be camouflaged, but instead placed in the open while utilizing the available terrain for camouflage. From behind a starting line the students are given 15 minutes to observe the lane with both the naked eye and available optics. After 15 minutes have elapsed, the students are moved down the center of the observation lane in 5 meter increments and given an opportunity to observe from that location. The objective is to assist understanding of the “eye-brain” relationship in the identification of readily recognizable objects. At the completion of the event the students will conduct an AAR and discuss ways in which they, as Master Trainers, can set up stations in their units to train Soldiers.

2) When the students arrive at this station, give an explanation for the objective of the station and the problem base scenario.

b. Hasty/Deliberate IED Emplacement Station.

Material Requirements: This station will require at least one Hasty emplacement and one deliberate emplacement. Any IED type is sufficient as long as it meets the criteria and can be explained/ described to the students. Other requirements are 1 shovel, 1 mattock, and any necessary components to assemble the 2 separate IEDs.

1) This station will require at least one hour for set up.

Terrain plays a big part in setting up this station. Two locations will need to be identified within close proximity to each other that support a Hasty and a deliberate emplacement. For the Hasty emplacement, a CWIED normally works best, although this is not a rule. Depending on terrain, a VOIED may also be utilized. The key is to explain in detail the components in the ground, and the time it took to emplace the IED and camouflage it. Care should be taken by the Instructor not to “over camouflage” to ensure that the point of HASTY emplacement comes across to the students. Also this is an ideal time to discuss components and where the enemy can obtain them, i.e. stator wire, batteries, pressure plates, main charge explosives, etc.

2) For the deliberate emplacement, the Instructor should ensure that it is camouflaged to the MAXIMUM extent possible. The Instructor will point out the time that was required for emplacement, the chain of various enemy personnel that could have taken part in the emplacement (stages), and the simplicity vs technically challenging aspects of the emplaced device. Also, it is EXTREMELY important to point out to the students that this IED was emplaced in a VP due to the enemy having a degree of certainty that CF would return to this area.

3) When the students arrive at this station, an explanation is given for the ELO of the station. They are first introduced to the Hasty Emplacement and then to the Deliberate Emplacement. It should take about 50 minutes to walk the students through both points, after which a Discussion, led by the Instructor, should be encouraged to solidify the points of how the

students, as Master Trainers, can take what they have learned back to their unit to train their Soldiers.

c. **Ground Sign Awareness Station.**

Material Requirements: The only materials required for this station are various “discardables” i.e. pieces of electrical tape, used water bottles, wire insulation clippings, cigarette butts, etc.

1) **This station will require at least 1 hour for set up.**

A piece of terrain for this station will need to be identified that includes roads, trails, and open areas. The area will need to be prepared by removing any unwanted traces of human movement (trash). Specific areas will then need to be prepared to show the students different Ground Sign Indicators: discardables, color changes, regularity, flattening disturbance, transference, and markers. The students will start at a point on the lane and slowly be taken through in an attempt to identify these ground signs. If they miss them, the signs will be pointed out and discussed. At the end of the lane a Discussion will be led by the Instructor about how to implement ground sign awareness training as a Master Trainer.

2) When the students arrive at this station, give an explanation for the objective of the station and the problem base scenario.

**Feedback
Requirements**

Feedback is essential to effective learning. Schedule and provide feedback on the any information to help answer student's questions.

**SOLUTION FOR
PRACTICAL EXERCISE 071-FREBB001 PE1**

Identify 7 out of 10 indicators of an IED as prescribed in the practical exercise to reduce the probability of injury to personnel or damage to equipment.