RIVER CROSSING COMMAND AND CONTROL

by LTC Daniel Waldo

Effective river crossing command and control requires accurate, timely status reports on crossing traffic. However, the communications assets available to track complex crossing operations are meager.

When five bridge companies are calling the TOC from five crossing sites, it's essential that they communicate quickly. Before deactivation in January 1986, the 549th Engineer Battalion in Schwetzingen, Germany, developed an alpha code reporting system that proved quick and effective in three FTXs and became standing operating procedure for V Corps.

To move forward in the V Corps' area of operations, most of the 8th Infantry Division and follow on forces cross the Main River. The 549th Engineer Battalion's primary mission in the corps' general defense plan was the command and control of river crossing operations. All the corps' float bridge units—541st Engineer Company (MAB), 8591st Civilian Support Group (RB), 814th Engineer Company (RB)—and both divisional bridging units—E/12 (RB) and E/23 (RB)—were attached to the 549th.

At the 549th, a 35-soldier HHD with only limited radio assets handled this complex command and control mission. During ARTEPs and FTXs, the bridge companies verified their ability to raft, bridge, and cross maneuver units. However, the HHD's ability to sustain 24-hour operations was always questioned. A cumbersome, line item reporting system had to be revised to improve efficiency.

Using the 549th's procedure, an alpha code is applied to each crossing condition (Figure 1). The bridge units are given their basic mission—to have a raft or bridge operational at a particular crossing site at a specified time. The code becomes the basis for reporting. By adding codes, the system can be tailored for different needs. For wartime security, the code would change daily.

As alpha codes are reported, each unit's activities are tracked on a large board at the TOC. The crossing force commander and crossing area engineer can tell at a glance:

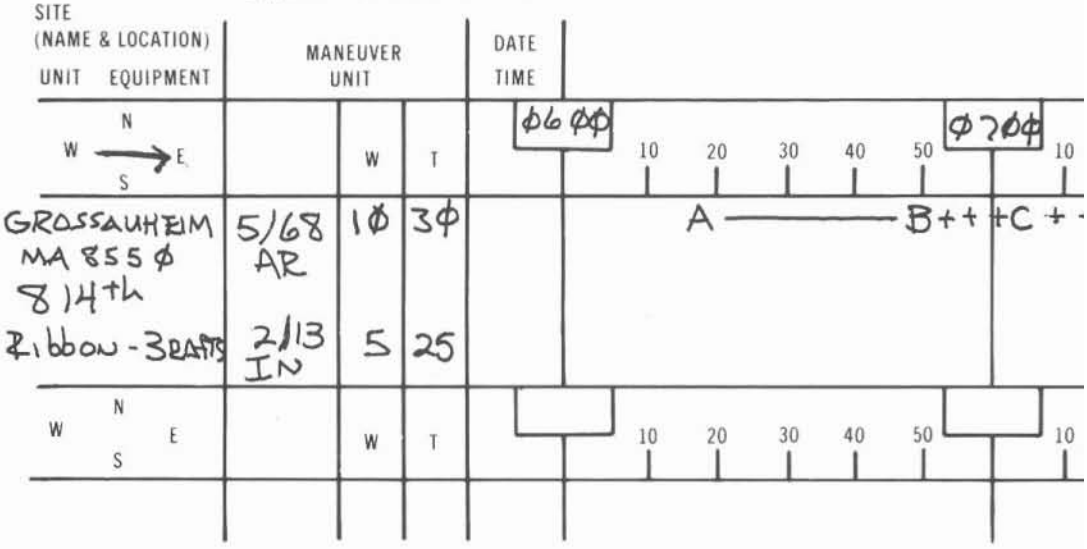
- What units have crossed, where, when, and with what.
- What units are currently crossing.
- What unit is in the engineer

Figure 1.

Alpha Code and Tracking Symbols

Alpha	=	Equipment departs bivouac site; bridge closure begins.
Bravo	=	Equipment on site and operational.
Charlie	=	Traffic at ERP (unit ID, number of wheels and tracks).
Delta	=	Begin crossing.
Echo	=	End crossing.
Foxtrot	=	Equipment returns to bivouac area; break bridge.
– – –	=	Water march; moving to new site on the river.
+++	=	Maintenance and resupply at the river; not crossing.
• • • •	=	Crossing traffic.
___	=	Other.

Figure 2. **CROSSING PLAN**



regulating point (ERP) or en route from the ERP to the crossing site.

- The status of bridging units, location and current activity.

Here is how the alpha code works.

The 814th Engineer Company receives the mission to have rafts operational at the Grossauheim site NLT 0700. Activity by the 814th is shown in Figure 2. When the unit moves from its bivouac site at 0620, the battalion TOC receives the simple message: "*Alpha* 0620." At 0650, the message "*Bravo* 0650" tells the TOC that all equipment is on site and operational.

These brief radio contacts quickly provide the exact status of the unit. When the 814th calls "*Charlie*" at 0705, it uses the unit identifier codes in the CEOI to inform the TOC that the 5/68 Armor is at the ERP with 30 tracks and 10 wheels.

Following normal river crossing procedures, the ERP will release raft loads in the priority requested by the maneuver commander. When the first raft load reaches the river and starts crossing, the unit reports, "*Delta* 0830."

While units are crossing traffic, they report status every hour on the hour. When the 814th reports, "0800; 20 *Tangos*, 3 *Whiskies*," the TOC understands that, as of 0800, 20 tracks and 3 wheels have crossed, even if radio contact is made late—at 0810 for example.

When crossing is complete, the 814th confirms that all traffic originally reported in the ERP has crossed, stating: "*Echo* 0830; 30 *Tangos*, 10 *Whiskies*."

The unit then goes into a maintenance mode awaiting further missions. When the 2/13 Infantry arrives at 0915, the 814th reports: "*Charlie* 0915." They give the CEOI identifier code for the 2/13 and the status: "25 *Tangos*, 5 *Whiskies*."

When the 2/13 finishes crossing, the 814th is told to return to the bivouac site. Back at bivouac, the unit reports "*Foxtrot* 1040."

If enemy activity had compelled the 814th to relocate to a new crossing site at 0930 before the 2/13 finished crossing, the unit would have called in "*Echo* 0930; relocating." At 1000, the unit would give its routine hourly report to update the TOC on the number of vehicles that crossed before the interruption. When crossing resumes at a new location, the 814th uses appropriate codes within the CEOI to give the new grid coordinates of the new crossing site so the traffic control points can reroute traffic.

The use of abbreviated code systems isn't new to the Army. This simple system was developed to communicate important river crossing information. Engineer units can easily adapt and modify the code for their own use.

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