Division Depot at Bassingbourn, which is an old RAF station in East Anglia. The Depot provides first term infantry training for Regular Army recruits of the Division's three regiments — The Queen's Regiment, The Royal Regiment of Fusiliers, and The Royal Anglian Regiment.

The training cycle at Bassingbourn is 18 weeks in length, and there potential infantrymen learn about the history and tradition of their regiments and are awarded their cap badges. The program of instruction is somewhat similar to that given at the United States Army Infantry Center at Fort Benning, but it also includes swimming, football, basketball, and other team sports. The Regular Army recruit cadres consist of between 35 and 40 soldiers per cycle, and the rate of attrition is ordinarily near 30 percent.

As a follow-up to my visit in late 1983, Major N.H. Kelsey of the 5th Battalion, visited the Army Training Center at Fort Benning. Since then, 18 other exchange officer slots have been identified.

A continuing program of routine individual personnel exchanges between the Reserve Components of the United States Army and their counterparts in other countries could do much to foster professional military relationships among the participating armies. The cost would not be significant because the exchanges could be accomplished in lieu of the members' annual camps with their own organizations. Existing military air transportation could be made available for exchange personnel.

The benefits of such a program to the participants and their units as well would be significant — both personally and professionally. Their exposure to new approaches to training, doctrine, and techniques could do much to stimulate their professional growth. And the exposure to officers and soldiers of another country would develop relationships between the countries on a personal level. Finally, the exchange of part-time soldiers who could also share their civilian life experiences would be a natural way to demonstrate a commitment to peace through strength and mutual support in the Free World.

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The BTR:
Ivan's Other Carrier

CAPTAIN SCOTT R. GOURLEY

The BMP, the Soviet's tracked infantry fighting vehicle — in its various versions — has received considerable attention in the West since its introduction in 1967. [See "Evolution of the BMP," by CPT David F. McDermott and CPT Scott R. Gourley, INFANTRY, November-December 1983, pages 19-22.] Meanwhile, the BTR, Ivan's "other" carrier, has been too often neglected or overlooked. Yet the BTR — *Bronetransporter* (literally "armored transporter") — has been an integral part of the Soviet Army since the end of World War II. United States forces have encountered the BTR all over the globe and probably will continue to do so. (Most recently, for example, some of the first threat equipment photos out of Grenada showed two BTR-60s that had been neutralized by U.S. firepower.)

The Soviets have introduced several major families of infantry BTRs during the past 40 years — BTR-152, BTR-40, BTR-50, BTR-60, and BTR-70 — each with several major variations.

The first Soviet-built armored personnel carrier (aside from the BA-64 wheeled scout car) was the BTR-152. Although prototype development on this vehicle began immediately after World War II, it was not seriously introduced until 1950. With some resemblance to a wheeled version of the U.S. Army's M3 half-track and (in its armor layout) to a World War II German half-track, the original BTR-152s were based on the ZIL-151 truck chassis. The truck's rear dual tires had been replaced by larger single tires, and the vehicle was powered by a 110-horsepower 6-cylinder ZIL-123 gasoline engine. The normal armament for the vehicle was a 7.62mm machinegun, but some versions were known to mount either a 12.7mm or a 14.5mm weapon. The BTR-152 could carry a crew of two and up to 17 passengers; it was not amphibious.

The Soviets, seeking to improve

some of the operating characteristics of the BTR-152, later introduced three "V" models. The primary improvement in each of these models was the addition of a tire inflation-deflation system. The BTR-152V1 was still based on the ZIL-151 truck chassis but had external air lines for tire pressure regulation. Both the V2 and the V3 models, based on the ZIL-157 truck chassis, had internal air lines, but the V2 did not have a vehicle winch while the V3 had both a winch and infrared driving lights.

The BTR-152K was the next improvement in the 152 family. (The "K" designator indicates that overhead armor was added to the vehicle.) It is apparently this vehicle that Viktor Suvorov (a Soviet defector writing under a pen name) refers to as "a simple lorry with armor plating fixed on top."

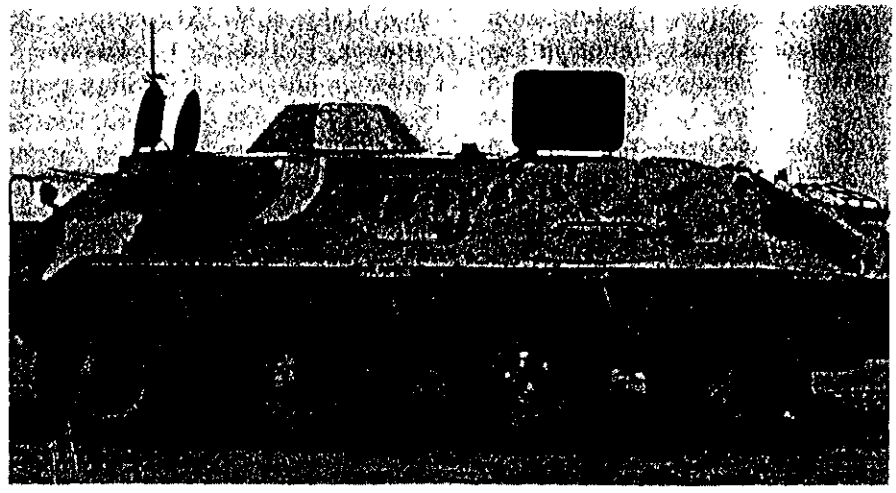
Suvorov, a former BTR unit commander, says:

The BTR-152 was a copy of that splendid American lorry, the Studebaker. The copy, as distinct from the original, was not a success and, after another five tons of armour had been added, it looked like anything else on earth but a battle machine. (Obviously, this is a British translation of Suvorov's comments.)

The final member of the 152 family was the "U" version, an armored command vehicle. It was a V1 or V3 model with a tall metal shelter built onto its rear, making it 8.9 feet tall, compared to 6.5 feet for the other models.

The second Soviet BTR family was the BTR-40. While some references claim it was introduced as early as 1946, most sources agree that it entered production in 1951.

Based on a GAZ-63 (4 x 4) truck chassis (but with an even shorter wheelbase), the BTR-40 family had three variants in addition to the basic vehicle. The BTR-40A was an antiaircraft version that mounted twin 14.5mm heavy machineguns. The BTR-40K had four armored roof hatches for limited protection. The third variant, the BTR-40P (also known as the BRDM), was amphibious and had overhead armor. The main wheels had a tire inflation-deflation device and two sets of additional wheels under the belly of the vehicle, which could be raised or lowered to help prevent "bellying." Although it was referred to as an armored personnel carrier, the BTR-40 was employed primarily as a reconnaissance vehicle.



BTR-60 PB

The only tracked member of the BTR series, the BTR-50, was first seen in 1957. Perhaps it is because of its tracks that the BTR-50 is the only one Suvorov praises. He calls it a "splendid machine" and laments the fact that his unit could not get them.

Based on a PT-76 amphibious tank chassis, the basic model was the BTR-50P (amphibious). This open-top model was supplemented by the BTR-50PK. These vehicles carried a crew of two and 12 passengers. Their normal armament was a 7.62mm machinegun. Hatches in the armored roof permitted the soldiers inside to get out over the sides of the vehicle. The third member of the "-50 family" to be introduced was the BTR-50PU, a command version built on the chassis of the BTR-50P.

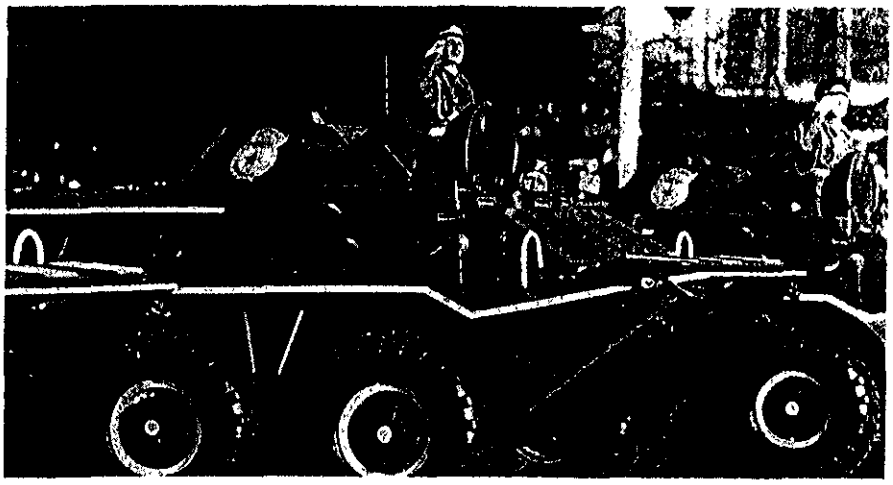
The BTR-50 (still around, of course, as are some members of the earlier families in one army or another) is powered by a 6-cylinder diesel engine which produces 240-horsepower — which may be another reason Suvorov liked it. (The earlier BTR models used gasoline engines.) The water jet propulsion system allows the vehicle to swim rapidly and to maneuver well in water. Even so, the BTR-50s in many units have now been replaced by tracked BMPs.

The BTR-60 family, first seen during the 7 November 1961 Moscow parade, appeared to be a radical departure from the previous BTR models. The BTR-60P is a large eight-wheeled vehicle with an inflation-deflation device and with a hull that is usually described as "boatlike." At first glance the wheels appear evenly spaced, but they actually have a slightly larger space between the second and third sets of wheels. The eight wheels are powered by two 6-cylinder 90-horsepower gasoline engines.

The BTR-60P is an open-top vehicle (no armor protection) that has been credited with carrying 8 to 16 people. The BTR-60PK, introduced in 1964, had overhead armor and the forward machinegun mount had been moved back. The BTR-60PB, which followed one year later, displayed a small turret over the second set of road wheels. The turret reportedly mounts coaxial 14.5mm and 7.62mm machineguns. Another

COMMON LETTER DESIGNATORS FOR BTR VARIANTS

P — Amphibious *(Plavayushchiy)*
K — Overhead armor protection
B — Turret
U — Command version
A — Antiaircraft version



BTR-70

variant, the BTR-60PU command vehicle, has a canvas top fitted over the rear of the BTR-60P.

Suvorov condemns the BTR-60 family, describing the shape of the hull not as "boatlike" but as "coffin" like. He blames the use of gasoline engines in them on a shortage of diesel fuel in the Soviet Union. According to him, since the Soviets did not have one really strong and reliable gasoline engine, they were forced to install two smaller engines from the GAZ-51 farm truck. He claims that the vehicles can enter the water quite well but can seldom get out — the two weak engines can turn either the wheels or the water propulsion system but not both at the same time, as may be required in shallow water.

Suvorov's biggest complaint, however, is with the vehicle's carrying capacity. After all the required equipment is placed in the BTR-60, there is simply no room for the 16 infantrymen it is supposed to carry. Suvorov says:

It was much better before, when armoured personnel carriers had no armoured roof and one could put everybody one on top of the other like peasant wenches on a hay cart ... Now we have to push all sixteen in through hatches in the roof. This is not an easy task, especially if you take into consideration the reservists' corpulence. The sergeants just have to hammer them in under the roof. Sometimes, this operation takes about forty minutes.

Suvorov claims that in order to breathe in that environment soldiers sometimes had to put on their "gas masks" and, disconnecting their filter containers from the pipes, feed the pipes out through openings in the vehicle. (This is definitely not the situation portrayed for the public.)

Several different families of BTRs were apparently employed by Arab forces in the 1967 and 1973 Mideast wars. One of the best descriptions of the way these BTRs performed in combat comes from Hans A. Kiesewetter, who, from his own explanation, was a tank officer in the *Bundeswehr*. He went to Israel in November 1973 to observe the Golan battlefield immediately after the cease-fire. Although he also noticed BTR-152s and 50Ps, his observations about the combat effects apply primarily to the BTR-60 family.

For instance, Kiesewetter describes as "amazing" the effect of high explosive shells on BTR-60s. The armor plate on the vehicles had been "torn open," he says, and the vehicles completely burned out. In another observation about "mobility kills" on these wheeled vehicles, he says that many of the abandoned vehicles were "outwardly undamaged with only the tires torn by fragmentation shells."

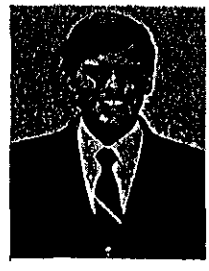
In addition to exporting these vehicles in large numbers, the Soviet Union, when it publicly displayed a new variant during the 7 November 1980 Moscow parade, indicated its intention to continue fielding the carrier within its own armed forces. Identified as the BTR-70, the new carrier differs from the BTR-60PB in several easily recognizable ways.

Starting at the front of the vehicle, the bow of the BTR-70 is wider and covers the front wheels, while the bow of the BTR-60PB is more pointed with its front wheels exposed. The wave deflector of the BTR-70 is on the upper side of the bow rather than on the under side as on the BTR-60PB.

The hatch configuration is also different on the BTR-70. The new commander's hatch appears angular rather than rounded, and the two rectangular hatches on the side of the hull have been eliminated. The space between the second and third axles has been increased noticeably, and the engine compartment at the rear of the vehicle appears to have been altered. This change in the engine compartment immediately led to speculation that the two 6-cylinder gasoline engines had been replaced by one or two new diesel engines.

The introduction of the BTR-70 reinforces the view that in the Soviet Army wheeled armored personnel carriers will operate alongside tracked infantry combat vehicles (BMPs) and that the wheeled version should be viewed as the standard combat vehicle of the motorized rifle force. (In central Europe, however, because of the high proportion of tank divisions, there is a ratio of about 1:1 between wheeled and tracked APCs.)

In our well-founded concern over the firepower and the other capabilities of the Soviet's tracked BMP, we need to be careful not to overlook Ivan's "other" infantry carrier, the BTR.



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