

BALKAN REPORT II

Off-the-Shelf Wheeled Armor Proves Its Worth In Macedonian Winter

by Captain Matthew D. Morton



Two Finnish SISU 6x6s team up to extract a bulldozer mired in the Macedonian mud.

Much has been written in recent editions of *ARMOR* about the versatility and unrealized potential of the M113A3 in Operations Other Than War (OOTW). Our joint task force, referred to by the UN as USBAT, used them as the only form of armored transportation (unless you count our limited number of armored HMMWVs as armored vehicles) in the United States sector of the former Yugoslavian Republic of Macedonia (FYROM) while conducting peacekeeping operations. The M113 worked well in the valley floor around Camp Able Sentry, our task force headquarters, but was of little or no use at our OPs. What our soldiers really needed was a wheeled armored personnel carrier to fill the role for which our M113s were not appropriate or capable. A better tool for the job would have been the LAV-APC.¹

I am not suggesting a change to the TO&E for any of the organizations in the current Army structure. What I am suggesting is this: If a **mechanized** infantry battalion can deploy from Germany without their M2A2s and fall in on equipment already in place, why not add a complement of LAV-APCs when the terrain, weather, and situation make it a better tool than the tracked M113? Obviously, it was not a stretch of the imagination for a smart planner to make sure our OPs were equipped with Small Unit Support Vehicles (SUSV), best described as similar to the type of

snow caterpillar seen on ski slopes, to aid us in accomplishing our mission in mountainous, snow-covered terrain. The LAV-APC would be another welcome addition in this environment and in other peacekeeping missions as well.

While deployed, our company's mission was to observe, monitor, and report any activity along the Northern Limit Area of Operations (NLAOO),² which could undermine confidence and stability in FYROM or threaten its territory. Our company manned USBAT sector east (see attached map). We accomplished our mission from a series of fixed OPs, which looked into Serbia, and with regular patrolling, both mounted and dismounted. Our sector was marked by extreme mountainous terrain with only one major hard-surfaced highway which ran from Kosovo to Bulgaria in an east/west direction. All of our fixed OPs were located more than 20 kilometers north of this highway at the end of small, unimproved roads that transitioned to small dirt tracks as they approached the NLAOO. Winter weather proved extreme. Four- and five-foot snow drifts were not uncommon during the months of January, February, and March. We received our last snowfall in May. Terrain and weather were daily challenges to mission accomplishment and force protection.

Patrolling supported accomplishment of the mission and provided a vehicle for showing our presence to the local

citizens on a daily basis. Showing a presence is an important aspect of any OOTW mission. We were able to accomplish the majority of our mounted patrolling with HMMWVs and occasionally SUSVs when weather did not permit the use of our wheeled vehicles. Rubber tires and the rubber tracks of the SUSV did no damage to the nearly non-existent network of trails and unimproved roads found in our sector. Had we been forced to use tracked M113s, M2A2s, or M1A1s, the fragile road network never would have lasted. Certainly the civilian population would have been displeased had we destroyed their already limited infrastructure, not to mention a rapid inability to supply our own OPs along these same fragile supply lines. Unlike fast-paced maneuver warfare, in which we hope to achieve rapid and decisive victory, the OOTW environment demands that we use the same infrastructure and deal with the local populace for an extended period of time. Planning to let follow-on forces deal with the people and improve the MSR is no longer an option.

Our soldiers safely accomplished their mounted patrolling missions from unarmored vehicles. They were able to do this because of the total lack of mine activity and violence in FYROM. This may not be the case in other OOTW areas of operations, and could have changed in our area during the course of our deployment. Increased protection would be desirable in a more



threatening environment. The ability of light and heavy tracked armored vehicles to move in the places that our troops patrolled was not an option for our company. Tracked armored vehicles quickly become unstoppable sleds on ice and snow. Riding an 11-ton sled off the edge of a steep mountainous road is not a prospect many of us relish. A 30- or 60-plus-ton sled is an even worse thought. In fact, we had an M113 slide off one of our OPs. It came to rest only after it slid into a group of trees. We recovered this vehicle using a technique taught during the Armor Officer Basic Course. The perimeter wire was reduced to allow the M113 to drive back onto the OP from a less acute slope. This would not have been an option on any of our other OPs. We tried removing track pads to improve traction, but with only minimal success. In our environment, we were left with no armored alternative. Had there been a greater threat, this would not have been acceptable. Our Army may easily find itself in a similar environment but facing a greater threat than we faced. Armored protection would be required to protect our force. Wheeled APCs can meet both the force protection and mobility requirements.

There is another less tangible aspect of patrolling worthy of note.

How many times has the media misidentified a tracked APC as a tank? The mere mention of a tank takes the psychological aspects of an operation to entirely different levels. The tanks at Tianamen Square never had to fire a shot to send a very serious message. No, an M113 is not a tank, but the difference between an M113 and a tank is much less obvious to a civilian than to a professional soldier. The difference between patrolling in tracked armored

vehicles and wheeled vehicles would not have been lost on the civilians living in our sector. Certainly there will be times when some degree of protection is required, but protection should not be gained at the expense of the local population's attitude toward our presence. Wheeled APCs provide that option.

Our task force was not equipped with LAV-APCs, but our sister battalion, NORDBAT,³ was equipped with the SISU XA-180, from Finland. This 6x6 APC is capable of carrying 10 soldiers with a crew of two. It is amphibious, though I never saw this capability used during our six-month deployment. The welded hull is designed to stop small arms and shell fragments. It sported a 10 metric ton winch with 50 meters of 16mm cable. Its listed road speed is 100 KPH. On occasion, I was passed by SISUs while traveling at highway speeds in my HMMWV. Cleated snow chains extended the mobility of the XA-180s operating in our sector. Chain usage had no noticeable effect on the limited number of hard-surfaced roads. This is probably because they were rarely used anywhere in our sector except under the most extreme off-road conditions. SCANDCOY⁴ soldiers operating in our sector did comment that the XA-180 did not handle particularly well on snow and ice, and that they too were forced to slow down. The important thing is that they were still moving with armored protection under conditions that stopped our HMMWVs.

Before citing examples of the XA-180 in action, a basis for our ability to



At upper left, a SUSV that left the road in a severe snowdrift and overturned. No one was injured, a SUSV takes to the air on helicopter sling.

insert the LAV-APC into similar situations should be established. The LAV-APC is an 8x8 vehicle capable of carrying eight soldiers and a crew of two. It, too, is amphibious. Its armored hull provides protection against small arms and shell fragments. Its standard winch is not as heavy as the XA-180's at 15,000 lb. The listed road speed is 100 KPH, and it can be equipped with snow chains. A machine gun mounts at the commander's station. It weighs less than the XA-180 by 2,000 kg, and it has both power steering and power brakes. Best of all, it is field tested; logistics requirements already exist, and a cadre of experienced operators can be found inside our military, the United States Marine Corps. The LAV-APC is not exactly the same as the XA-180, but close enough that the following examples of the XA-180 in action should also apply to the LAV-APC.

As mentioned before, the poor infrastructure made resupplying our fixed OPs extremely difficult. Small roads and tight turns, which had collapsed on

more than one occasion, made the 5-ton truck (we had multiple series) “king of logistics. The HEMTTs we did have in FYROM were used to refuel our helicopters at Camp Able Sentry. Because of the many tight turns on already narrow roads, even our 5-ton trucks were forced to make a series of forward and backward movements to negotiate the curves on some roads. Heavy snow at our higher elevation OPs forced us to use helicopter sling loads, or more commonly sending the SUSV down to meet the LOG-PAC and make multiple trips from an LRP to the OP and back.⁵ This was time-consuming and inefficient. We also supplied one SCANDCOY OP located in the exclusion zone,⁶ atop the highest mountain in our sector, 1703 meters. They also shuttled fuel and water with their SUSV, but they also had the use of their XA-180. A water blivet fits nicely in the back of the XA-180. Our M113s were immobile when the weather required this technique; their APCs were productive, and if the THREATCON had ever risen, they would have provided their soldiers with protection to and from the LRP.

Our engineers worked non-stop trying to improve the trail to the lone SCANDCOY OP in our sector. The bulldozer which did much of this road improvement was also responsible for assisting the LOGPAC trucks up some of the steeper hills on the days they traveled all the way to the OP. Unfortunately, the bulldozer became fender depth mired in a spring hidden beneath the snow. Two XA-180s with their 10 metric ton winches, three snatch blocks, an additional length of cable, a whole lot of timbers, one very squared away NCO with years of service at Ft. Greely, Alaska, and a Swedish infantry captain extracted the bulldozer in a day. There were no M88s in country, not that it mattered, for an M88 couldn't have traveled the 60+ kilometers to the OP in January from Camp Able Sentry. SUSV winches are for self-recovery only. Our HEMTT wrecker would have had a hard time getting to the OP under the winter conditions we were experiencing. Even if our HEMTT wrecker made it to the scene, it only would have made it there with its one winch.



A HMMWV in deep mud just south of the buffer zone.

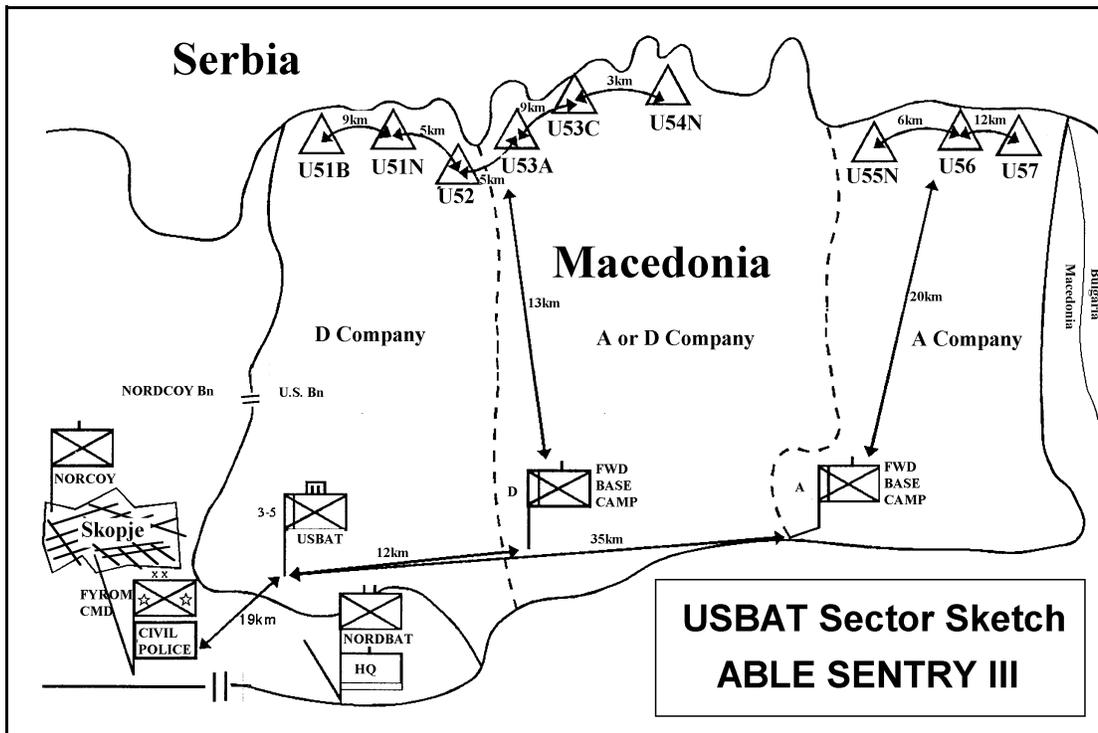
Moving two forward-deployed, winch-equipped APCs is easier and provides a more flexible response than bringing a resource in great demand and short supply⁷ to the farthest limit of the sector when, with the right tool, infantrymen, tankers, scouts, and engineers could solve the problem with limited additional resources. The XA-180 winches pulled other vehicles back onto the roads on other occasions. An LAV with its 15,000-lb winch is just another tool which would give our troops more self-sufficiency. An LAV-R mounts a 30,000-lb winch and, in an OOTW environment, affords its crew more protection than a HEMTT wrecker.

Our OPs rotated personnel every 21-days. Once in the rear, they served on the Quick Reaction Force, the guard force, or took their UN pass. Our rotation of squads took place by exchanging one fire team at a time by air or ground extraction. This process was often complicated when an OP's HMMWV was deadlined, which required the lateral movement of vehicles across the sector.⁸ The SCANDCOY soldiers rotated on a weekly basis, using their XA-180 to rotate an entire squad at a time. Had our troops been equipped similarly, the contortions we went through would have been greatly reduced. The average OP during our operation was a squad — nine infantrymen and one medic. The LAV-APC carries 10 sol-

diers. Imagine this: Incoming squad mounts up and moves to sector in its own vehicle, the same vehicle just used on the QRF or guard force. Incoming squad arrives, is briefed on current situation, conducts joint inventories, and maintenance checks. The outgoing squad mounts up in **its own APC**, and drives to the rear. Rotating on and off of equipment is something no one likes. It is very hard to establish a sense of ownership when that ownership is only for 21 days at a time.

Our Quick Reaction Force was equipped with HMMWVs and M113s. The QRF rehearsed to insert in support of an OP by air, UH-60, or ground. It wasn't uncommon for Camp Able Sentry, located next to Skopje international airport, to be fogged in when the weather was perfectly clear out in sector, or vice versa. Anyone who has ever depended on helicopters has at some time been disappointed (our pilots, both UN and U.S., were very capable and very dedicated). This leaves HMMWVs and M113s. By HMMWV, under **ideal** road conditions, the drive to our closest OP took at least 2½ hours. This isn't quick by any standard, and to still be arriving in a light-skinned vehicle probably is not the best idea if the situation demands the deployment of the QRF. The LAV-APC provides the mobility and speed of a HMMWV and the protection of an M113. A QRF equipped with the LAV-25 would be an extremely lethal force in many OOTW scenarios. In the context of the large frontages our task force had to cover, and many OOTW situations may demand, I will not even discuss how long it would take an M113 to make the trip out to sector.

Those who would argue that another type of vehicle would strain our logistics system even more may be right. Yet, none of our mechanics had ever worked on a SUSV until we deployed, but somehow they managed to keep our fleet up and running. Of course, when the Air Force could not land with our sustainment packages of Class IX, our mechanics found a way to local-purchase the required Mercedes parts⁹ for the SUSVs and glow plugs for our HMMWVs. Yes, I think our 63s and 45s can handle the additional task of



diesel fuel resupply on a weekly basis. Large fuel tanks were also required to refill HMMWVs, SUSVs, and any engineer vehicles that might be temporarily operating from a forward OP. All water used to support our on average 10-man OPs was brought up during LOGPAC. This provided our soldiers enough water for cooking, personal hygiene, and about one shower per week. Class I resupply was conducted from an M998. All rations were issued in bulk and prepared in kitchen CONEXs by infantrymen on our forward OPs.

working on a LAV instead of spending their time pulling services on an M113 that never leaves the perimeter. The Air Force supplied our joint task force with an Air Force NCO to run our mail room. Certainly the Marines could provide a knowledgeable mechanic, even if only on a temporary basis. Civilian contractors flew in to apply Modification Work Orders (MWOs) to our HMMWVs. Our task force also had a full time Logistics Assistance Representative, who helped us maintain our equipment readiness. Logistics should not be the excuse used to keep this valuable tool out of the hands of soldiers who could really use it.

The wheeled APC isn't the answer to all the problems that will face our troops in OOTW. It is another tool which will allow our soldiers to do more with less. If we can put together these packages of equipment that our task force fell in on, certainly we could add a useful tool to the package. OOTW continues to present us with new problems which require innovative thinking, or in this case not so innovative. Many of the places our troops have already gone were not conducive to heavy armor for a variety of reasons, to include terrain, weather and political considerations. We have also been to places where we did not have the right tool at the right time, and our dependence on someone else to provide it cost us dearly. The LAV is a tool already on the shelf. It comes tested, with a cadre

of experienced NCOs and officers to teach us how to use it.

The flexibility of our Army is unquestionable, and it always finds a way to accomplish the mission. As our missions become more diversified, the soldiers in the field deserve the best equipment to accomplish the mission. The LAV-APC would serve the Army well, and in the type of mission we are currently performing in FYROM, it is much better than the M113. Missions like Operation Able Sentry will continue, as will the demand for vehicles which afford more protection than the HMMWV, yet not all that is encompassed with the use of armored tracked vehicles. Fortunately, we already have the compromise in the form of the LAV-APC; all we have to do is use it.

Notes

¹The LAV comes in a variety of configurations. For the purpose of my article, I will focus on the LAV-APC, not the LAV-25.

²Consider this the unofficial border between Serbia and FYROM. For political reasons we did not refer to it as a "border."

³NORDBAT was composed of two Finnish companies, FINNCOY 1 and FINNCOY 2, and one company composed of platoons from Norway, Sweden, Denmark, and Finland, SCANDCOY.

⁴See Note 3.

⁵All electricity on our OPs was generated by 60 kw and 30 kw generators, which required

⁶The exclusion zone was a small portion of our sector where no Serbian or FYROM soldiers were permitted to patrol. OP U55A was located in the middle of this zone atop hill 1703. During our rotation, it was only manned by SCANDCOY soldiers. Our task force supplied the bulk of their logistics needs and conducted multiple OP improvements. Our company was responsible for tracking all operations and patrols at U55A.

⁷HEMTT wreckers were useful: they moved dragon teeth at Camp Able Sentry, moved Milvans into holes during OP improvements, recovered vehicles throughout the task force sector, and provided overhead lift for maintenance operations.

⁸Though our OPs were relatively close in terms of east-to-west, straight-line distance, almost all lateral movement took the form of moving south to the one hardball road, moving laterally and then moving back to the north. The result? A 6k distance turns into a 4-hour round trip just inside the sector.

⁹NORDBAT and SCANDCOY used Volvo engines in their SUSVs.

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