551-88U-4410
Recommend Railway Operations Procedures
Status: Approved

Conditions: Assigned as a Railway Specialist given the requirement to advise COCOM/Host Nation personnel on administering railway operations, given a complete risk assessment, timetable and all applicable references, day or night, in all weather conditions, in an operational environment. Some iterations of this task should be performed in MOPP 4.

Standards: Check timetables, recommend rail operation plans and coordinate with adjacent railway operating companies IAW the Expeditionary Railway Center Opeations and the Geberal Code of Operational Rules (GCOR) without injury to personnel or damage to equipment.

Special Conditions: None

Safety Risk: Low

MOPP 4: Sometimes

Task Statements

Cue: Upon receiving orders, administer railway operations.

DANGER
None

WARNING
None

CAUTION
None

Remarks: None

Notes: None

Performance Steps

1. Check Timetables.

    a. Review railway track engineering data.

        (1) Grades.

        (2) Curves.

        (3) Number of main tracks.

        (4) Number of passing tracks.

        (5) Recommended track speeds.

        (6) Communication facilities.

    b. Review Rail Operations Plan.

        (1) Maximum train length.

        (2) Predominant type of motive power.

        (3) Trains that are to run on a set schedule.

        (4) Trains to run as extras.

        (5) Yard capacity.

        (6) Number of train crews available.

    c. Calculate horsepower to tonnage ratio for each subdivision.

        (1) Determine ruling grade for each subdivision.

            (a) Take optimum train length and overlay it onto most restrictive combination of grade and/or curvature of subdivision.

            (b) Calculate GTL for predominant type of locomotive.

        (2) Divide horsepower by Gross Trailing Load (GTL) in short tons (STONS).

    d. Determine main track authority(ies) and limits.

        (1) Single, double or multiple main tracks.

        (2) Yard Limits.

        (3) DTC, TWC, track permits.

        (4) Railway signal systems in effect, Centralized Traffic Control (CTC), Automatic Block Signal System (ABS), and Central Blocking Signal System (CBS).

    e. Determine maximum authorized speeds.

        (1) Through turnouts and sidings.

        (2) At specific locations on the main line.

    f. Determine station departure times for scheduled trains.

g. Publish timetable.

    (1) Organize information in station order and/or as general remarks.

    (2) Include assigned and alternate "red" communication frequencies for rail operations.

    (3) Supersede existing timetable(s).

    (4) Include notice of new timetable in track bulletins.

2. Recommend Rail Operation Plans.

  a. Analyze traffic flows.

    (1) Review general description of rail system and facilities.

    (2) Review basic characteristics and conditions of routes, facilities, equipment, structures, operations, and related factors.

      (a) Condition of roadbed, rail, ties, ballast, and drainage when reports are not available.

      (b) Ruling grade and curve in each direction.

      (c) Main, siding, yard, team, house, spur, electrified, and other tracks.

      (d) Loading and unloading platforms and facilities.

      (e) Locomotive fueling, watering, and turning points and facilities.

      (f) Terminal, yard, shop, and engine housing facilities and equipment.

      (g) Bridges, tunnels, and train ferries.

      (h) Traffic interruption factors and bottlenecks.

      (i) Weather and terrain features.

      (j) Construction and maintenance problems, labor, and materials.

      (k) Locomotives, rolling stock, and special equipment.

      (l) Supplies and spare parts.

      (m) Signals, dispatching, and other means of communication.

      (n) Track gage and mileages.

      (o) Nature, density, and volume of traffic.

      (p) Maximum load limits and minimum clearances.

      (q) Mainlines and alternate routes, including single, double, and multiple track operations.

      (r) Transfer points, entraining and detraining points.

    (3) Review tonnage from port to railhead and between yards.

    (4) Review locomotive dwell time (time awaiting fueling, servicing or train to be made-up).

    (5) Review railcar terminal dwell time (time awaiting outbound train).

(6) Review railcar utilization (number of loaded trips / month).

b. Identify run-through trains.

(1) High priority movements.

(2) Common destination.

(3) Bypass intermediate switching at terminals.

c. Identify train blocks.
Note: Designate train blocks for each yard, port, terminal and railhead on the railroad.

d. Build trains.

(1) Assign train block(s) to trains.

(2) Schedule trains to run sequentially and / or on a timetable.

(3) Allocate motive power to each train.

e. Identify Bad Order Track.

f. Publish and submit information for approval.

3. Coordinate with Adjacent Railway Operating Companies.

a. Contact adjacent train dispatcher(s).

b. Conduct crew briefing focusing on the following areas:

(1) ETA of inbound trains.

(2) Estimated departure of out-bound trains.

(3) Maintenance of Way (MOW) issues.

(4) Motive power issues.

(5) Tonnage issues.

(6) Other.

c. Plan trains to run during shift.

4. Recommend Railway Movement Activities.

a. Analyze train operations.

(1) Review train statistics.

(a) Call train–to-depart times.

(b) Average running time.

(c) Train make-up.

(2) Interview Yardmaster or appropriate movement coordinator when consistent issues exist.

(3) Review safety record.

b. Compare current operation to Rail Operations Plan.

c. Develop and implement action plan to correct known deficiencies.

(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 Administering Railway Operations.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Checked Timetables.			
2. Recommended Rail Operation Plans.			
3. Coordinated with Adjacent Railway Operating Companies.			
4. Recommended Railway Movement Activities.			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	ATP 4-14	Expeditionary Railway Center Operations	Yes	Yes
	GCOR	General Code of Operating Rules (GCOR), Seventh Edition	Yes	No
	TB 55-46-1	Standard Characteristics (Dimensions, Weight, and Cube) for Transportability of Military Vehicles and Other Outsize/Overweight Equipment (in TOE Line Item Number Sequence)	Yes	No

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. 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-2002	How to Coordinate cargo movements by rail
551-K-0049	How to enforce safety rules and techniques
551-K-0091	How to operate a tactical wheeled vehicle within a convoy
551-K-0127	How to interpret regulations, technical manuals, and Standard Operating Procedures (SOP)

Skills :

Skill ID	Skill Name
551-S-0144	Ability to read, understand, and comply with regulatory guidance.
551-S-0075	Ability to read, interpret and perform instructions from another person
551-S-0055	Ability to match job requirements to tools needed
551-S-0060	Ability to conduct a military briefing

ICTL Data : None