

551-88U-1425
Communicate Using Railway Signals
Status: Approved

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

Destruction Notice: None

Foreign Disclosure: FD1 - This training product has been reviewed by the training developers in coordination with the Transportation School, Fort Lee, VA foreign disclosure officer. This training product can be used to instruct international military students from all approved countries without restrictions.

Conditions: Assigned as a Railway Specialist with the requirement to advise COCOM/Host Nation personnel on how to communicate using signal appliances, given a railyard, Personal Protective Equipment, engine with railcars and engineer, flags, fusees, radio and lantern, day or night, in all weather conditions, and in an operational environment. Some iterations of this task should be performed in MOPP 4.

Standards: Ensure all signals can be plainly seen, clearly understood and given from engineer side of track when practical. Apply correct color of flags or lights and use proper radio etiquette without causing injury to personnel or damage to equipment.

Special Conditions: None

Safety Risk: Low

MOPP 4: Sometimes

Task Statements

Cue: Your team has been tasked to advise COCOM/Host Nation personnel on how to communicate using signal appliances.

DANGER

None

WARNING

None

CAUTION

Working around live tracks is always dangerous. Follow all safety procedures outlined in the GCOR. Install portable derail or flag protection IAW GCOR and ATP 4-14.

Remarks: None

Notes: None

Performance Steps

1. Apply hand and lantern signals.

- a. Signal to stop.
- b. Signal to reduce speed.
- c. Signal to proceed.
- d. Signal to back up.
- e. Signal emergency stop.
- f. Signal to apply air brakes.
- g. Signal air brakes release.

2. Provide blue flag signal protection of workmen.

WARNING

Do not place fusee where it can start fire.

3. Apply fusee signals.

WARNING

Movement must stop within half the distance specified unless additional instructions are received.

CAUTION

The engineer will not accept any hand signals unless they are Stop signals while using the radio.

4. Give signals using radio and voice communication.

- a. Tell engine number to go ahead.
- b. Tell engine number to back.
- c. Give distance if more than four cars.
- d. Provide distance to crossings.

(Asterisks indicates a leader performance step.)

Evaluation Guidance: Mark each performance measure either GO or NO-GO. The Soldier must complete all steps to receive a GO for each measure. All measures must be marked GO to receive an overall GO on the task. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

Evaluation Preparation: Ensure that all materials required to perform the task are available. Tell the Soldier that he/she will be evaluated on communicating using signal appliances.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Applied hand and lantern signals.			
2. Provided blue flag signal protection of workmen.			
3. Applied fusee signals.			
4. Gave signals using radio and voice communication.			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	BASIC TRAINING MANUAL	Basic Training Manual for Brakemen and Switchmen	Yes	No
	GCOR	General Code of Operating Rules (GCOR), Seventh Edition	Yes	Yes

TADSS : None

Equipment Items (LIN):

LIN	Name
70238N	Radio, Mobile Portable Remote
NA4053	Lantern Color Percept
NA1520	Case, Ear Plug
DA3045	Boots, Safety
J07970	FUSEE RR RED M72
L80358	Locomotive Diesel: 56-1/2 In Gauge 100 to 120 Ton DS
DA159T	Vest Safety RV-1
HA4052	Safety Glasses, Revision Sawfly E
J68064	GLOVES LTHR MN WORK 1

Materiel Items (NSN) :

Step ID	NSN	LIN	Title	Qty
1.	6230-01-325-0595		Lantern, Battery Operated, Rechargeable	1
2.	1325-00-446-2864		Flag, Red	1
2.	8345-00-543-6912		Flag, Identification, Vehicle, Blue: Convoy, Leading Vehicle	1
3.	1370-01-009-2593		Fusee, Signaling	1

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 the current Environmental Considerations manual and the current GTA Environmental-related Risk Assessment card.

AR 200-1 delineates TRADOC responsibilities to integrate environmental requirements across DOTMLPF and ensures all training procedures, training manuals, and training doctrine includes sound environmental practices and considerations. The Army's environmental vision is to be a national leader in environmental and natural resource stewardship for present and future generations as an integral part of all Army missions. Environmental protection is never completed. Continuously be alert to ways to protect our environment and reduce waste.

Leaders must ensure that their unit has an active and strong environmental program. They must understand the laws and know what actions to take. Leaders bring focus, direction, and commitment to environmental protection. Commanding officers should ensure the following environmental programs are in place and are being maintained:

- Hazardous materials program.
- Hazardous waste program.
- Hazardous communications program.
- Pollution prevention and hazardous waste minimization recycling program.
- Spill prevention and response plan program.

Safety: In a training environment, leaders must perform a risk assessment in accordance with current Risk Management Doctrine. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer 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

current CBRN doctrine.

All operations will be performed to protect and preserve Army personnel

and property against accidental loss. Procedures will provide for public safety incidental to Army operations and activities and safe and healthful workplaces, procedures, and equipment. Observe all safety and/or environment precautions regarding electricity, cable, and lines. Provide ventilation for exhaust fumes during equipment operation and use hearing protection when required IAW AR 385-10, the Clean Air Act (CAA) and the CAA amendments, and the OSHA Hazard Communication standard.

Accidents are an unacceptable impediment to Army missions, readiness, morale, and resources. Decision makers at every level will employ risk management approaches to effectively preclude unacceptable risk to the safety of personnel and property affiliated with this task.

- (a) Take personal responsibility.
- (b) Practice safe operations.
- (c) Recognize unsafe acts and conditions.
- (d) Take action to prevent accidents.
- (e) Report unsafe acts and conditions.
- (f) Work as a team.

Prerequisite Individual Tasks : None

Supporting Individual Tasks : None

Supported Individual Tasks : None

Supported Collective Tasks : None

Knowledges :

Knowledge ID	Knowledge Name
551-K-1091	Know rail operation procedures
K-551-P-0013	Knowledge of signals
K-551-U-0005	Knowledge of GCOR Railway equipment
K-551-P-0008	Knowledge of rail safety procedures
551-K-0112	How to read, interpret, and relay visual hand and arm signals
K-551-P-0161	Knowledge of lights
K-551-T-0052	Knowledge of Army Rail Operations

Skills :

Skill ID	Skill Name
011-023S	Understand Night Use of Lights

ICTL Data : None