

SOVIET RIVER CROSSING TACTICS

Captain Richard E. Ashby

The Russians are not at all inclined to look upon rivers as insurmountable barriers that limit a commander's freedom of action. On the contrary, they attach remarkably little importance to the difficulties that are involved in crossing rivers with troops and equipment during combat operations.

It would be fallacious to assume that this attitude is adopted only toward rivers with special characteristics that tend to facilitate crossing operations. This was demonstrated when the Russians crossed the flooded lower reaches of the Oder, a typically Central European river and on other occasions during the winter of 1941-42 and the fall of 1943.

The Russians never use a river as a phase line in offensive operations. Even if they are unable to carry the attack forward across the river, they immediately send forces ahead to assure the establishment of small bridgeheads for subsequent operations. By moving mobile troops rapidly forward, they endeavor to cross the river before the enemy has had a chance to bolster his defenses.

These tactics did not originate with the Russians. It has always been the aim of attacking forces to cross a river prior to or simultaneously with the defeated enemy troops, unless it has been replanned to halt operations upon reaching the river.

The distinguishing feature of Russian tactics is the fact that as a result of their mass commitment of troops, they are in a position to launch attacks simultaneously on a wide front and to over-run all undefended areas. This technique enables them to quickly discover and swiftly cross any sectors that are not defended or are held by weak enemy troops.

Tactically speaking, the Russians are adept in all types of crossing operations that include infiltration to major offensives, moving forward of advance attachments, and large-scale nighttime crossings.

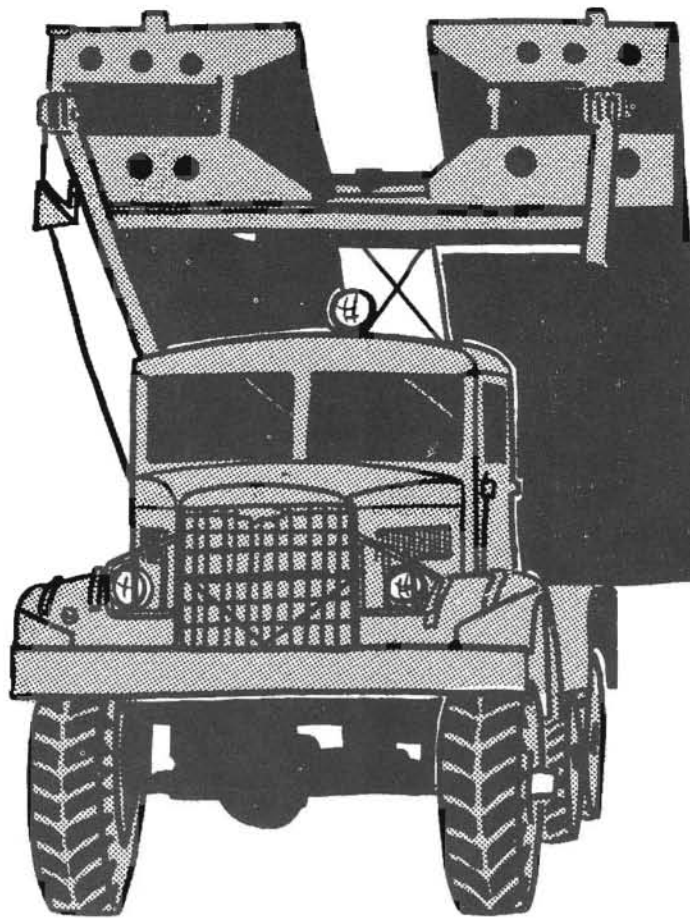
The Russians are no more deterred by difficult terrain and river conditions than by unfavorable weather and seasonal changes.

In World War II, the Russians did not employ any startling technical innovations in crossing large rivers. The devices they used were relatively primitive, but effective.

It is reasonable to assume, however, that the Russians have since perfected their crossing equipment to such an extent that they can cope with the problems presented by Central European Rivers.

Special attention should be called to the fact that the troops are resourceful and well-trained in crossing techniques.

All in all, it is imperative for defenders of a river line to remember that the Russians are able



to recognize and exploit. This evaluation of Russian river crossing capabilities was the result of a post-World War II study that received the full endorsement of Generaloberst A. D. Franz Halder, Chief of the German Army General Staff.

As a result of successful broad-front, river crossing operations during WWII, the Soviets have concentrated on the development of bridging equipment that would enhance this technique. Today, more than ever, it is vital that armored and mechanized infantry mobility be restricted as little as possible by terrain features. Therefore, the Soviets place emphasis on the co-development of armored and engineer equipment. This ensures that sophisticated and advanced engineer equipment is available to properly support their newer, armored and mechanized vehicles.

Soviet Engineer Tactical Bridging has emphasized three basic design principles: 1) speed of construction, 2) simplicity of design and, 3) minimal additional construction support.

With these concepts in mind, in 1961, the Soviets developed and introduced the Heavy Folding Ponton Bridge, PMP, into their engineer inventories.

Designed to carry Class 60 loads, the PMP float bridge has a construction rate of 60 feet per minute and requires a construction crew of ap-

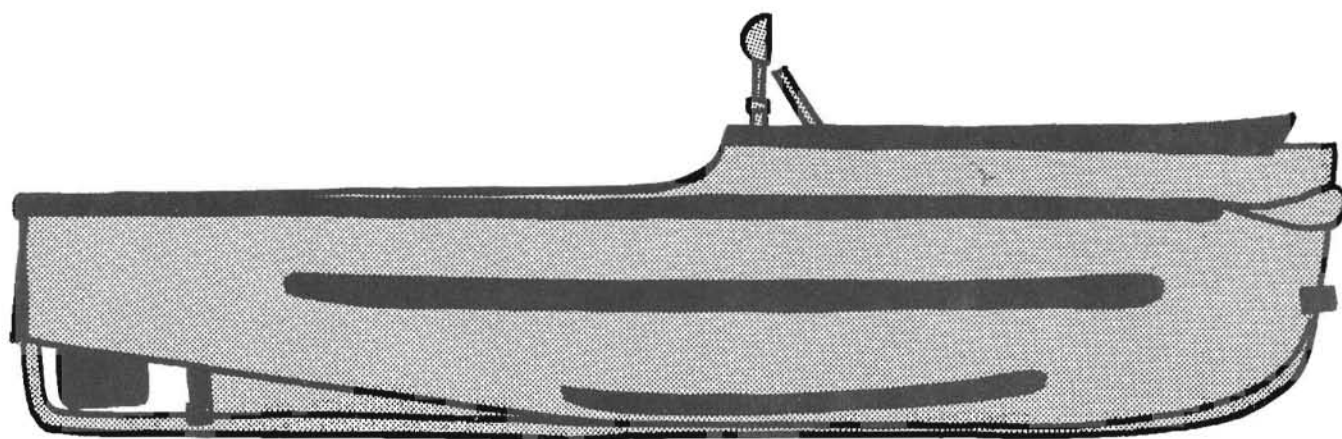
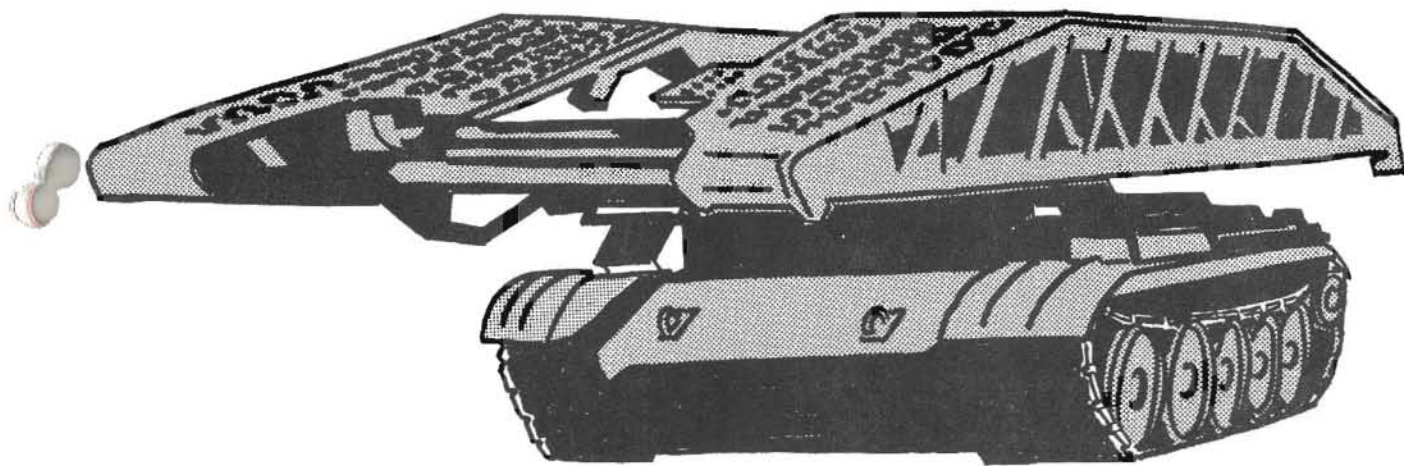
proximately 35 personnel. Consisting of 16 center pontoons, two end or ramp pontoons, and one anchor/repair truck, the PMP Set has a spanning capability of more than 320 feet. Each ponton is a self-contained, mechanically operated unit with the ponton superstructure serving as the roadway surface.

The KRAZ-214 Truck transports, launches, and retrieves the folding ponton.

To minimize the requirement for additional supporting construction equipment such as cranes, the Soviets developed the BMK-150 Power Boat with integral travel struts! These struts are folded along side after the boat is afloat.

The Bridge Erection Boat is used in conjunction with PMP bridging and rafting operations. Using a traveling arm connected to the AFT section, the BMK-150 is towed to the bridge site by a KRAZ-214 vehicle. Upon arrival, the truck backs up to the river's edge and pushes the boat out into the water. A crew member disconnects the traveling arm which releases the integral strut-locking devices. The wheels swing forward into storage wells and the boat is ready for operation.

While the U. S. has eliminated the need for a crane in bridge construction by developing a ribbon bridge. A crane or lifting vehicle is still required for our sectionalized bridge erection



boats. Perhaps we should consider developing a new bridge erection boat that would compliment our Ribbon Bridge set.

To provide Engineer support during the assault phase, the Soviets have developed and introduced the Tank-Launched Bridge MTU. This class 60 bridge span consists of two box-truss treadways mounted on and launched from the T-54 tank chassis.

The cantilever launching technique was specifically used to minimize the bridges exposure to enemy fire. In addition, the span is launched by a mechanical drive system rather than a hydraulical one. The primary short coming of this bridge is its limited spanning capability of only 40 feet. Therefore, the Soviets will probably develop a similar bridge with a greater spanning capability.

To improve their bridging versatility, the Soviets have developed and introduced into their Engineer Inventory the Heavy Truck-Mounted Scissors Bridge. This bridge consists of at least three (3), class 60, 30-foot spans mounted on a modified KRAZ-214 Truck. Using a mechanically driven launching arm and cable system, the span is raised to the verticle position. The cable system unfolds the bridge and begins to lower it into place. While the bridge is being lowered, the adjustable trestles that are mounted beneath the

span, are released and locked into position. When the lowering operation is completed, the span is married to a previously emplaced bridge section. The intergal trestles can be adjusted up to 10 feet in height. However this limitation could be overcome easily by cribbing beneath the footers.

With a construction crew of 12 personnel, this set can be erected over a 100-foot dry or wet gap within 45 minutes. To increase this spanning capability, two TMM Sets could be employed together.

As you can see, the Soviet Army Engineer units are equipped with modern, sophisticated, tactical bridging to ensure that they can provide the necessary support to their armored and mechanized infantry units. They have had more than 10 years to gain the necessary experience to understand its capabilities and limitations. Therefore, the Soviet Engineer's capability cannot be passed over lightly.

With the modern concept of nuclear tactics and its emphasis on battlefield mobility the advantages of having this type of bridging equipment available is self evident.

Captain Richard E. Ashby is a former graduate of the Engineer Officer Advanced Course at Fort Belvoir, Virginia.