

NIGHT CROSSING

by LTC Richard V. Gorski and 1LT William Vickers

Soldiers practice connecting MABs during daylight hours to prepare themselves for more challenging conditions of nighttime operations in MOPP IV (staff photo).

For some time the 2nd Armored Division had been in contact with the enemy. Intelligence reports of a decisive and successful battle against elements of the 1st Shock Army began to emerge. A warning order alerted the division that it would soon be maneuvered against other forces elsewhere. The 17th Engineer Battalion's Echo Company knew that it would play a major role in the upcoming operation.

The terrain facing the division was crisscrossed with small streams and rivers. Most permanent bridges had been demolished earlier during the war. Clearly, river-crossing operations would have a great impact on the results of any engagement. The side with the more efficient, better trained mobile bridging assets would have a great advantage.

As Echo Company escalated its preparations for the coming battle, the S-2 reported extensive enemy use of chemical weapons. Enemy intelligence was excellent and would be watching carefully for any movement of our Mobile Assault Bridges. Since the enemy controlled the skies during daylight, the division would have to move at night to escape detection.

A night river-crossing under total blackout conditions . . . possibly in a chemically contaminated environment . . . could Echo Company pull it off? . . .

Fortunately, this scenario was just the fictitious build-up to one phase of exercise Hardened Steel VII, the 2nd Armored Division's annual spring exercise. But the mission was real: construct two MABs in MOPP IV in total blackout.

Our division commander, MG John W. Woodmansee Jr., had issued a warning order for this mission after the previous spring's exercise. Operating and constructing a Mobile Assault Bridge isn't easy under the best of conditions. Doing it in either MOPP IV or in total blackout is difficult enough. Putting it all together in complete chemical protective gear and in total blackout is a task that the MAB's designers probably never envisioned.

With a year to get ready, we needed a training program that would sustain our high level of proficiency through the inevitable personnel changes and develop crew proficiency and confidence rapidly and safely. Echo Company designed such a program to be ready for a blackout MOPP IV crossing in stages: daylight bridge construction and rafting procedures; daylight operations wearing protective masks; night bridge construction and rafting procedures; and ultimately, night operations in MOPP IV in total blackout.

Because Fort Hood's famous Cowhouse Creek is too narrow and too shallow to support MAB operations, most of the training took place in Belton Lake, the man-made reservoir created by the damming of Cowhouse Creek near the Fort Hood reservation. Calm-water MAB operations on a lake don't simulate moving water operations on a typical fast-moving German river, but in Texas you use the water that God gives you and you're thankful for that!

Initial training took place in the heat of summer. MAB crewmen practiced driving their rigs into the water, maintaining a tight formation, throwing the ropes used to pull the rigs together, connecting the rigs into rafts, maneuvering the rafts, and finally landing the rafts onto the shore. Because time is precious when constructing a bridge, all the exercises emphasized teamwork and were geared towards saving time.

And teamwork was the key. Individual MAB rigs had to enter the water smoothly and stay in formation. As rigs were called in by the raft commander, a deckhand on each rig threw a rope to his counterpart on the adjacent rig,

wrapped it quickly around the capstan, and used the rotating capstan to tighten the ropes and draw the rigs together.

Practice ensured that the rope was caught on the first attempt so that no time would be wasted pulling a missed rope out of the lake. As the ropes were drawn tight, the crewmen carefully controlled the speed of the capstans so that the rigs would slide together smoothly. After inserting the hydraulic pin connectors and checking them for secure fit, the raft commander called in the next MAB rig to hook up.

After individual rigs had been hooked together to form a raft, the raft commander began maneuvering the raft into position to form a bridge. If the raft commander missed the precise landing spot on each shore, the bridge would be off the centerline of the crossing site. If the ramps failed to hit the landing site on the first pass, the raft would sweep past the landing site and lose valuable time maneuvering back into position.

There were usually about 18 to 20 crews in the company at any one time; seven or eight crews and their rigs were needed to complete each bridge. Cross-training in crew skills meant each drill had to be repeated several times to ensure proficiency. Moreover, although most of our training was done by platoon and stressed section integrity (there are two MAB sections in each platoon), cross-section and cross-platoon training was required to prepare us for any eventuality.

Once we had achieved a reasonable level of proficiency—and this took quite a lot of practice—we did it again, this time wearing chemical protective masks.

Working in protective masks immediately caused problems. Aside from the obvious difficulties of limited vision and reduced ability to communicate, the troops couldn't fasten their steel helmets over their masks. Unfortunately, a few helmets were lost in the river before a clever sergeant convinced his lieutenant to store the steel pots in the cabs of the MABs.

Impaired peripheral vision was not so easy to correct. The raft commander had to learn to look at each marine drive operator in turn to be able to tell if all marine drives were being operated correctly. Engine noise and the ever-present wind compounded the problem of communications between raft commander and marine drive operators. The raft commander had to be especially clear and concise with his verbal instructions, use exaggerated hand and arm signals, and act without hesitation. Otherwise, operators would become confused and unsure of their actions.

By comparison to what was to come, the training so far was easy.

We had practiced before, performing night crossings in total darkness without cab lights, running lights, or even flashlights. A single MAB could easily become misoriented in the darkness; therefore, each crew chief was carefully briefed on his position in the formation in the water. He had to keep the MAB in front of him in sight and be ready to hook up when his turn came, yet he could not get too close or he would limit the other rig's maneuvering room.

Other minor problems caused by limited visibility were solved one by one through attention to detail, discipline, and practice. For example, usually the hydraulically actuated pins which hold the raft together are checked visually by the raft commander. Since we couldn't use any lights and fluorescent paint and tape were useless, we learned how to physically feel for the correct placement of the pins. This involved some potential danger and discomfort to the raft commander which we just had to acccept.

Operating the MABs at night and with M-17 protective masks turned out to be less difficult than we had expected. The practice without masks at night and with masks during the daylight had paid off. Crew confidence was amazingly high. Raft commanders would run along the bridge roadway until they could stand directly in front of and communicate with particular operator.

Of course constructing a bridge is only half the battle. Getting traffic across the bridge is an integral part of the effort—and doing it at night creates some special problems.

Previous river-crossing exercises had taught us the importance of well trained ground guides. Keeping traffic moving quickly and steadily at night absolutely requires well trained ground guides.

Vehicles equipped with night vision devices, like the M-1 Abrams and the M-2 Bradley, can see a ground guide's hand and arm signals without any additional light. Other vehicles require that the ground guides have a light in each hand so that their signals are visible. In either case, the ground guides have to use standard hand and arm signals that are known to the vehicle drivers, and their hand and arm movements have to be bold and exaggerated.

The ground guide's position is also critical. He can hamper the vehicles he is guiding if he is too close to them. If he's too far away, the drivers can't see



Under the cover of darkness and protected by their MOPP equipment, soldiers of the 17th Engineer Battalion, 2nd Armored Division, work to connect their MABs to provide the maneuver brigades the means to cross a water obstacle (U.S. Army photo).

him. Several guides on a bridge are necessary. By keeping their distance and handing off vehicles from one guide to the next, the guides can keep the traffic flowing at near-daylight rates. We found that one of the most important roles of the officer who was the bridge site commander was to watch the efficiency of the ground guides and ensure that correct procedures were being followed.

We also found that we could wear AN/PVS-5 night vision goggles (NVGs) over our M-17 protective masks. Some ground guides had great difficulty at first coping with the severe tunnel vision effect, but like everything else, practice instilled confidence. With the NVGs, the ground guides could see the oncoming traffic as well or better than the traffic could see them.

Previous night-bridging missions had proved the value of chem lights. By putting a chem light inside a C-ration box or a tin can, the light is visible from only one direction. We would use lights like this to mark the landing sites so that raft commanders could see in the dark exactly where to position their bridge ramps. We would also use them to mark the bridge site's approach and exit roads.

Chem lights would also be used by the ground guides. By holding the chem lights in their foil wrappers so that just their tips were exposed, the lights would not be visible outside the bridge area, and they would not blind vehicle operators using night vision devices.

We found that chem lights made identification of key personnel a snap. Using "100-mile-an-hour" tape, we taped a chem light to our left sleeves just below our shoulders. By taping over the chem light and leaving only narrow bands of light showing, we could easily identify leaders—one light band for NCOs, two for junior officers, three for senior officers. By doing the job carefully, we solved two problems: how to identify key personnel at night in MOPP IV and how to prevent those leaders from being too visible under night vision devices.

. . . in the bivouac area we anxiously awaited word from battalion S-2 about what was happening on the front lines. The MABs were well concealed under heavy camouflage. Although we were in the division rear and occupying a fairly secure area, we kept our perimeter security alert. We didn't want any surprises from OPFOR airborne forces.

Finally the word arrived. Division had successfully counterattacked and destroyed an enemy division. As part of our move to another part of the corps area, the division would conduct a retrograde operation. The move would have to be done at night for concealment. We were cautioned that several areas had been chemically contaminated during the battle and that all the permanent bridges were destroyed.

Echo Company's mission: construct two bridges across Cowhouse Creek after dark and cross the division before daylight. And since the crossing areas had been hit with chemical weapons early that day, conduct the entire operation in MOPP IV!

This was it! All that training would finally pay off. The bivouac area was humming with activity. The air of restlessness that had permeated Echo Company during the past days was replaced with one of excited anticipation. Personal equipment was scrutinized by the practiced eyes of the section sergeants. MOPP gear was checked one final time for serviceability. At the pre-operation briefing, final instructions were issued.

Plans were finalized and the crews thoroughly briefed. We stressed attention to detail, light and noise discipline, MOPP IV procedures, and safety. We had to be ready to cross traffic at 2100.

At precisely 1900, 1st Platoon emerged from its perimeter and 2nd Platoon followed 15 minutes later. As each checkpoint was passed, the platoon leader reported his position by radio. At the final checkpoint before the crossing area, the convoys pulled over, dispersed, and assumed MOPP IV. Light was fading rapidly. At 1930 the first MAB splashed into the water on schedule.

The first three interior bays went together without incident. The next two were a struggle. Time and again the bridge commander would bring the MABs close, the capstans would scream with their coils of rope, but the pins would not slide into place. Sweat poured off the men on the ropes, pooling in irritating puddles at the base of their protective masks.

Finally, after we tried every trick in the book, the pins grudgingly slid into place, and the process of closing the bridge began. First, the two free interior ends were brought together, and ropes were thrown to form a "V" in the middle of the river. By raising the ramps, throwing the MAB marine drives into full throttle reverse and then lowering the ramps, the ends of the bridge were slipped into place. The exhausting process had taken almost 1 1/2 hours.

It was now 2055. The troops had worked up quite a sweat under their MOPP gear. The cool night air cut easily through their protective suits.

Then we felt the rumbling of tons of Abrams tanks. Next came the distinctive sound of road wheels picking up and laying down track. Before we knew it, they were upon us and crossing. The 2AD was here.

Ground guides worked smoothly and carefully. Shifts moved in and out with the precision of a drill team. By morning it was over. The retrograde was complete.

The division had called for a total blackout crossing in MOPP IV. Echo Company had delivered!

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