

Considerations for Railloading a
Mechanized Brigade

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Considerations for Railloading a Mechanized Brigade

Introduction

Railloading of military equipment is becoming an increasingly frequent task and one which most leaders are at least familiar with.¹ Most continental United States (CONUS) Army organizations are subject to periodic rotations to the National Training Center (NTC), just as many overseas units must deploy by rail for major training exercises. Additionally, many units are required to railload for deployment in support of National Guard or reserve component training or to facilitate their own off-post training requirements (i.e., cold weather training at another military installation). Railloading is usually the first actual phase of a deployment. As such, it begins the sequence of events and must be executed in a timely and professional manner. While railloading is performed by all levels of command (platoon, company, battalion), the higher the level, the greater is the complexity of planning and executing. In the same manner, the more diverse the unit's equipment, the more complex the operation. For these reasons, I will address railloading at the brigade level, to include armor, mechanized infantry, field artillery, combat engineer, and support battalion assets which normally deploy with a heavy brigade. Though oriented at the brigade level, my intent is to address considerations applicable to all levels of rail operations.

¹This point is emphasized by the fact that all "units deploying more than 800 miles from their probably SPOE (Sea Port of Embarkation) will plan to move all equipment by rail". FORSCOM Regulation 55-1, Unit Movement Planning (1 May 1982), pp 3-2.

When the unit is notified of an upcoming deployment, staff responsibility for railloading is usually an S4 function. He will be the individual responsible for analyzing the mission upon which the deployment is based and building a rail-load concept based on his estimate of the situation. The Division Transportation Office (DTO) and the Installation Transportation Office (ITO) will pass requirements and provide information to the S4 on an increasingly frequent basis as deployment nears. One of the early requirements will be for the headquarters to compile a list of equipment to be railloaded. Units must be tasked to provide this information early on. Changes will occur and will be allowed (within reason) but this document will provide a starting point to identify the amount and type of railcars needed to move the equipment involved. The deploying unit is normally allocated funds for the move, a large portion of which is expended on railcars. Therefore, the early identification of requirements can greatly assist in fund management for the exercise.

Letter of Instruction

Another early consideration will be publication of a Letter of Instruction (LOI)². Instructions are usually published as part of the Service Support Annex to the operations order (OPORD) for the exercise. In many cases, however, rail requirements are due prior to issuance of the OPORD or are unable to be clearly defined until immediately prior to execution. Known requirements are established initially and a time sequence or milestone list distributed. The publication of additional updates is useful in passing current information as it becomes available. The milestone list should give suspense dates and schedule necessary events. For instance, if ITO projects having load plans available on X date, schedule a meeting the following week with all unit points

² The LOI is identified as the first occurrence by Headquarters, 2d Brigade 4th Infantry Division (Mechanized), "After Action Report - NTC Rotation June 1984 (In-House)" (5 September 1984).

of contact (POC) to disseminate this information. To enforce the milestone schedule, be sure to provide a copy of the LOI to the ITO and DTO. Address items face to face with the key players to insure they understand the concept and the importance of events occurring as they are scheduled. Once the milestones are developed, they become interlocking and dependent on the events happening in the sequence projected, much like dominoes falling in a row, one after the other. Likewise, the milestone list should task subordinate units far in advance to facilitate their planning considerations. For this reason, the milestone sequence must begin at least 120 days prior to deployment. Additionally, weekly in progress report (IPR) meetings must be scheduled by the highest staff involved. Attendees at the IPRs will vary as deployment nears, but initial attendance by staff will ensure unit of effort. DTO and ITO must attend as execution nears and can provide timely answers to unit's questions. Written minutes of these meetings are a must, to include their distribution to attending units.

In large moves, much equipment is involved. This generates a multitude of tasks for the involved units to accomplish. Before discussing individual tasks, the tasks must be addressed collectively. Some tasks, such as preparing vehicles for transport, are done by each unit. Others, such as drawing blocking and bracing material, can be performed once for all units involved. Tasks which can be consolidated at the higher level, should be identified and delegated to one unit to accomplish. Also, taskings must include a requirement for the performing unit to identify the responsible OIC/NCOIC by name by an established suspense date. This process forces leaders to do detailed planning.

The identification of railroad teams, OICs, and NCOICs is an important task. An initial meeting with the OICs should be included on the milestone list, along with a prior requirement that they be identified by name. This meeting should not occur the afternoon before railloading begins. It must be far enough in advance that reaction can be made to units failing to respond. This provides an excellent vehicle to establish face to face rapport with POCs from subordinate units. By conducting this meeting in the proper advance time, the tone is more at-ease and less directive; there is more time for questions and gathering information. A last minute meeting will necessarily be stiff and directive, with fewer questions and increased possibility of poor execution.

Having recognized the need to identify railroad teams leads into the need for training. At the time names are compiled, many of the soldiers involved typically have no concept of how to tie down equipment on railcars. Due to normal personnel turnover in CONUS units, even periodic training fails to meet unit needs. This consideration must be evaluated in conjunction with the Army concept of training to established standards. Railroad training classes are normally conducted by DTO, ITO, or unit personnel. In railroad "testing" (or the actual deployment), civilian railroad inspectors approve or reject each piece of equipment. In my experience, it was never possible to have these inspectors conduct training at the unit level three months prior to deployment. (The requirement for railcars is submitted for bidding to all local railroads. After receipt, their bids must be evaluated and the lowest bid selected. This is a simplified explanation for a complex process. The bottom-line is that the railroad carrier is usually not identified until a few weeks prior to the move.) If such an arrangement could be contracted for, it would certainly

require that the same inspector qualify the load during actual deployment. I have seen units train to a specified standard only to discover that after railloading an entire track of railcars that the standard used was inadequate to that particular civilian inspector, of that particular railroad, on that particular day of the week. It is a frustrating set of circumstances which I hope is not universally applicable. One solution involves units in conducting familiarization (as opposed to in-depth training) for teams. Teams are shown the various tools, different turnbuckles, and equipment used and given detailed safety precautions. On railload day, the team ties down the first vehicle on the first railcar. Then the entire railload team, OIC, and NCOIC gather around as the civilian railroad inspector checks the load. He points out deficiencies and everyone understands what is required. From there, the crews can separate to complete the operation. While this method will start a little slower, it can mean the difference between soldiers being home at 1630 hours and load teams retying vehicles at midnight.

. The last consideration concerning the initial LOI is for rail guards. The ITO can project this requirement, if it applies, but the unit retains the responsibility. By tasking early, the assigned units can identify personnel who have flying phobias or other considerations. The tasked unit is normally responsible to feed the guards. The period of rations must include total travel time, plus any time while the guards sit awaiting the arrival of the off-load teams.

Railhead Activities

I will move now to activities at the railhead during deployment.

This is not an abrupt change of direction in substance, but rather a transition. Indeed, many of the considerations to follow will not occur if they are not planned for in the initial guidance, as addressed previously.

Equipment being railloaded is normally assembled in one location prior to railloading and sequenced in the order it is to be loaded. This process is referred to as marshalling. If performed the same day as loading, the day will be long and hectic. Marshalling can take place the day or afternoon prior (more common). In either case, problems will arise which must be dealt with. A common occurrence is a deadlined vehicle which becomes a no-show. By marshalling the day prior, reaction time is available to shift loads or identify a substitute vehicle.³ In contrast, marshalling the day prior also affords opportunity for other problems. Invariably, the next morning, some drivers will not report on time, some vehicles will not start, and other equipment will have flat tires. The trade off must be weighed carefully. A maintenance team and fuel vehicle should be tasked and under the control of the marshalling OIC. In most instances, vehicles are required to move onto railcars under their own power. Likewise, equipment with CLASS III leaks is usually required to be repaired before the railroad will accept the load.

Rail teams need tools. A basic list of required tools must be compiled and distributed to OICs. The teams must bring the tools on the list with them each day of loading. Note here that most of the necessary tools can be found

³Substitution invariably creates unnecessary confusion if not properly coordinated with all parties concerned, as evidenced by Headquarters, 2nd Brigade, 4th Infantry Division (Mechanized), "Operation Highland Thrust (2d Brigade NTC Rotation, Mar 83) After Action Report" (11 May 1983).

as part of the BII/AAL/COEI of armored vehicles. Special tools or equipment may be needed on a limited basis (i.e., cable cutters, bolt cutters, etc.). These items should be available at the DTO in the form of Mobilization Tool Kits. If not locally available, specific needs should be identified and requested. Team members should have leather gloves available also.

When the teams start work, they will need some basic equipment. The needs vary depending on the type of equipment being loaded and the type of railcars being utilized. Again, the DTO, ITO or DEH can assist in determining the unit needs. Some examples of the equipment needed include turnbuckles, clamps, cable, chock blocks, nails, lumber, shackles, banding material, lacing wire, and tape. Most of the items come in different sizes and lengths, and only the correct sizes and lengths will accommodate a particular piece of equipment. While this sounds like a given, I have witnessed loadings during which, though the vehicles were sitting on the railcars, the unit was unable to tie down because they arrived with the wrong size lifting shackles. The minute it would have taken to check the equipment against the vehicle a month prior, would have been time well spent.

Transportation at the railhead would not seem a likely problem. Yet, surrounded by vehicles, key personnel are frequently unable to maneuver. The S4/Rail OIC must seek alternate transportation from non-deploying units or assets being moved at a later date (possibly by air). Be aware that all deploying units will experience transportation problems, as all their cargo carriers (2 1/2 T trucks, etc.) are uploaded and equipment is marshalled. Accordingly, buses should be scheduled to return drivers to the company area (after marshalling/loading their vehicles) and to transport load teams to and

from the railhead. Some form of transport will be needed to deliver the blocking, bracing, packing, crating and tiedown (BBPCT) materials to different locations as it is needed. (The deploying units have purchased this equipment. Due to the amount of equipment and length of loading operations, it may be necessary to secure the BBPCT in a central location over a period of days). The danger in loading heavy equipment is evident in rail operations. Therefore, a medical evacuation vehicle, with trained medics, cannot be overlooked. Though preferred, an ambulance is not required, as long as some vehicle is readily available. Lastly on transport, railroad teams and drivers will probably be working at the loading tasks through at least one meal. Buses can be arranged to carry troops to the dining facility, if one is not readily available. However, time used for transporting and dining is not maintaining the loading momentum. Additional time is lost by the requirement to secure tools, board buses, unload, locate missing soldiers, and so on. An alternative is to deliver sack lunches to each load site or mermite the food. Some form of transport is required in either event. While some of the vehicle requirements may be overlapped, the chow-delivery concept is much more time consuming in execution than is initially realized. Coffee or juice, while not a mission essential item, can definitely drive morale. When loading in the snow or tying down in 110° heat, the presence (or absence) of fluids can make a significant impact on the morale of unit load teams.

Command and control at the railhead are vital. The overall OIC (usually Brigade S4 or his representative) cannot run the operation from the garrison office. The man in charge must be on site, with a known command post (CP) location where he can be reached by all load OICs, DTO, ITO, or visitors. And

visitors will abound, from company commanders to the Division or Installation Commander. These visitors will inquire on everything from the location of PVT Smith, to a commander wondering if his jeep has been loaded yet. The necessity of someone knowledgeable being on hand to meet incoming VIPs cannot be underestimated. The CP can consist of a tent if no structure is available to operate from. It should contain copies of the LOI and possibly charts depicting the rail schedule and tracking the loading progress. I prefer to control the medical evacuation vehicle and personnel from this central location, as well as an up-loaded vehicle with BBPCT to respond to unit needs. Loading usually ceases at dusk, for safety reasons. The CP is then the sergeant of the guard's (SOG) headquarters. Vehicles on railcars and awaiting loading, to include CONEX containers, are packed with unit equipment and represent a substantial investment by the American taxpayer. Additionally, sensitive items are in some containers (i.e., NODS, machine guns, TOW equipment, etc.). Guard duties can cease upon the resumption of railroad activities the following morning.

An effective control measure is the briefback. While loading, crews can be operating at several tracks simultaneously. Some crews will complete loading before others. If they are completed for that day, require the load team OIC to brief the responsible officer before he departs. This is insurance that all railcars are in fact completed and the railroad inspector has accepted the load. Additionally, it is an opportunity to outline the following day's activities and address any problem areas (buses were late, not enough chow, etc.).

Command and control is increased by the presence of communication assets. Remember, however, the deploying units will typically have packed all radios for the move. A solution is the hand-held radio (walkie-talkie) (not authorized

by TOE or MTOE). Some installation agencies such as DTO, ITO, or the military police, may have such assets. The local procurement channel is another alternative which will let the unit retain the radios for off-load and redeployment operations. The ability to communicate solves many railhead coordination problems in short order and increases the responsiveness of medical personnel. Perhaps most importantly, it allows the OIC to become mobile. There is no substitute for being on the scene. This enables the OIC to watch the loading progress and anticipate needs ("Cable cutters needed in five minutes on track #2").

Finally, on command and control, bear in mind that once the deployment sequence starts, it must proceed on schedule. The OIC will know where he can take extra time and where he has no margin. Weather cannot control the operation. This may require the erection of warming tents at each track or the simple wearing of wet weather gear. Whatever the extreme, the OIC must plan for all contingencies and be prepared to execute in a timely manner.

Off-load Concerns

Once the last train leaves the installation you think you can slow down? Well, forget that idea. All the equipment is now arriving at its destination and the OIC will be on the first plane out. The smoother and more efficiently this phase proceeds, the more time will be allowed for the purpose of the deployment: the tactical training. Equipment arriving on the first train may have been on the railcars for as long as a week. Therefore, expect vehicles not to start, to have flat tires, and even missing batteries and no fuel. Have a plan to fuel vehicles immediately. Maintenance personnel and equipment must be immediately accessible. This is a good place to note that if the unit had hoped for a hot meal immediately, the mess equipment should have been on the

first train out. Drivers and off-load crews should also be among the first soldiers deployed. The driver should arrive with keys to his vehicle, also. In any event, the OIC should have a master key, in the form of boltcutters, on hand and use them judiciously. An immediate source of water will be needed to refill dry radiators. Units should have appropriate oils and hydraulic fluids on hand. If an immediate road march is projected following the off-load, the importance of many of these considerations increases tenfold. The presence of tow cables, wreckers, and slave cables is paramount.

During the off-load, many events occur as a reverse of the loading sequence. During loading, however, S & P (flatbed) trailers were available for hauling CONEX containers, cranes assisted in loading the CONEX containers, and forklifts abounded. Suddenly, at a strange railhead, these items may not be available. If they are, they must certainly be requested in advance (prior to deployment). The unit may ship its own support assets, also. Once again, the placement of these on the train may be critical. If the CONEX containers arrive on Day 1, but the crane is on the last train, the hot meals have just been delayed and the ration cycle destroyed.

Redeployment

Finally, consideration must be made for the redeployment. The equipment used to railload the unit (the BBPCT) should be salvaged and secured in a consolidated location. Plan for some items, such as a percentage of chock blocks, to be nonusable for redeployment. Extra chockblocks, nails, lumber, and wire may be procurable from the redeployment railhead source. However, if this cannot be positively confirmed, ship redeployment supplies. These can be turned-in for credit if they are not consumed or destroyed through

use. Logistical flights from the home installation may also be able to deliver pre-planned redeployment supplies.

Conclusion

While these considerations are not all inclusive, they do cover some of the recurring, and hopefully more applicable, concepts. Again, they are not listed in order of priority. The one overlooked will be that moment's priority. With our current doctrine to fight anywhere in the world and under any circumstances, the importance of a unit's ability to deploy is paramount. These thoughts will help the logistician in meeting that need.

Sources Consulted

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2. FORSCOM Regulation 55-1 (with Change 2), Unit Movement Planning, 1 May 1982
3. Headquarters, 1st Battalion 11th Infantry, 4th Infantry Division (Mechanized), Fort Carson, Colorado, After Action Report for NTC Rotation, March 1983.
4. Headquarters, 2d Brigade, 4th Infantry Division (Mechanized), Fort Carson, Colorado, "Operation Highland Thrust (2d Bde NTC Rotation, Mar 83) After Actions Report", 11 May 1983
5. Headquarters, 2d Brigade, 4th Infantry Division (Mechanized), Fort Carson, Colorado, "After Action Report - NTC Rotation June 1984 (In-House)", 5 September 1984