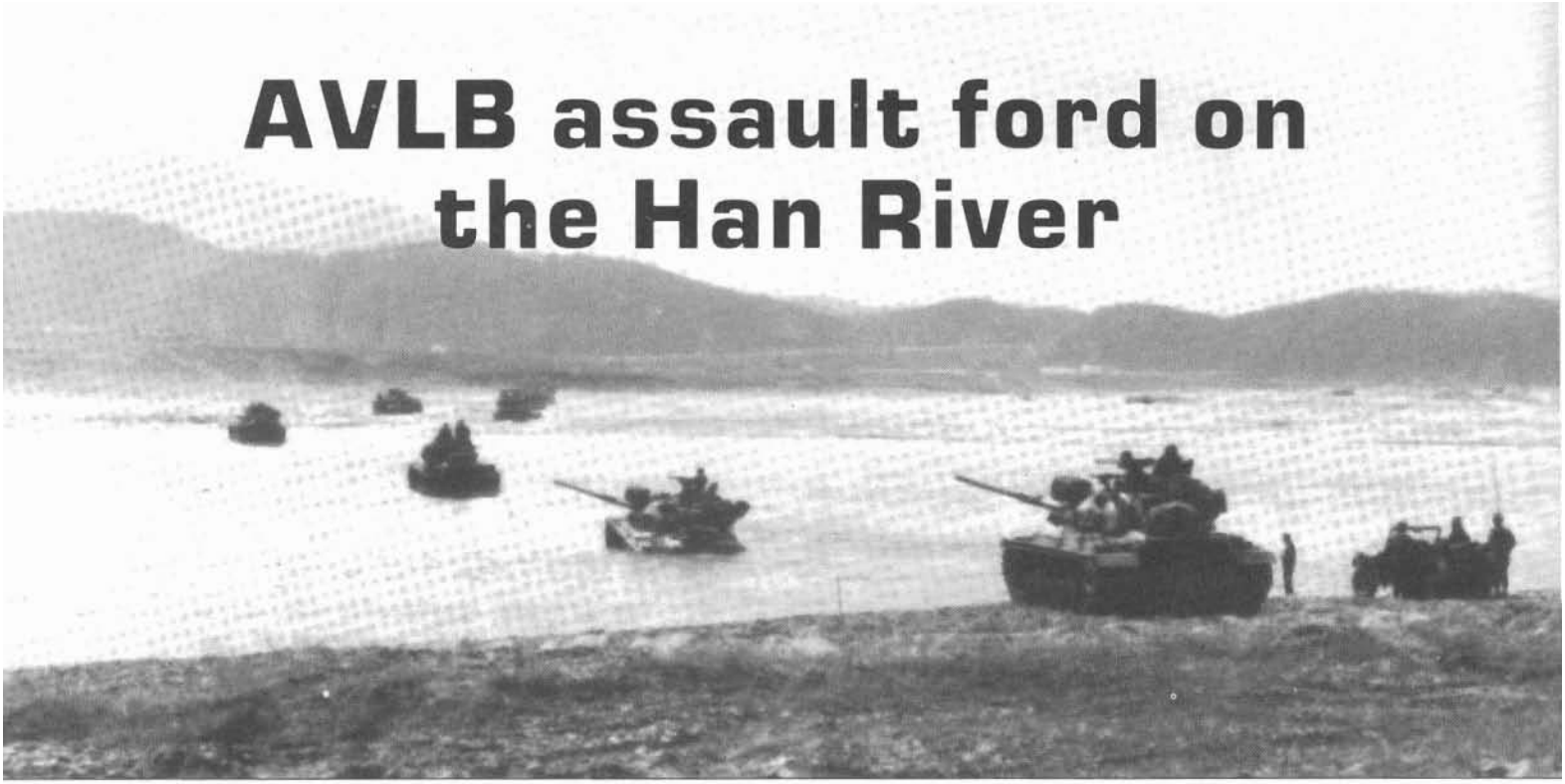
AVLB assault ford on the Han River



by CPT John Rivenburgh

Cross the water where ***you*** choose, and make the battle yours. Here's how the Orange Force (2d Infantry Division) used a surprise crossing to defeat the Blue Force in 1982's joint ROK-US Exercise, TEAM SPIRIT. Convinced that a flank attack on Blue Force would turn the tide, Orange Force maneuver commander, division engineer, and assistant division engineer planned to cross the South Han River and drive west.

They decided to move a mechanized brigade across a major water obstacle. No fords or fixed bridges were available. The few prepared, deep-water crossing points had been used by the enemy. To surprise the enemy, AVLB assets of the divisional float bridge company (6 launchers with 8 bridges) would construct a hasty AVLB overlapping assault ford at an unexpected site.

Emplacing the assault ford

Two days before the attack, E Company, 2d Engineer Battalion, used SCUBA teams, 3-man reconnaissance boats, and shoreline observation to determine the feasibility of the assault ford. The findings were less than ideal (sandy-silty-rocky bottom; 5.5-foot depth, and 5-foot-per-second current), but the river bottom was flat. The battalion commander consulted with the assistant division commander and gave the order to initiate.

To prepare for the mission, the end curbs were removed from the AVLBs and safety poles were fabricated. The first launcher drove into the river and launched its bridge at maximum fording depth. Before the bridge completely submerged, the AVLB commander placed 8-foot safety poles in the river bottom along the sides of the bridge. After the first launcher retreated, a second came forward, launched its bridge, and formed an interlock by overlapping the first bridge 3 feet. In this way, 5 AVLBs spanned 300 feet.

The attack

The third morning, the battalion bombarded the far shore. Under cover of smoke, 37 armored vehicles crossed the overlapping assault ford with only one minor mishap. This surprise maneuver allowed Orange Force to defeat Blue Force in detail.

The findings of the river reconnaissance proved to be more than adequate for the mission. The 5 AVLBs were recovered without damage to bridges or launchers.

The hasty AVLB overlapping assault ford is not suitable for all river conditions—it works best when a ford's only limiting factor is depth. A rocky bottom can cause point loading and damage the bridges. Bridges may sink into a clay or silt bottom, lowering their surfaces below the crossing vehicles' fording depth. Bottom suction may render bridges unrecoverable. Extensive shore preparation is needed when banks are steep or high. Bridges must be retrievable from the near shore.

All this means that a thorough reconnaissance must be conducted. The division engineer and maneuver commander must ensure the benefits outweigh the risks. AVLB crews must train on land to perfect the overlapping techniques. Clearly, the use of this assault ford is heavily dependent on METT-T.

But like all specialized tools, the hasty AVLB overlapping assault ford can be the perfect instrument in the right circumstances—it can let the maneuver force commander exploit enemy weakness.

CPT John Rivenburgh is a Senior Team Leader in EOAC Division of the Engineer School. He has also served as Commander, E Company, 2d Engineer Battalion; and Project Engineer, Albuquerque District, COE. CPT Rivenburgh holds a BS in Civil Engineering from Clarkson University, an MS in Civil Engineering from the University of Connecticut, and is a registered professional engineer in Virginia.