Multi-Nodal Coast-to-Coast Mobility

Reflections

by Maj Rich Charest

uring the fall of 2019, 2dMarDiv, Combat Logistics Regiment 2, and units from 2d MAW deployed from Camp Lejeune, NC, (CLNC) to the inaugural MAGTF Warfighting Exercise aboard Marine Air Ground Combat Center Twentynine Palms, CA. The logisticians involved in the exercise derived multiple, invaluable, Service-wide insights from first-hand experience, after-action submissions, and hot wash brief.

The exercise mobility planners deployed equipment for MAGTF Warfighting Exercise via rail, over-the-road tractor trailers (TT), and chartered (GoPax) flights to move the passengers (PAX). In total, the division and supporting elements deployed and redeployed 9,361 Marines and sailors on 78 aircraft, loaded 622 rail cars, and 1,053 TTs. These numbers make great fitness report bullets; however, numbers do not tell the story behind the extensive planning, mistakes, and lessons learned throughout the reception, staging, onward movement, and integration, which occured again during redeployment operations. Make no mistake, these were extremely successful and safe evolutions, and the warfighters received cargo on time for mission execution.

Deployment

For deployment, planners deliberately apportioned equipment between rail and TTs. The primary determinate for which equipment would deploy on which mode was the amount of

>Maj Charest is the G-4 Mobility Officer, 2d Marine Division.

time the unit had to operate without their equipment because of staging/ preparation loading and transportation timelines. At execution, Camp Lejeune's railhead was closed for work on the trestle bridge connecting the Camp Lejeune feeder line to the main line-a result of damage from 2018's Hurricane Florence. Morehead City port railhead was the next closest in proximity to Camp Lejeune and was immediately chosen. In retrospect, this nodal choice may not have been the best fit because of the sheer scope of the deployment movement. At the time, however, the short distance that green gear traveled over civilian highways made Morehead City an appealing course of action. Fort Bragg, on the other hand, offers nine 25-car tracks with the ability to load more than 200 cars at a time, whereas, in retrospect, Morehead City's three tracks possess a maximum capacity of just 25 railcars at a time. To a great degree, the cargo was split, with most rolling stock moved by rail and all breakbulk, as well as a few items of rolling stock, moved by TT. This split met the mobility community's intent to hold a unit's cargo for the least amount of time possible while also satisfying ease of offload at the receiving end.

The largest uncomfortable truth revealed at Morehead City, while performing rail operations, was that the Marine Corps' skills in this mode had atrophied or were altogether nonexistent. Railhead operations became a shared learning experience between the Distribution Management Office (DMO) freight team and the Marines performing the tasks at the rail head operations group. Hard lessons learned included simple tasks, such as load planning the cars, chaining techniques, mobile loading considerations, height and width considerations, documentation requirements, and overall best practices. Although doctrinal publications and guidelines exist, such as the Surface Deployment and Distribution Command Transportation Engineering Agency 55-19 and the Association of American Railroads open-top loading rules, every situation and operation are unique and nuanced. In general, for the railhead operations, 2dMarDiv lacked true experts to fill in the knowledge gaps between the publications and real-life experiences. For redeployment this was not an issue, as Barstow is home to the DOD Rail Operations School. In that location, we had on-site experts to assist, which provided the opportunity for Marines to attend the school and gain valuable skills for the future.

Personnel Movement

PAX movements were phased with two overarching considerations: the operational design of MWX and the logistics constraints of Camp Wilson's billeting capacity, in particular while the out-going ITX exercise and AD-FOR forces were still on deck. Stemming from lessons learned the previous fall during Exercise TRIDENT JUNC-TURE 2018, 2dMarDiv mobility used a maximum planning factor of 500 PAX per day for the TPFDD'd (time-phased force and deployment data) force flow (see Figure 1). The PAX limitation is based on commercial market availability of contracted aircraft and not on either the maximum-on-ground of the airfields involved or their operational capabilities. Still, with the 500 PAX limitation, we found that the commercial bus availability in California was severely limited. This bus limitation was even more profound on weekends, which forced us to contract buses from as far away as San Diego and Las Vegas for flights landing at March AFB.

Ground transportation of personnel (TOP) movement relied almost exclusively on commercial assets contracted through DMO. This is in contrast to all previous Service-level training exercises) as the South West Regional Transportation Fleet a transportation organization that provide common-user TOP and transportation of things (TOT) was unable to simultaneously support both the large volume of MWX forces and its mission to directly support I MEF forces because of a risk of running out of contracted hours at the end of the year. This held true even though II MEF did have a valid line of accounting for transportation to cover South West Regional Transportation Fleet's extra incurred costs. Moreover, there were literally bus and TT operators and their equipment available to support, but strong resistance at some level prevented II MEF units from utilizing the same support that is levied with other Service-level training exercises, such as Weapons and Tactics Instructor Course, Mountain Warfare Training Exercises, and the Integrated Training Exercise. So, why was MWX different? South West Regional Transportation Fleet's inability to fully support MWX units increased the ground TOP costs by 46 percent for the exercise. If MWX is to continue, the Service must properly resource this capability.

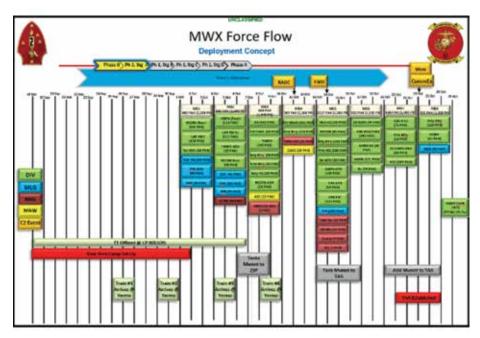


Figure 1. MWX force flow-deployment concept.

Reception.

The reception of cargo occurred in two primary locations: TTs at Camp Wilson and rail at MCLB Barstow. TTs departed CLNC steadily with the CLNC DMO pushing 20-45 TTs a day for a period of about 16 days. At the receiving end in Twentynine Palms, however, an accordion effect occurred as a result of Camp Wilson's inability to accept TTs on the weekends. This interruption in the flow of TTs created a large buildup of arrivals on Monday and

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Tuesday mornings. On one particular day, 114 TTs swarmed the reception site at Camp Wilson. This erratic flow, coupled with all truck drivers moving at different paces, made forecasting the next day's workload a daunting task. During the hot wash, following the last TT arriving at Twentynine Palms, DMO and the MWX Mobility team discussed lessons learned. First, there

are bottlenecked areas both where drivers must check-in and also during the movement from DMO to Camp Wilson. DMO did a great job throttling traffic from the freight office to Camp Wilson. What could not be avoided on the receiving end was the volume of traffic on any particular day. One solution would have been to request opening DMO to accept inbound traffic on one or both weekend days. On the return end, we asked base DMO and they approved their employees' overtime for the redeployment phase. Doing this helped decompress the backload and provided the freight bookers some overtime hours. It also gave the transportation providers flexibility for their drivers' arrival. Our goal was to load no more than 60 TTs each day, which proved to be our level of sustained operations for a full workday.

The reception of personnel at the aerial port of debarkation is a fairly mundane, though well-oiled, process between the exercise logistics coordination cell in Camp Wilson and the aerial port of debarkation (March AFB, Ontario, and San Bernardino). Our TOP design was to split the PAX at the aerial port of debarkation into two groups. The first group consisted of those going to Barstow, who would convoy their own tactical vehicles offloaded from

the Barstow rail head operations group and drive the vehicles straight to Camp Wilson. The second group was everyone else just moving to Camp Wilson. This, like everything in the transportation/distribution realm, required detailed planning down to the fire team level. Regardless, all equipment did move from Barstow to Camp Wilson via either these convoys or locally contracted TTs (M1A1s and other tracked assets).

Task Organization.

The wire diagram (see Figure 2) shows the exercise force's task organization (T/O). Division developed this T/O because of the absence of a MAGTF command element. Consequently, decision making rested on the officer conducting the exercise "OCE": the CG, 2dMarDiv. This construct led to difficulties with logistical tasking of the administrative on/offload operations. Multiple major subordinate commands, each with competing interests, lacked a standard relationship with a higher headquarters dictating priorities and tasking. Thus, in planning, we used the arrival assembly operation group model and pulled support from all participating units to share the burden of the grunt work. If you are thinking, "the arrival assembly operation group is an amphibious movement control organization," you would be correct, per the MCTP 3-40; however, doctrinally, there was no other movement control organization that best fit what Division was attempting, at least not without the benefit of a higher headquarters (i.e., the MEF playing its doctrinal role). Second, 2dMarDiv and 2d MLG were very familiar with the arrival assembly operation group / arrival assembly operations element construct, since both units deployed to Exercise TRIDENT JUNCTURE 2018 (Norway) less than a year prior. This time around, arrival assembly operation group was primarily the Division G-4 Mobility section, with a division movement control center cell controlling convoys to and from Barstow, CA. 2d Transportation Support Battalion controlled the rail head operations group operations and supervised the offload, while arrival assembly operations element personnel provided

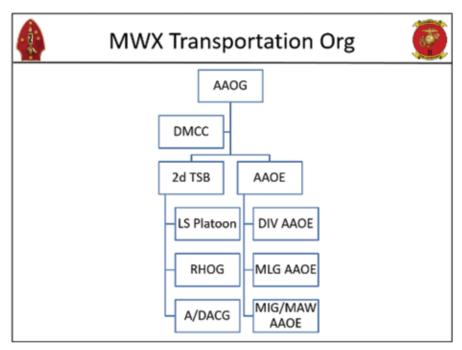


Figure 2. MWX mobility task organization.

drivers, gripers, a staging lot, and material handling equipment support. This task organization was not perfect, but it remained mission-focused and overall professionalism helped to smooth out most wrinkles in the task organization.

Redeployment

Redeployment was much smoother through all nodes and conveyances. The redeployment was not without its hiccups but given the interest of commanders at all levels to get home, along with the hard lessons learned from the deployment phase, there were fewer opportunities for surprises.

Moving the vast amount of equipment and personnel from coast to coast, and back again, was a complete team effort. 2dMarDiv owes a well-deserved Bravo Zulu to multiple organizations. The DMOs on both coasts held firm to their mandates to provide the "best customer value," yet also focused on mission accomplishment and had the flexibility to pull the proverbial rabbit out of the hat when needed. The Barstow rail operations supervisor Mr. Chad Hildebrandt and his team taught and mentored the entire force throughout the reception and redeployment as it pertained to rail and multimodal equipment transfers. Last, but not least, the uniformed professionals of the 04XX, 35XX, 31XX, 13XX MOSs who dirtied their hands away from home station performed their MOS in an exemplary manner.

What the Future Holds.

The total TOP/TOT cost for MWX 20-1 was more than \$31 million dollars and there are arguments whether or not the cost was worth it. The answer to that question likely depends upon which seat you occupy. This MWX will likely not be the last, in name at least, but it may in the end stand as the largest because of the Commandant's Planning Guidance (Washington, DC: July 2019) which focuses the Marine Corps away from large, force-on-force operations, and more toward small, expeditionary/mobile operations. Regardless, logisticians gained some practical experience in deployment operations in a true multi-nodal setting. First-hand experience at this level, and to this scale, cannot be taught in a schoolhouse or textbook setting; we must continue to train the way we intend to fight in order to be ready for the next conflict.

