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# **ARMY RAIL OPERATIONS**

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# PREFACE

This manual describes the organizations, processes, procedures, and systems involved in the rail operations across the military spectrum. The focus of this manual is for the reader to gain an understanding of the Army rail system and how it functions. Rail transport operations in developed nations are considered to be a HN-provided service. In contingency areas, US rail units may have to be employed to support the theater of operations. This FM sets forth transportation rail doctrine and organizational structure. It is written to explain the functions of rail transport operations service in a theater of operations. It provides basic information for commanders and staffs of supporting units and for staff officers of higher HQ. It is also intended to serve as a text for student instruction and training of rail unit personnel.

This manual remains consistent with Army operations, logistics doctrine, and concepts currently published or in the process of being published. However, the reader is cautioned that logistics doctrine is changing — and changing rapidly. The on-going efforts to reduce the Army logistics footprint and move to the Objective Force will require doctrinal change. Users acting within the scope of their authority may vary from this doctrine in this manual when such variation will result in improved operations.

The Army's environmental strategy into the 21st century defines its philosophy and commitment in protecting and preserving the environment and natural resources for present and future generations. Sound environmental practices and considerations must be integrated into all Army documents, missions, and operations. In keeping with the Army's vision to be a national leader in environmental stewardship, commanders and leaders must ensure that all local, state, federal, and host nation laws and regulations pertaining to the environment are included in the planning process and followed to an extent consistent with operational considerations.

Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.

The proponent of this publication is the United States Army Combined Arms Support Command (CASCOM). Send comments and recommendations on Department of the Army (DA) Form 2028 to Commander, US Army Combined Arms Support Command and Fort Lee, ATTN: ATCL-T, Fort Lee, Virginia, 23801.

# Chapter 1

# **Rail Transport Operations**

There are four primary functions of rail transport operations for military and commercial railways. These functions include the following:

- Train operation.
- Maintenance of way.
- Maintenance of equipment.
- Train Control.

# **OPERATIONS**

1-1. NATO and US war plans involves extensive rail use. Rail transport operations in Europe is a HN-provided service.

# **RAILWAY SERVICE IN THE THEATER**

1-2. Each potential HN in NATO (with emphasis on Germany, the Netherlands, Belgium, and France) operates a sophisticated, modern railway system. The western area of Europe offers multiple routing possibilities, plenty of marshaling yards, and discharge/loading terminals. Rail line repair and equipment maintenance facilities are dispersed throughout the system. The European railway system poses the following potential limiting factors:

- Primary dependence on electrified train operations.
- Civilian dependence on uninterrupted rail support.
  - Improbability of civilian rail personnel being used in the CZ (corps and division).

1-3. Personnel should consult and comply with AMovP2 before moving trains across NATO borders. The Army uses the area's existing rail structure as much as possible to support the TA. The following provides the support needed to operate the rail system without extensive rail construction or major engineer reconstruction.

- Existing tracks.
- Locomotives and rolling stock
- Switching modes.
- Marshalling yards.

Extensive rail construction is beyond the capabilities of a military force, except during a prolonged war when a civilian work force would be employed to operate the railroad.

1-4. In the past, US Army transportation railway brigades, groups, battalions, and so forth; operated the theater rail system. Rail units now supplement existing HN rail systems or control and operate a

contingency area's rail system. In some cases, the service organization is much smaller than was needed in the past.

# **ESTABLISHMENT OF RAIL OPERATIONS**

1-5. There are many similarities between military and commercial railways. Military railroads operate on the same basic principles as commercial railroads. These principles are:

- Locomotives pull railcars loaded with freight and passengers over miles of track.
- Train movements are controlled by schedule or signal communication.
- Some trains have superiority over others.

1-6. Rail operations in a theater may consist of a broad initial or preinvasion plan based on limited available intelligence data. As more detailed data becomes available, the initial plan is modified. Initial or preinvasion planning provides general estimates of the potential movement capability of a particular railway system in the theater.

## PHASES OF OPERATION

1-7. Military railway operations are accomplished in three phases. These phases are normally conducted in sequence. However, depending on military requirements, a phase II or phase III operation may be initiated without progression through the preceding phases or regress to a previous phase. These phases aim to reduce requirements for military units and personnel for railway operations. Therefore, skilled local labor and HNS is a prime consideration in initiating phase II and phase III operations. In discussing these phases, the terms "civilian labor" and "host nation support" are not synonymous terms, as HNS can be other than civilian labor.

### Phase I

1-8. Only military personnel conduct phase I operations. Personnel use this phase during the early stages of a military operation. Phase I is used in or near the CZ where there is a need for the military and where security restricts the employment of civilians.

### Phase II

1-9. This phase is a joint civilian-military operation under direct military supervision. In this phase, military and local civilian railway personnel operate and maintain the railway lines.

### Phase III

1-10. A phase III operation is normally used in the rear areas of the COMMZ. Local civilian railway personnel operate and maintain rail lines under the direction and supervision of the highest military railway echelon in the theater. The operation is established as soon as practical. Under this operation, military railway personnel may be released for duty in more critical areas.