

Railhead Operations

Training Guide

Railhead Operations

Unloading

Part 3

Unit Commanders will ensure:

- **Key railhead personnel are certified through the Railhead Operations Training and Verification Program.**
- **Personnel conduct risk assessments of the railhead site, and staging areas considering common risk factors.**
- **That a safety officer or a safety NCO is appointed.**
- **Soldiers are briefed and instructed on the safety standards and procedures in AE Pam 385-15-2.**
- **Safety equipment (i.e., reflective vests, hard-hats, flashlights), supervisory personnel (OIC/NCOIC) and ground guides are available.**
- **Medical support is available at loading and unloading sites.**
- **Safety standards are monitored and enforced.**
- **Participants are shown the location of high-voltage lines, in-service tracks, switches and other hazardous locations/equipment in the work area.**
- **Protection from cold or inclement weather is provided.**

Safety briefings and training



Safety briefings and proper training are prerequisites for a successful and accident free mission completion.



Train Commanders will ensure:

- Military units and organizational personnel have been –
 - Made aware of unsafe conditions in the railhead area.
 - Told to keep a safe distance from electric power lines and systems in the work area.
- Supervisors are aware that when overhead power lines are switched on temporarily for technical reasons--
 - **Operations must cease!**
 - The area must be cleared of personnel.
 - Operations will not resume until the appropriate railway authority (i.e. *Deutsche Bahn AG* in Germany) confirms that electricity has been shut off and grounded in the railhead area. (*Note: Electrified rail systems with overhead power lines and feeder lines installed beside rail tracks carry 15,000 volts or more.*)
 - **While supplies are moved, escorts may not ride in freight cars or vehicles loaded on railcars.**

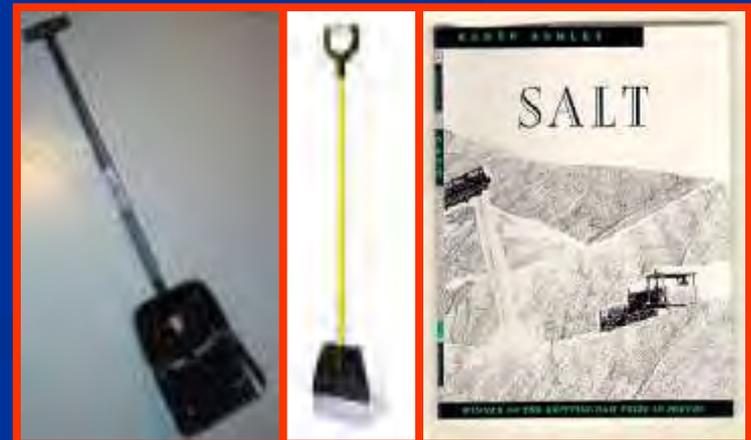
Transportation Officers or Representatives will:

- **Coordinate with the responsible railway official and confirm that electric overhead power lines have been shut off and grounded in the railhead work area. Under no circumstances will operations start until confirmation is received.**
- **Keep units informed of changing conditions.**
- **Enforce the rules of conduct for ensuring safe operations.**
- **Make soldiers aware of warning signs posted in the local work area and affixed to railway equipment.**
- **Ensure that in the presence of overhead power lines equipment with steps or stepladders extending higher than 2 meters above the rail car surface will be avoided.**

Railhead OIC/NCOIC will:

- **Confirm that electric overhead power lines have been shut off and grounded in the railhead work area. Under no circumstances will operations start until confirmation is received.**
- **Ensure there is enough lighting at the railhead site.**
- **Ensure medical support is onsite before operations begin.**
- **Ensure drinking water and rations are available to all personnel on the railhead site.**
- **Keep units informed of changing conditions.**
- **Enforce the rules of conduct for ensuring safe operations.**
- **Ensure soldier support facilities are available (warming tents, latrines, mess area).**

Recommended tools



Additional tools for winter operations

All Personnel will:

- Wear Kevlar helmets or OSHA-approved hardhats.
- Wear leather or work gloves when handling chains, wire ropes, blocking, tools, or any other form of bracing material.
- Be equipped with reflective vests or belts and flashlights/chemical lights during darkness.
- Not work or walk on top of unloaded vehicles without specific permission from the OIC or NCOIC. *This will apply even when no overhead line is installed above the tracks. Only the OIC or NCOIC may declare an area safe from electrical hazards.*
- Be informed that the local transportation representative in charge of rail uploading or downloading is the only person authorized to inform Host Nation supervisors when railcars may be moved. *The transportation representative will be the only person wearing a white armband.*

Proper Personal Protective Equipment



Kevlar or OSHA-approved hardhat

Reflective vest or belt

Eye protection

**Leather or work gloves
(not wool inserts)**

Hearing protection

**Flashlights or chemical lights
for ground guides**

Vehicle operators will:

- **Be trained and licensed to operate their assigned vehicle.**
- **Do not move a vehicle without a ground guide.**
- **Be familiar with hand and arm signals (FM 21-60)**

Railhead Operations

Associated hazards

and

Control measures

Conduct operations in adverse weather conditions.

Cold weather injuries, rainstorms, or high/gusty winds.

- **Pre-designate Go/No Go weather conditions.**
- **Brief all soldiers on inclement weather procedures and cold weather injury prevention.**
- **Provide warm-up areas, drinking water and proper work/rest cycles.**
- **Determine wind chill factor.**

Hot weather injuries.

- **Brief all soldiers on hot weather injury prevention.**
- **Provide shaded areas, drinking water and proper work/rest cycles.**
- **Obtain daily weather forecast and post heat index.**

Personnel working on railhead

Personnel injured during operations performed at the railhead.

- **Ensure that on site medical and hospital support is available during the entire operation.**
- **Utilize combat lifesavers with bag on site during the entire operation.**

Disembarking of guard personnel

Person(s) sustain severe injuries while disembarking a moving train.

- **Ensure nobody will disembark a moving train. Train must come to a complete stop.**

Remove tie-down material on railcar

Personnel sustain head, hand, foot or eye injury.

- **Brief personnel on risks and hazards of securing vehicles and equipment.**
- **Ensure workers wear proper PPE.**

Remove blocking & bracing (b&b) materials

Personnel sustain head, hand, foot, or eye injury.

- **Brief personnel on risks and hazards of rail operations.**
- **Ensure workers wear proper personal protective equipment (PPE) (hard hat, leather gloves, and eye protection).**
- **Ensure workers handle tools properly and carefully.**
- **Ensure that no horseplay is tolerated.**

Personnel working on railhead

Personnel do not have proper protective equipment (PPE) for railhead operations.

- **Ensure personnel has required PPE (kevlar helmets or ANSI hard hats, leather gloves and reflective vests).**
- **Provide hard hats for distinguished visitors (DV's).**
- **Ensure personnel is dressed appropriate to weather conditions.**

Personnel walking on ramps and railcars

Person(s) slip and fall from ramp or railcar.

- **Ensure personnel maintain positive contact while on the railcar.**
- **Ensure personnel will not run on ramps/railcars.**
- **Ensure personnel will not jump from railcars.**
- **Ensure loading areas are adequately lit during periods of limited visibility.**

Personnel walking/working at the railhead

Person(s) struck by moving train, Army Motor Vehicle (AMV) or Material Handling Equipment (MHE).

- **Brief personnel to stay clear of tracks and train until train stops.**
- **Brief off limit areas at railhead.**
- **Ensure rail Movement Management Team (RMMT) controls all rail load operations.**
- **Ensure non-operational personnel/distinguished visitors (DVs) are escorted in the area.**
- **Enforce no running at railhead.**
- **Control vehicle access to railhead and enforce speed limit.**

Driving AMVs on ramps and railcars

AMV drives off the edge of a ramp/railcar or get stuck between railcars.

- **Ensure all AMVs are ground guided onto railcars.**
- **AMV will be stopped if visual contact is lost with ground guide.**
- **Ensure spanners are available for vehicles/trailers with small tires.**

Driving AMVs on ramps and railcars

Person(s) injured or struck by AMV driving onto railcar (i.e. pinned between AMV & railcar or another AMV).

- **Ensure drivers and ground guides are both familiar with hand signals.**
- **Ensure ground guides are not on the same railcar with a moving piece of equipment (maintain at least one railcar distance).**
- **Ensure ground guides do not stand between AMVs and other equipment.**
- **Ensure ground guide will not walk backwards on railcars.**

Sling loading trailer/semi-trailer or other equipment on railcars with mobile crane

Personnel struck/injured by lifted trailers/equipment (i. e. workers pinned between trailers and other objects/railcar or hit by lifted equipment).

- **Maintain 3-meter clear zone around and under the trailer/equipment while being lifted.**
- **Establish warning sign/sound and brief personnel on correct usage.**
- **Ensure that all work stops immediately if ANYONE releases a warning signal/sound.**
- **Use guide ropes to assist in controlling movement, brief rope use and cautions (Never wrap around hand/arm).**

Loading MILVANs from trailer/PLS onto railcars with Material Handling Equipment (MHE)

Personnel injured by moving MHE or lifted equipment (i.e. workers pinned between container and other objects/railcar, run over by MHE or hit by lifted equipment).

- Maintain 3-m clear zone around MHE and under the container while being moved/lifted.**
- Establish warning sign/sound and brief personnel on correct usage.**
- Ensure that all work stops immediately if ANYONE uses a warning signal/sound.**
- Establish operational rule that no one approaches container until it is below eye level.**

Driving AMVs to include oversized equipment from marshalling area to staging area at railhead.

Unlicensed/untrained drivers to include Local National drivers assigned to operate military vehicles.

- Ensure all military drivers are licensed to operate assigned vehicles and Local National drivers are trained to operate the military vehicles they drive.**

Movement of non-operational vehicles from marshalling area to staging area at railhead.

Non-operational vehicles improperly handled.

- Provide NATO/U.S. slave cables and power source to start vehicles.**
- Provide an emergency-towing vehicle/line haul assets for non-operational vehicle.**

Driving AMVs to include oversized equipment from staging area at railhead to marshalling area.

Personal injury and equipment damage caused by AMV.

- **Enforce speed limit.**
- **Ensure AMVs are ground guided in the marshalling area and in all congested areas (rail loading site).**

Towing operations

Loss of control of equipment due to unplanned disconnect while towing vehicle.

- **Ensure one designated person in staging area and at ramp inspect any towed equipment for pintel pins installed and safety chains hooked up prior to moving or negotiating ramp.**

Railhead

Final set up prior to
unloading operations



- 1 Train positioned at loading ramp
- 2 Train secured to prevent movement
- 3 Remove railcar stakes (if necessary).



- 4 Remove tailgate locking mechanism.
- 5 Lower tailgates.
- 6 Lower side gates (if necessary).

OPERATIONAL REQUIREMENTS

Railhead OIC/NCOIC

All Personnel

Ground Guides

Railhead OIC/NC/OIC will ensure:

- **Support legs are lowered and tailgates and side braces are removed (if necessary) before unloading operations begin.**
- **Trash is cleared from the area before the train leaves.**

All Personnel will:

- **Not to jump off railcars.**
- **Not to walk between railcars.**
- **Not to walk backwards.**
- **Use proper techniques when lifting heavy material (i.e. railcar stakes, tailgates, blocking material).**
- **Not to be on the same railcar as a moving vehicle.**

Ground guides will:

- **Coordinate signals with drivers before ground guide operations (with flashlights after dark). The signals to control vehicle drivers shown in FM 21-60 will be used.**
- **Be seen by the driver at all times. If the driver loses sight of a ground guide, he or she will stop the vehicle immediately.**
- **Ensure only one ground guide will provide signals to a driver.**
- **Ensure that they will not walk or run backward. If ground guides are observed walking or running backwards, the vehicle operator will stop and make an on-the-spot correction.**
- **Ensure that they will not stand on the same rail car as the vehicle being guided.**
- **Be equipped with reflective vest and flashlights or chemical lights.**
- **Not place themselves in a dangerous position between two vehicles.**

Unloading tracked vehicles



- 1 Back up vehicle and STOP.
- 2 Remove front chock blocks. After removal of chock blocks ALL personnel will stay away from the railcar during movement.
- 3 Drive forward and remove rear chock blocks when vehicle is on next railcar.

Towing tracked vehicles



- 1 Back up towing vehicle.
- 2 Hook up towing vehicle. After the tow bar is hooked up ALL personnel must leave the railcar prior to any movement.
- 3 Drive forward slowly on the railcars and especially while approaching and driving on/down the ramp.

Common mistakes



- 1 Improper snow and ice removal on railcars and ramp.
- 2 Driving vehicle off railcar without using a ground guide.
- 3 Chock blocks beside tracks with protruding nails.

Questions ?

Comments ?