Crossing Rivers and Bridging Gaps in Doctrine: Experiences from Remagen Ready 24-01

by MAJ Korey Gaines and MAJ John Kearby

A lone Joint Light Tactical Vehicle (JLTV) idles softly under a camouflage net, nestled into the scrub oak underbrush. The humvee, guided by the JLTV's Joint Battle Command-Platform signature, slides into place – door to door with the JLTV. Passenger side doors open … and the crossing area headquarters is born. The 2nd Battalion, 8th Cavalry Regiment (Stallion) and the 20th Engineer Battalion operations officers exchange a greeting and get down to the thorny business of sequencing and rafting the Stallion Task Force across Cowhouse Creek. The 1st Brigade, 1st Cavalry Division and the 36th Engineer Brigade recently participated in Remagen Ready 24-01, a division-level gap crossing exercise at Fort Cavazos, TX. The following highlights the advances in thinking gained during that event…

Recent large-scale wet gap crossing exercises, and the logical implications of a future operational environment on those operations, suggest that significant gaps exist in our published doctrine. The current body of knowledge reflected in Army Techniques Publication (ATP) 3-90.4, ***Combined Arms Mobility***, specifically Chapters 4 and 5 – "Gap Crossing in Support of Maneuver and Deliberate Gap Crossing," either lack sufficient detail to be relevant at the brigade and battalion level or present conflicts with what we know to be true about Field Manual (FM) 3.0, ***Operations,*** styled large-scale combat operations (LSCO) in the age of convergence. It is apparent that the gap crossing principles – specifically those related to planning, reconnaissance, and command and control, require significant overhauling and improved depth to provide value to our formations in both the current and future operational environments.

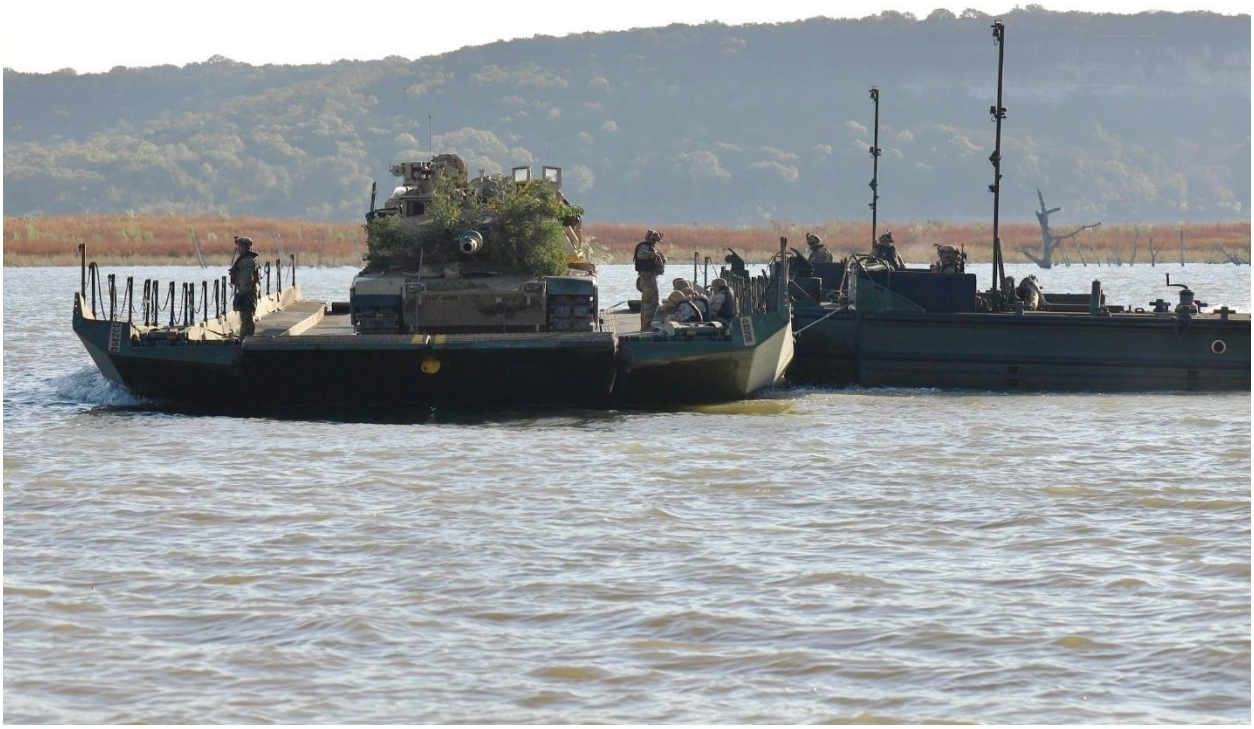

Figure 1. 1/1CD rafting their Armored Cavalry Troop during Remagen Ready 24-01 – An M1 Abrams tank rides on a 43rd Multi-Role Bridge Company (MRBC) raft under the direction of 2-8 Cavalry and the 20th Engineer Battalion. Rafting operations took place after 2-5 Cavalry had seized far-side objectives via air and boat assaults. *(U.S. Army photo by MAJ Garrison Spencer, U.S. Army Corps of Engineers (USACE) Public Affairs Officer)*

The first area to address in the doctrine relates to the planning of wet gap crossing operations and the echelon at which detailed planning must occur. Much of the discussion revolves around operations at the division level – but significant and specific effort is required at the brigade and battalion level to support and enable the detail for division. The gap crossing fundamentals of extensive preparation, flexible planning, and traffic management all reflect clear truths, but they omit the literal requirement of parallel planning and battlefield development at the brigade and battalion level. The doctrine does not go far enough in describing what a brigade or battalion staff should do to achieve those principles or what their roles might be. The following represents our recommendations.

Maneuver and support force brigade and battalion staffs need to develop basic working relationships and provide each other with capabilities briefings, discuss how they each visualize and understand gap crossing operations, and conduct joint academic sessions to educate each other on the specifics of their functions. Leading up to Remagen Ready 24-01 – 1st Armored Brigade Combat Team (ABCT) hosted Wet Gap Crossing Leader Professional Development sessions, conducted numerous terrain walks with commanders at various echelons, and arranged the participation of support forces in staff training exercises. The ATP suggests that support forces "must link up"[1] – but we believe that significantly more early interaction is necessary as described above.

The planning for a wet gap crossing requires flexibility be built into the operation, but it also requires tremendous depth and detail that can only be developed at lower echelons. The literature suggests worthy features of a flexible gap crossing plan – such as alternate crossing sites and holding equipment in reserve – but critical details that deliver the flexibility are glossed over. The actual crossing sites, routes, engineer regulating point locations, and exact loads expected on each raft require details that are out of reach of the division. Battalions must execute the focused preparation of the battlefield and generate the graphic control measures for their brigades and divisions. Maneuver and engineer brigades and battalions must design the crossing area so that it achieves flexibility by developing four crossing areas, and the route or corridor network required to access each of them from various waiting areas. A firm understanding of the cross-mobility corridors will be critical, and programming that into the graphics at the outset provides the desired flexibility. The four sites also build opportunities for deception and viable alternatives to the typical two site planning factor for a brigade. Additionally, doctrine prescribes staging, holding, and call forward areas – each marshalling large formations and under the control of a Military Police element. We believe that in practice, in the face of the current and future operational environment, this is no longer a tenable course of action. Large electronic and physical signatures will only invite enemy disruption efforts, and maximum effort should be applied to creating dispersed and concealed formations. With that in mind, we, and others recommend application of staging and holding zones, where units are dispersed and under the control of their brigade or battalion to be directed toward the crossing sites, rather than MP controlled areas. The echeloning or funneling of units based on their size through the crossing site should be maintained.

Figure 2. Multi-Role Bridge Company Raft Construction – The 43rd and 74th MRBCs assemble 7-Float rafts capable of ferrying multiple armored vehicles across Belton Lake. Early trips are conducted using a horizontal rafting style (pictured above), while subsequent iterations employ longitudinal rafting where the Bridge Erection Boats are positioned on both sides of the raft. *(U.S. Army photo by MAJ Garrison Spencer, USACE Public Affairs Officer)*

Beyond the graphics, likely only at the battalion level will there be enough understanding of the scheme of maneuver and the rolling composition of each formation to plan march serials and the individual raft loads they will comprise. In a contested wet gap crossing against a peer threat in large-scale combat operations, it is expected that we would employ rafting operations for most of the crossing. Rafting provides greater survivability, natural dispersion, and improved flexibility while sacrificing the speed at which combat power can be trafficked to the far-side. Multi-Role Bridge assets are extremely scarce and the less reliant we are on fixed sites the more survivable we can expect to be. For crossings of this type, an execution checklist may be developed at the division level, but the mechanics of moving companies across a gap, raft by raft, is extremely challenging to capture. That granularity exists at the battalion level, and we owe that detailed portion of the planning.

We experienced firsthand how powerful and how fast we could be when equipped with an order of movement containing by vehicle composition information and a desired scheme of maneuver on the far-side. The micro-routing decisions concerning congestion, enemy contact, and inactive crossing sites were natural and well informed. Doctrine, inexplicably, assigns the development of the unit movement and crossing plan to the transportation officer to be executed by the provost marshal section in accordance with their traffic control plan. This design is clumsy, in that neither of those elements are positioned to react to changes and make rapid decisions, and there is considerable risk that they do not understand enough of the nuances of the battalion schemes of maneuver across different crossing sites to recommend decisions that even support the plan. We believe it is far superior to have brigade and battalion staffs devise the crossing plan and provide refinement to the specified tasks from division.

To summarize, brigade and battalion staffs executing wet gap crossing operations should – make every effort to closely integrate and build organizational relationships and trust. They should collaboratively design the crossing area with a network of mobility and cross mobility corridors to create the flexibility to cross at any of four sites from any origin. This crossing area should also feature dispersed staging and holding zones to provide survivability to their formations. And they should recognize that rafting operations are the preferred mode of crossing and that brigade and battalion staffs own the crossing plan – complete with sequence of units to specific locations and high resolution composition of unit crossing element.

During Remagen Ready, our key leader rehearsals on the terrain were invaluable. They enabled us to confirm the trafficability of different routes and confirm redundant communication across command posts and nodes. After our rehearsal, we changed the routing from the holding areas to the call forward areas because many of the routes were not traversable due to rain. However, it is unlikely units will be able to conduct the same type of rehearsals during LSCO. Therefore, reconnaissance units must put the same effort into identifying suitable routes through and across zones as they due to the identification of the crossing sites themselves. This emphasis must be added to future wet-gap crossing doctrine.

ATP 3-90.4 affirms the importance of reconnaissance to facilitate a wet gap crossing. However, it does not provide the specificity required to ensure units execute the necessary reconnaissance. For example, ATP 3-90.4 states “a division reconnaissance element moves ahead of the main body to conduct reconnaissance of the near side and predetermined crossing sites.” Therefore, the doctrine must be updated to add three specific reconnaissance requirements to facilitate a wet gap crossing. First, lead reconnaissance efforts must identify suitable locations within the different zones for follow on forces to stage. Secondly, they must validate communications capability at templated C2 locations. Finally, they must identify mutually supporting routes that can support movement to multiple crossing sites. Without these reconnaissance efforts, units will struggle to achieve the gap-crossing fundamentals of extensive preparation, traffic management, and speed.

Reconnaissance must be a deliberate portion of the *extensive preparation*. That enables the traffic management and the speed. A route will inevitably shut down at some point. We had routes shut down due to enemy actions, recovery operations, and degradation of the route due to so much traffic. Fortunately, we identified decision points throughout the system to redirect traffic to different call forward areas and crossing sites. Furthermore, we had our CPs and RETRANS positioned in a manner that enabled us to communicate throughout the crossing area. As units prepare to execute these operations in LSCO, they must ensure their reconnaissance identify multiple approach routes/cross mobility corridors and locations that provide the best communications throughout the crossing area.

ATP 3-90.4 includes a lengthy discussion concerning command post functions and their activities during a deliberate wet-gap crossing. While these are useful and appropriate actions in general – they offer an unrealistic perspective of echelons where these actions are taking place and imply a physical structure that is infeasible considering the operational environment. The final section to be addressed within this techniques publication, is how and with what structure a wet-gap crossing operation should be commanded and controlled.

The ATP delineates the roles of crossing area commanders and crossing area engineers at both the division and brigade levels. While the descriptions of their responsibilities are generally accurate, the manual either understates or omits crucial details and composition.

At the brigade level, the crossing area engineer assumes the role of the brigade commander unless delegated otherwise. This individual, likely highly mobile, seeks a comprehensive battlefield perspective through personal evaluation and dialogue with battalion commanders. However, due to this mobility, they may not consistently be available to address tactical problems. Like the crossing area commander, the crossing area engineer, who is the engineer battalion commander responsible for the crossing area, circulates the battlefield to gain understanding and shape the larger operation. Periodic contact and decision points facilitate major decisions between these individuals, including when to assault cross, raft, commit to full enclosure, expand to two-way traffic, or change crossing sites.

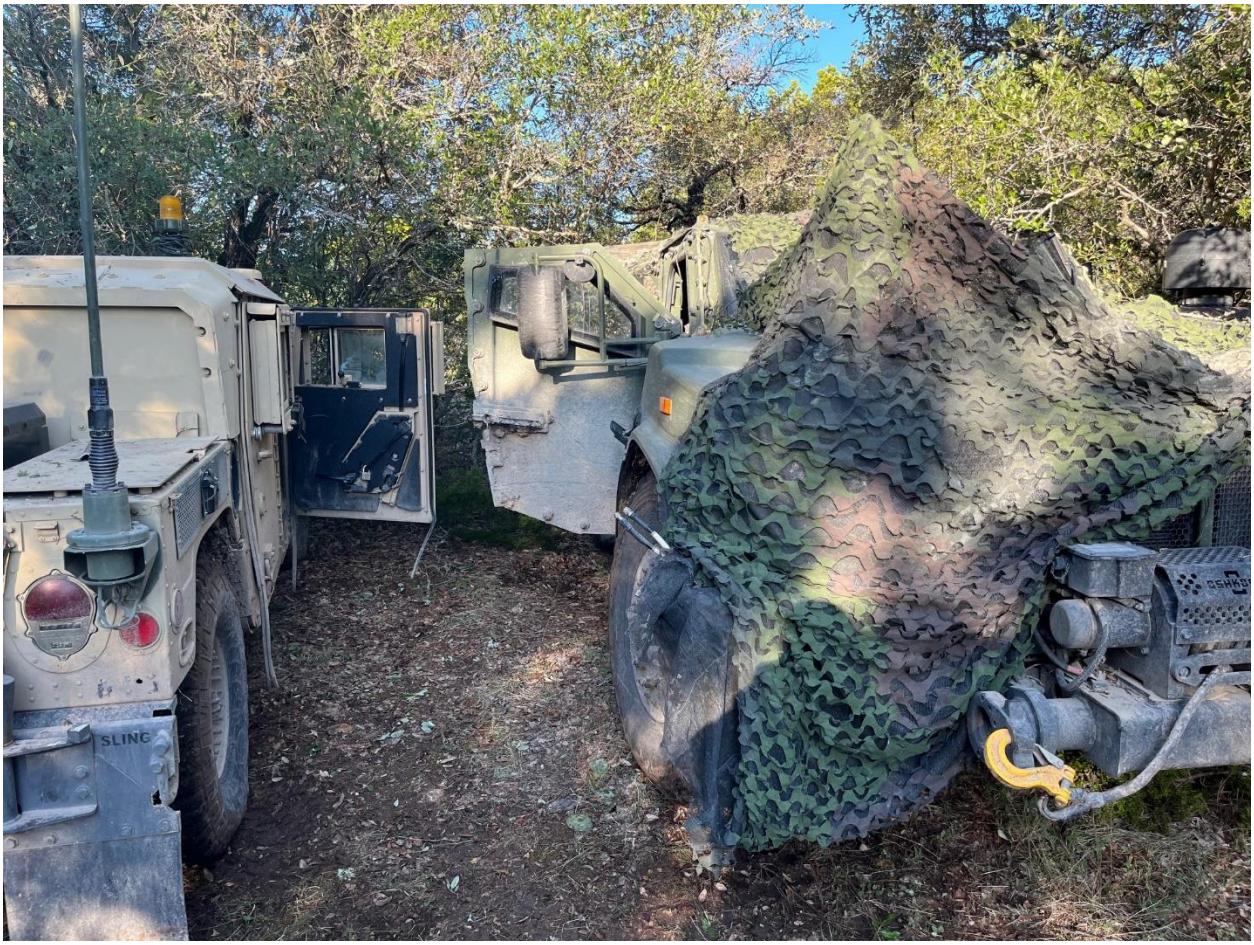

Figure 3. The Crossing Area Headquarters – A small control cell, consisting of battalion operations officers and their vehicles, managed the flow of equipment through the crossing area. Each element had clear lines of both communication and control with their subordinate elements throughout the operation. The proximity of these nodes allowed for rapid decision making, tactical flexibility and limited detection. *(U.S. Army photo by MAJ John A. Kearby)*

Mechanical decisions and those in response to friction must occur elsewhere, leading to the proposal of the crossing area headquarters. Despite the doctrine implying that this should be the brigade main command post (MCP), in practice, this setup appears disconnected and indirect. The brigade MCP, situated on the border of the crossing area, is often too far removed from the sites to have accurate information for effective flow control. The suggested solution is a crossing area headquarters comprising elements from the engineer battalion TAC at various crossing sites and a tactical command post (TAC) element from whichever maneuver battalion(s) are within the crossing area.

This structure offers several advantages. The crossing maneuver battalion possesses an immediate understanding of unit composition, a clear grasp of the scheme of maneuver and open lines of communication with subordinates. This internal control element within a crossing battalion can provide instant agility in rapidly changing conditions. Rafting, the likely preferred mode of crossing, necessitates thoughtful serial design and routing to avoid congestion, and crossing battalions inherently understand this about themselves. Battalions are better equipped to inform engineer headquarters about the details of individual elements, avoiding disruptions to the plan.

Furthermore, battalions understand the scheme of maneuver at the appropriate level, allowing for correct routing of small elements. Rigid march tables and pre-arranged plans, if left to chance, risk too much when things do not unfold exactly as expected. The engineer TAC element, having clear lines of communication with subordinates managing crossing sites, understands real-time conditions and capacities at each site, facilitating anticipation of crossing rate changes and degrading site conditions. The proposed crossing area headquarters is dynamic and fluid in composition, with a constant engineer battalion TAC element and a presence from the actively crossing battalion, ensuring proximity to crossing sites while maintaining dispersion, facilitating rapid decision-making, and providing the necessary guidance to maintain tempo.

Unfortunately, ATP 3-90.4 mistakenly describes wet gap crossing operations in high-flying abstractions and fails to appropriately address the mechanics required by the battalions and brigades trying to execute them. The manual must be updated to provide practical and actionable tasks to staffs and units at the appropriate echelon so that they are equipped to confront the modern battlefield and this mission set. Remove the romanticized vision of grand wet-gap crossing maneuvers and reorient on the details that will enable success. With improved guidance regarding planning at echelon, revised reconnaissance objectives, and command and control techniques that consider the modern battlefield the ATP 3-90.4 can be a powerful tool for conducting wet-gap crossing operations.

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Notes

[1] ATP 3.90-4, ***Combined Arms Mobility***, Paragraph 4.25.

Acronym Quick-Scan

ABCT – armored brigade combat team

ATP – Army techniques publication
CGSC – U.S. Army Command and General Staff College
FM – field manual
JLTV – Joint Light Tactical Vehicle
LSCO – large-scale combat operations
MCP – main command post
MRBC – Multi-Role Bridge Company
TAC – tactical command post
USACE – U.S. Army Corps of Engineers