

Deploying Armor: A Transportation Battalion's Perspective and Lessons-Learned

by MAJ Matthew T. Mosteiko

The deployment of 1st Armored Brigade Combat Team (ABCT), 3rd Infantry Division, Fort Stewart, GA, and the redeployment of 2nd ABCT, 1st Infantry Division, Fort Riley, KS, brought unique challenges to both ABCTs and to 833rd Transportation Battalion, which conducted port operations at the Port of Tacoma, WA, for both rotational-force brigades within a three-month timeframe. This article will separately discuss pre-deployment activities, port operations and lessons-learned from each armor brigade.

1/3 ABCT: pre-deployment

Deploy and redeploy are tasks within nearly every unit's mission-essential task list, but successful deployments often rely on separate sustainment units to set conditions by conducting pre-deployment checks for the deploying unit. The 1/3 ABCT took advantage of a key service that Military Surface Deployment and Distribution Command (SDDC) offers: pre-movement technical advice from deployment and distribution support teams (DDSTs).

DDSTs are teams of subject-matter experts who assist deploying units by checking the hazardous-material declarations, inspecting containers and certifying placards for containers and rolling stock. These pre-movement checks help units avoid suffering "frustrated" cargo at the port and prevent cargo left on port after the vessel departs the seaport of embarkation.

The 1/3 ABCT received pre-movement technical advice from two of the 1182nd's DDST teams at Fort Stewart Aug. 2-28, 2020, more than one month before the vessel's arrival. This support helped the unit identify tie-down procedures for secondary loads, review hazardous-materials documentation and confirm equipment data. The DDSTs also assisted the unit with its containers, ensuring blocking, bracing, packaging, crating and tie-down were done correctly. As a result, 1/3 ABCT was well prepared to arrive at the port.

In-progress reviews (IPRs) are essential to the smooth synchronization of multiple units working together. The 1/3 ABCT and 833rd Transportation held monthly IPRs via Internet on-line meeting software to synchronize timelines, working space and due-outs leading up to the deployment. Communication between the two units permitted flexibility as changes occurred in vessel dates and type, rail timelines and port-support-activity (PSA) composition. IPRs included representation from the 1/3 ABCT mobility warrant officer, PSA representatives, 833rd Transportation S-3, operations supervisor and team lead. IPRs helped identify reception windows for line-haul trucks arriving at the Port of Tacoma, rail timelines, staging areas at the port and PSA composition.

Transportation battalions require a final unit-density list (UDL) at least 60 days before the available-to-load date. The UDL is the main document that drives port-staging-area selection and vessel stow plans, and it can influence vessel selection. Without an accurate and timely UDL, transportation battalions have an increased level of difficulty in managing the port operation, thereby amplifying friction points for the deploying unit.

In the 1/3 ABCT's deployment, a planning UDL was sent well in advance, but it contained far more pieces of cargo than the brigade deployed. This created uncertainties in vessel capacity because ABCTs often come extremely close to cubing and weighing out most vessels. A 10-percent variance in cubing and weighing factors could potentially push the ABCT's requirements from a one-vessel solution to a two-vessel solution. Transportation battalions and Military Sealift Command use a 14,000-commercial-tons planning factor to account for dunnage, fuel, unit loads, etc., to develop a stow plan for unit equipment and extreme variances in planning UDLs. Accurate and timely UDLs decrease the probabilities of delays in loading and sail dates.

Transportation battalions create the pre-stow plan, but the final stow plan is approved by the vessel's captain. The delay in a final and accurate UDL forced 833rd members to create several inaccurate pre-stow plans prior to vessel arrival. Units can help prepare for deployment by submitting accurate and timely UDLs with validated dimensions and weights. This simple act can help alleviate many loading delays when the vessel arrives and ensure a smooth deployment from the seaport of embarkation (SPoE).

Port operations

Reception operations at the SPoE include the arrival of deploying cargo, PSA, total-force-integration (TFI) Soldiers and port opening by 833rd Transportation Battalion. An advance party from the deploying unit is also included in the reception window. The 1/3 ABCT elected to send a small number of its leadership as the advance echelon. This was a welcomed and appreciated decision to ensure leaders were present to get the lay of the land and conduct a terrain walk before the main body arrived.

The 833rd operations team conducted a two-day train-up at the Port of Tacoma to ensure PSA and TFI personnel knew emergency procedures, port layout, staging areas and reception flow. They also presented the concept-of-operations (CONOP) briefing that is normally presented to deploying unit leadership. Briefing the CONOP to all PSA and TFI personnel ensured a shared understanding during reception and loading operations.

Setting up for success via virtual terrain walks and conducting a successful reception go a long way in preparing to load a 656-foot vessel with nearly 800 pieces of equipment. The 1/3 ABCT and 833rd Transportation Battalion preparation was commendable; however, our efforts did not prevent “Murphy” from making an appearance at the port. The major issue that arose during the 1/3 ABCT deployment could not have been predicted, but it may have been prevented.

There are bound to be maintenance issues in a brigade with more than 250 tracked vehicles. One of 1/3 ABCT’s Abrams tanks had transmission shifting issues at the Port of Tacoma, creating a safety issue with loading the tank onto the vessel. Due to the close quarters the ground guides need to work in, a tank with transmission problems is not safe to load. The trouble with repairing this issue before loading was that the Class IX maintenance parts were already loaded in a 20-foot container-express (CONEX) box inside the vessel.

The labor contract with the stevedoring company at the Port of Tacoma mandates that union personnel handle, load and unload equipment and unit cargo, thereby preventing unit personnel from accessing materials as easily as the unit would have liked. Considering that the CONEX was already loaded on the vessel, 833rd would incur more charges to unload several containers to gain access to the maintenance parts, then unpack, repack and reload the container as well as the other containers moved in the process. The minimum cost was about \$30,000 but could have increased to as much as \$75,000 per day if the operation caused the vessel to delay its set sail date.

The 833rd commander made a fiscal decision by leveraging the National Security Strategy (NSS). The NSS states that in the Indo-Pacific, the United States will “maintain a forward military presence capable of deterring and, if necessary, defeating any adversary. We will strengthen our long-standing military relationships and encourage the development of a strong defense network with our allies and partners. For example, we will cooperate on missile defense with Japan and South Korea to move toward an area defense capability. We remain ready to respond with overwhelming force to North Korean aggression and will improve options to compel denuclearization of the peninsula.”

This paragraph in the NSS made for an easy argument to absorb the additional cost in retrieving the Class IX parts, repairing the non-mission-capable Abrams tanks and ensuring that more than 250 tracks roll off the vessel under their own power in the Republic of Korea. Any prying eyes would witness our nation’s resolve to an area-defense capability on the Korean peninsula.

Lessons-learned

As mentioned previously, preparation can only go so far during port operations. With only one track non-mission-capable, 1/3 ABCT boasted a 99-percent operational readiness rate. The lesson-learned from this issue is not in preventing the vehicle from being non-mission-capable but rather in how to use force packaging to prevent a delay in the maintenance operation.

Deploying units have two viable solutions to the Class IX (repair parts) issue. First is to have the maintenance CONEX as part of the support package that stays with the rear detachment and redeploys to Fort Stewart. PSA packages include both personnel and equipment. A Class IX CONEX could have been part of the 1/3 ABCT PSA package. This would have prevented the unpacking and repacking of the maintenance container. A significant downside to this option is that the full-up power pack and other Class IX repair parts would not be shipped to the Republic of Korea.

The other option would have been to load the maintenance CONEX last. The stow plan used during the 1/3 ABCT deployment called for CONEX boxes to be loaded concurrently with the tracked vehicles. This maximized use of stevedore assets and allowed for a quicker vessel load, but the container was never identified as a priority item.

CONEX boxes are commonly segregated by sensitive items, hazardous material and general cargo. They are also prioritized by category. Unfortunately, the maintenance CONEX was only categorized as general cargo for this move. Had 1/3 ABCT and 833rd personnel identified it as a priority item, it would have been loaded last on/first off. Loading the maintenance CONEX last would have ensured it remained in the staging area until the last day of loading, making the retrieval of repair parts much easier.



Figure 1. 833rd Transportation Battalion Soldiers load tracked vehicles onto rail cars at the Port of Tacoma with Washington's Mount Rainier visible in the background. The 833rd Transportation Battalion is one of 12 worldwide battalions in the SDDC. It is based at Joint Base Lewis-McChord (JBLM), WA. (U.S. Army photo by MAJ Matthew Mosteiko)

2/1 ABCT redeployment

Redeploying is not simply the reverse of deploying. There are many factors that have changed during deployment to both equipment and personnel, affecting both the mental status of Soldiers and the readiness levels of equipment. During the 2/1 ABCT redeployment, many factors contributed to a frustrating sequence of events. Factors such as rail-loading and block-leave scheduling were within 833rd's and 2/1's ability to change, while others were outside our control.

Pre-deployment activities

The 833rd Transportation Battalion had deployed 2/1 ABCT to Korea nine months prior. The UDL used for the deployment was not identical to redeployment. The 833rd received the UDL as soon as the vessel departed Korea from 837th Transportation Battalion. While the ideal timeline is 60 days prior to operations, the vessel sail time of three weeks permitted ample time for 833rd to prepare at the Port of Tacoma.

PSA personnel for 2/1 ABCT was more than adequate in size and composition. They provided 75 Soldiers, including a mix of leadership, medics, unit-mobility officers, drivers and maintenance personnel. The PSA arrival timeline allowed adequate time for a port orientation, introductions and a CONOP brief.

The 833rd Transportation Battalion conducted weekly IPRs during the planning phase of this operation, although attendance was a challenge due to different time zones and Reserve Component involvement. In addition to IPRs, communication with 837th Transportation Battalion in Korea was used early and often. This permitted coordination with both the “pitch and catch” battalions. There was also a virtual pre-deployment site survey conducted four weeks before the vessel arrived.

Port operations

The 2/1 ABCT intentionally placed their maintenance package at the stern of the ramp in a priority CONEX. This container held the tools required to connect all batteries swiftly upon lowering the ramp. Since U.S. Customs and Border Protection must clear all containers before they can be opened, this caused all equipment to be held fast, leading to a frustrating delay. Redeploying units should consider having maintenance parts and tools available as part of their PSA equipment to avoid download delays.

Another issue that arose during discharge operations occurred when 16 pieces of equipment failed the Customs and agricultural-inspection process. This particular incident led to more costs for agricultural cleaning. Although agricultural cleaning and inspection is conducted in Korea, shipping across the Pacific Ocean loosened some phytosanitary debris. This cost remains the deploying unit’s responsibility to link its division G-8 and SDDC G-8 points of contact to reconcile lines of accounting allotted for the exercise to prevent delays in disposition operations.

Disposition is the onward movement of all unit equipment via multiple means of conveyance. For ABCTs, rail is often used for as many pieces as possible, especially the heavy tracked vehicles. Some containers and wheeled rolling stock are commercial line-hauled to their destination. SDDC owns a contract for rail assets, but timeliness and availability are affected by many variables such as railcar availability and serviceability.

Sensitive items can include weapons, optics, computers and other critical items with a serial number. The 833rd Transportation had trouble acquiring line-haul trucks for both sensitive items and general cargo during 2/1 ABCT’s redeployment. This led to increased costs for security and a delay in reaching Fort Riley. The delay put Soldiers at risk of missing holiday block leave following deployment, as the brigade commander directed that there would be no block leave until all containers containing sensitive items were received at Fort Riley.

Rail operations created more issues because there was a significant delay in all four trains’ arrival at the Port of Tacoma. The 833rd Soldiers had transit visibility tools and attended daily conference calls with the rail companies, but they had no control over their timeliness because they are in constant competition with commercial rail requirements. Rail operations encountered more delays due to a high rate of “bad order” rail cars and cars requiring repair. The bad-order cars were deemed unusable, while other cars were repaired on-site and used after a delay.

A final issue with the rail load was that 833rd relied on UDL weights instead of the actual weights for the variants of the M2A3 Bradley Fighting Vehicle. The marine-cargo specialists instructed PSA drivers to load three Bradleys per rail car. It was revealed the next day that incorrect UDL weights put the rail cars overweight. With the PSA personnel already on a flight back home, 833rd used port labor to lift the middle M2A3 from each rail car instead of driving them. Port labor used top-loading lift assets and slings to move the Bradleys onto additional cars in accordance with rail standards.

Lessons-learned

The 2/1 ABCT redeployment brought up three preventable items to improve upon. One is that we at 833rd Transportation Battalion need to do our homework to better understand what we are receiving and what we are sending. The UDL was received with enough time to react, but it was provided by 837th Transportation Battalion in Korea instead of by the supported unit. While the UDL timeliness may not have prevented rail delays, it would have added fidelity to the planning effort.

Another issue to improve upon is not to be in a rush. Getting the PSA back in time for block leave became a planning factor one week into the mission. PSA leadership needs to be on the ground to make the difficult decisions if temporary duty needs to be extended to meet the mission requirements. While it worked out in the end, it was apparent that Soldiers had holiday leave on their mind as a distraction.

Agricultural cleaning can be fickle. Units do their best to clean all items to standard, but often some items do not pass inspection on the other side of the ocean. On this redeployment, agricultural cleaning seemed like an afterthought. The Port of Tacoma set up a hasty cleaning point to react, but prior planning and higher expectations would have set this mission up for smoother inspections and cleaning processes.

In all, the 2/1 ABCT redeployment was a success. All equipment arrived at home station, no injuries occurred and Soldiers were able to take holiday leave.

In fact, both the 1/3 and 2/1 BCT missions were successful. This article simply brings to light some of the issues that may be encountered during deployment or redeployment activities. With information from a transportation battalion's perspective, ABCTs may be able to prevent common missteps on their future movements and increase communication between the sustainers and our maneuver brethren.

MAJ Matthew Mosteiko is the executive officer, 833rd Transportation Battalion, JBLM, WA. His previous assignments include transportation officer, 593rd Expeditionary Sustainment Command, JBLM; movements control officer, 371st Theater Opening Element, Fort Sheridan, IL; operations officer, 645th Regional Support Group, Southfield, MI; commander, 952nd Quartermaster Company, Livonia, MI; and platoon leader, 724th Transportation Company, Bartonville, IL. His military schools include the Command and General Staff College, Theater Sustainment Planner's Course, Ordnance Captain's Career Course, U.S. Army Reserve Pre-Command Course, Ordnance Basic Officer's Course, Basic Noncommissioned Officer's Course and Primary Leadership Development Course. MAJ Mosteiko has a bachelor's of science degree in meteorology and a master's of science degree in public administration, both from Central Michigan University. Among his awards are the Bronze Star Medal and the Meritorious Service Medal. MAJ Mosteiko served 18 years in the U.S. Army Reserve before being called to active duty in July 2019.

Acronym Quick-Scan

ABCT – armored brigade combat team

CONEX – container, express

CONOP – concept of operations

DDST – deployment and distribution support team

IPR – in-progress review

JBLM – Joint Base Lewis-McChord

NSS – National Security Strategy

PSA – port-support activity

SDDC – Military Surface Deployment and Distribution Command

SPoE – seaport of embarkation

TFI – total-force integration

UDL – unit-density list