

**551-88U-3410**  
**Validate Track Structure and Right-of-Way**  
**Status: Approved**

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**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 advising COCOM/HN personnel, given an Operations Order/Operations Plan, rail crew, section of rail, Personal Protective Equipment, completed risk assessment, means of communication, track assessment, AR 56-3 and UFC 4-860-03, day or night, in all weather conditions, in an operational environment scenario. Some iterations of this task should be performed in MOPP 4.

**Standards:** Validate inspected track structure and Right-of-Way in accordance with UFC4-860-03 with 100% accuracy.

**Special Conditions:** None

**Safety Risk:** Low

**MOPP 4:** Sometimes

<b>Task Statements</b>
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**Cue:** Your team has just arrived in theater. The COCOM is asking for an assessment of the Railroad.

<b>DANGER</b>
None

<b>WARNING</b>
None

<b>CAUTION</b>
Working around live tracks is always dangerous. Follow all safety procedures outlined in the GCOR and ATP 4-14.

**Remarks:** None

**Notes:** None

## Performance Steps

1. Monitor worksite.
2. Validate establishment of on-track Roadway Worker Protection and set-on.
3. Validate track structure and roadway inspection.
  - a. Track inspection vehicle speed must not exceed 5 MPH over crossings, switches and turnouts.
  - b. Speed between crossings/turnouts is at inspector's discretion based on system or local speed restrictions or track inspection vehicle restriction.
  - c. Tracks within 30 feet of track being traversed may be inspected provided that view of the track is unobstructed (single inspector).
4. Validate non-complying track is noted and protected.
5. Validate set-off procedures and on-track Roadway Worker Protection was released.
6. Validate track information database was updated.
7. Confirm if condition of roadway warrants exception to standards pertaining to:
  - a. Roadway
  - b. Drainage
  - c. Vegetation
8. Confirm if condition of track geometry warrants exception to standards pertaining to:
  - a. Gage
  - b. Cross Level
  - c. Superelevation
  - d. Warp
  - e. Alinement
  - f. Profile
9. Confirm if condition of ballast warrants exception to standards.
10. Confirm if condition of crossties warrants exception to standards.
11. Confirm if condition of other track material (OTM) warrants exception to standards pertaining to:
  - a. Tie Plates
  - b. Spikes
  - c. Joints
  - d. Rail Anchors
  - e. Gage Rods
12. Confirm if condition of rail warrants exception to standards.

13. Confirm if condition of turnout warrants exception to standards pertaining to:
  - a. Turnouts and Track Crossings; generally
  - b. Switches & Switch Stands
  - c. Frogs
  - d. Guard Rails
14. Confirm if condition of road crossing warrants exception to standards.
15. Confirm if condition of rail crossing warrants exception to standards.
16. Confirm if condition of bridge warrants exception to standards.
17. Confirm if a close clearance exists.
18. Verify that the railroad reports an activation failure of an active highway-rail crossing with 15 days of occurrence.  
Note:  
Ensure the performance of necessary adjustment or repair.
19. Verify that the railroad maintains a record of each report of a warning system malfunction.
20. Confirm that all control circuits affecting the safe operation of a highway-rail grade crossing warning system operate on a fail-safe basis.
21. Verify that the railroad provides for safety of highway users and/or train traffic before interfering, in testing or otherwise, with the functioning of the grade crossing warning system.
22. Verify that all outdoor housings of grade crossing warning system apparatus are kept, locked, sealed, or secured against unauthorized entry.
23. Confirm that the railroad provides a standby power source to operate the warning system during power interruption.
24. Verify that each flashing light unit is properly positioned and visible to persons approaching the crossing.
25. Verify that each gate arm light is maintained in such a condition as to be properly visible to persons approaching the crossing.
26. Confirm that train detection apparatus is maintained to detect a train, locomotive, or car which occupies any part of a train detection circuit.
27. Verify that each sign mounted on a grade crossing signal post or mast is maintained in good condition and visible to any approaching user.
28. Verify that each gate and arm mechanism is inspected for sound structure and operability at least once each month.
29. Confirm that inspection results are recorded on appropriate forms reflecting the following information:
  - a. Place and date.
  - b. Equipment inspected.
  - c. Results of inspections/tests.
30. Report findings to supervisors.

(Asterisks indicates a leader performance step.)

**Evaluation Guidance:** Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If any performance measure is failed, tell the Soldier what was done wrong and how to do it correctly.

**Evaluation Preparation:** Setup: Provide the Soldier with a rail crew, section of track, references, and necessary tools.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Monitored worksite location.			
2. Validated establishment of on-track Roadway Worker Protection and set-on.			
3. Validated track structure and roadway inspection.			
4. Validated non-complying track was noted and protected.			
5. Validated set-off procedures and on-track Roadway Worker Protection was released.			
6. Validated track information database was updated.			
7. Confirmed if condition of roadway warranted exception to standards.			
8. Confirmed if condition of track geometry warranted exception to standards.			
9. Confirmed if condition of ballast warranted exception to standards.			
10. Confirmed if condition of crossties warranted exception to standards.			
11. Confirmed if condition of other track material (OTM) warranted exception to standards.			
12. Confirmed if condition of rail warranted exception to standards.			
13. Confirmed if condition of turnout warranted exception to standards.			
14. Confirmed if condition of road crossing warranted exception to standards.			
15. Confirmed if condition of rail crossing warranted exception to standards.			
16. Confirmed if condition of bridge warranted exception to standards.			
17. Confirmed if a close clearance existed.			
18. Verified that the railroad reported an activation failure of an active highway-rail crossing with 15 days of occurrence.			
19. Verified that the railroad maintained a record of each report of a warning system malfunction.			
20. Confirmed that all control circuits affecting the safe operation of a highway-rail grade crossing warning system operated on a fail-safe basis.			
21. Verified that the railroad provided for safety of highway users and/or train traffic before interfering, in testing or otherwise, with the functioning of the grade crossing warning system.			
22. Verified that all outdoor housings of grade crossing warning system apparatus were kept, locked, sealed, or secured against unauthorized entry.			
23. Confirmed that the railroad provided a standby power source to operate the warning system during power interruption.			
24. Verified that each flashing light unit was properly positioned and visible to persons approaching the crossing.			
25. Verified that each gate arm light was maintained in such a condition to be properly visible to persons approaching the crossing.			
26. Confirmed that train detection apparatus was maintained to detect a train, locomotive, or car which occupied any part of a train detection circuit.			
27. Verified that each sign mounted on a grade crossing signal post or mast was maintained in good condition and visible to any approaching user.			
28. Verified that each gate and arm mechanism was inspected for sound structure and operability at least once each month.			
29. Confirmed that inspection results were recorded on appropriate forms.			
30. Reported findings to supervisors.			

**Supporting Reference(s):**

Step Number	Reference ID	Reference Name	Required	Primary
	CFR 49	CFR 49: Parts 200-299	Yes	No
	GCOR	General Code of Operating Rules (GCOR), Seventh Edition	Yes	No
	TM 5-627	MAINTENANCE OF TRACKAGE {NAVFAC MO-103;AFM 91-33}	Yes	No
	TM 5-628	RAILROAD TRACK STANDARDS {AFR 91-44}	Yes	No
	UFC 4-860-03	Unified Facilities Criteria (UFC): Railroad Track Maintenance & Safety Standards	Yes	Yes

**TADSS :** None

**Equipment Items (LIN):** None

**Materiel Items (NSN) :**

Step ID	NSN	LIN	Title	Qty
No materiel items specified				

**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. It is the responsibility of all Soldiers and DA civilians to protect the environment from damage. AR 200-1 delineates TRADOC responsibilities to integrate environmental requirements across Doctrine, Organization, Training, Material, Leadership and Education, Personnel and Facilities (DOTMLPF) and ensure all training procedures; materials and doctrine include 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. This Training Support Package meets this standard.

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**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 soldiers and leaders must maintain a proactive posture towards safety in day-to-day operations. The need for total commitment to safety should be evident to commanders, senior soldiers, and their subordinates. The importance of safety is intensified for personnel conducting railway maintenance operations. Safety awareness is most effective at three levels: command, leader, and individual.

**Prerequisite Individual Tasks :** None

**Supporting Individual Tasks :** None

**Supported Individual Tasks :** None

**Supported Collective Tasks :** None

**Knowledges :**

Knowledge ID	Knowledge Name
K-551-U-0036	Knowledge of track maps
K-551-U-0017	Knowledge of timetables
K-551-T-0050	Knowledge of Track Inspection Database
K-551-T-0049	Knowledge of track and roadway inspection criteria
K-551-T-0018	Knowledge of track inspection forms

**Skills :**

Skill ID	Skill Name
S-551-T-0029	Ability to interpret a timetable
S-551-T-0030	Ability to inspect track and roadway
S-551-T-0010	Ability to read a map

**ICTL Data :** None