

(assigned or attached) to make sure they eat and sleep and don't collapse from exhaustion. (A good training NCO can take on some of the burden during extended field exercises).

Keeping morale up is sometimes difficult. As with any other unit, the morale fluctuates with field problems, inspections, missions, and very little time off. The soldiers in my brigade worked hard, and their morale rose and fell like a tidal

wave. They didn't always understand or like it, but they pitched in and got the job done. I am sure of one thing—morale and motivated, disciplined leaders go hand in hand.

These are some of the problems I encountered, and these are some of the solutions I came up with during my short tenure. I still have a long way to go as a First Sergeant, but I am constantly learning. Luckily, though, the soldiers

and the NCOs of the company were always willing to help with my training.



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# The Soviet BTR-80

CAPTAIN GEORGE T. NORRIS

A recently released issue of *Soviet Military Power* refers to a new Soviet APC, the BTR-80, but does not provide any additional comments. Once again, we have a situation in which the Soviets themselves have said more about a new weapon system than our own intelligence services. Although it is always possible that no such vehicle exists, it is important to consider just what might happen if it does. Beyond that, the question should be what effect the new system would have on the battlefield.

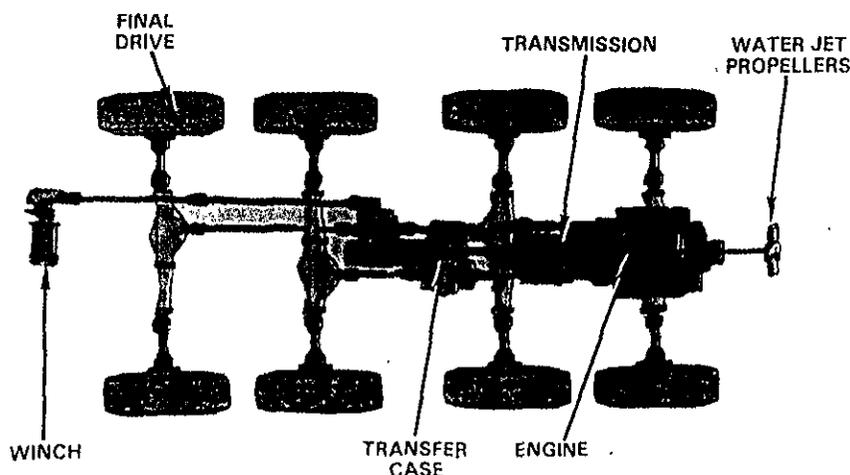
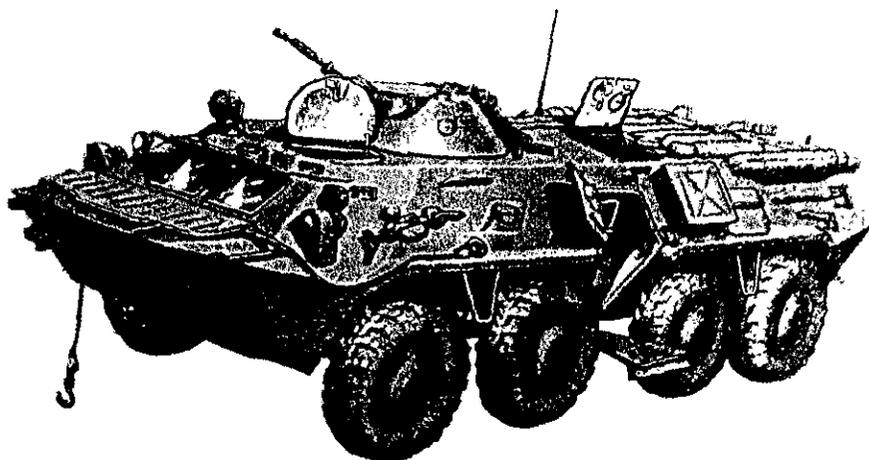
The Soviet description of the BTR-80 and its accompanying sketch indicate that it is much more capable than any of its predecessors. Like both the BTR-60PB and the BTR-70, it is a wheeled, 8x8, squad APC that is amphibious without significant preparations. It does, however, correct many of the limitations of both earlier vehicles.

To begin with, the Soviets have used a single diesel engine instead of the twin gasoline engines of the BTR-60/70. In addition to a lower risk of fire, the single engine makes maintenance easier. An improved power train has been added, so the BTR-80 will have good cross-country mobility. Better armor protection and integral fire extinguishers provide increased protection for the occupants.

In addition to better survivability, the

vehicle also appears to offer much better performance in combat situations. One serious limitation of the BTR-60 and

the BTR-70 is the fact that they, like our M113, are essentially battlefield taxis—their occupants cannot fight effectively



while mounted. With the BTR-80, the Soviets appear to have changed that: they have provided a firing port for the vehicle commander in the front of the vehicle. The squad members located in the center of the vehicle now sit facing outward, with a firing port for each. Two vision blocks on each side allow the squad members to orient themselves on the battlefield without looking out the hatch. The maximum elevation of the machineguns in the turret has been increased, which allows them to engage aircraft and other targets above the vehicle. This feature and two firing ports in the roof appear to be the result of a lesson learned the hard way in Afghanistan.

If the infantrymen in the BTR-80 are actually required to leave the vehicle, they will be able to do so more easily. In the BTR-60PB, the only ways out were through the hatches on the top of the vehicle or through the side hatch. The BTR-70 added an escape hatch between the second and third wheels on each side, but a soldier essentially has to wriggle in and out and cannot wear any equipment and still fit through the hatch.

The BTR-80 retains the two hatches on the top of the vehicle, but they are not the primary ways of leaving the vehicle—the side hatch has now been en-

larged and, in place of the escape hatch, a second hatch has been added directly below the side hatch. The side hatch swings to the front, while the lower hatch opens downward, serving as a ramp for soldiers leaving the vehicle.

With infantrymen who are now in a better position to fight while mounted, and who have an easier time dismounting from the vehicle, how well can the BTR-80 be expected to perform in combat? To begin with, it remains an APC, and the Soviets still do not consider it an IFV. Although it appears to have better armor protection, most antitank weapons can still defeat it. In fact, when the LAW is replaced by the AT-4, every antitank missile we have should be able to defeat it. And it is likely that the chain gun on our Bradley vehicles will also be able to penetrate the armor of the BTR-80, although the Soviets must be doing something to try and counter that as well.

As with its predecessors, the tires on the BTR-80 remain a vulnerable spot, but only if enough fire can be directed at them to destroy their integrity. Machine-gun fire that rips up the sidewalls and any flame weapon that burns the tires should stop the vehicle in its tracks.

With all these problems, did the Soviets really develop the system, or is

this another one of their famous disinformation jobs? Since it is an improvement on the existing BTR-60s and BTR-70s, the vehicle most likely actually exists. Recently, when the Soviets provided a good deal of information about an 82mm mortar called the *Vasilek*, many analysts also initially doubted its existence, but it has proved to be an actual weapon that does just what the Soviets said it did.

The Soviets continue to be required to field large numbers of wheeled APCs for two good reasons. First, the vehicle is inexpensive to make and easier to maintain than a tracked vehicle, and second, Europe is covered by a very well-developed road network on which a BTR's mobility makes it superior to almost every tracked vehicle.

The side of this that is unpleasant for the Soviets but pleasant for us is the fact that our Bradley will continue to be capable of defeating all of their infantry vehicles through at least the end of the century.

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