

ROLL ON!

Army Selects LAV III Variants To Equip New Interim Brigades



The LAV-based Mobile Gun System mounts a low-recoil 105mm cannon on the LAV's eight-wheeled chassis.

— Jody Harmon Drawing

The Army has selected two variants of the wheeled LAV III Light Armored Vehicle to equip the new Initial Brigade Combat Teams (IBCTs) now in training at Fort Lewis, Washington. This historic shift from tracks to wheels, and from heavy to lighter armor, followed months of testing and evaluation of both wheeled and tracked candidates.

The winning entry, manufactured by a partnership of General Motors and General Dynamics Land Systems (GDLS), includes a troop carrier version, with a number of subvariants for specialized missions, and a mobile gun system mounting a 105mm cannon on a pedestal above the hull. Purchasing 2,000 of them, enough to outfit the first six medium-weight brigades, will cost an estimated \$4 billion. If the Army goes forward with plans to form another two brigades in this configuration, it will have to spend an additional \$3 billion for the brigades' vehicles. These totals do not include electronics and communications gear, which will be supplied by the Army.

The selection ends, at least for now, a heated debate within the Army over the virtues of wheels versus tracks and over

whether the more deployable light armor will be survivable enough against modern weapons. The base vehicle, without additional armor, protects against 14.5mm heavy machine gun fire, while the current main battle tank has never been penetrated by any enemy weapon system. On the other hand, the 70-ton tanks require weeks of travel by sea to arrive at a distant theater, while the eight-wheeled armored cars, at 19 tons, can be transported by the C-130, the Air Force's smallest battlefield airlifter. The new brigades will be designed to be able to move to world trouble spots within 96 hours.

The Army was seeking an "off-the-shelf" armored system to outfit the new brigades and invited contractors to demonstrate their vehicles last winter at Fort Knox's Platform Performance Demonstration. Both tracked and wheeled vehicles took part. Meanwhile, the first of the new brigades began training at Fort Lewis, using vehicles borrowed from Germany, Italy, and Canada. Canada loaned the U.S. 25 of its LAVs for training, and other vehicles were on loan from several other countries while the selection process went forward. The vehicle selected resembles the earlier

version of the LAV in use by the Marine Corps, but the new vehicle's armor protection is better, according to COL Joe Rodriguez, who manages the program for the Training and Doctrine Command.

The cross-country mobility of wheeled armor, in dispute during the selection process, was not a problem with the Canadian Army "loaners" in the Fort Lewis training, according to MG James Dubik, who was until recently in charge of training the new brigade. He said there were few problems negotiating swampy areas, and that he was completely satisfied with the vehicles' off-road mobility.

The current contract schedule calls for 2,131 of the new vehicles to be delivered by 2008. Variants will include 714 infantry carriers, 321 reconnaissance vehicles, 252 command and control vehicles, 241 mortar carrier variants, plus specialized versions as antitank vehicles, fire support vehicles, armored ambulances, NBC reconnaissance vehicles, and an engineer support variant. In addition, there will be 204 Mobile Gun Systems (MGS), a variant which incorporates the 8-wheel troop carrier hull



The basic LAV III infantry carrier is used by Canada, Denmark, Sweden, and Ireland, with New Zealand and Switzerland soon to add these vehicles to their armies. It can carry a nine-man squad, plus a two-man crew. Combat loaded, four of the vehicles can be carried by a C-5A, two on a C-17A, and one on a C-130.

— GM-GDLS Photo



with a pedestal-mounted 105mm cannon on the top deck. The cannon is the low recoil version of the L68, which is similar to the cannons on the M60-series and early M1-series tanks. The MGS, which has an autoloader, will inherit a vast store of former tank munitions, including special purpose rounds that are not available for the 120mm cannons on current tanks.

The contractor is a joint venture between General Motors Electro-Motive Division and General Dynamics Land Systems Division. Suppliers come from five countries, including the U.S., Canada, Germany, Britain, and Israel. Sixty-five percent of the work will be done in the U.S., and the first vehicles are expected to be delivered in the 3rd quarter of FY 02. More than 5,000

LAVs are in service. Similar types of LAVs have been built for Canada, Denmark, Sweden, and Ireland, and New Zealand and Switzerland are committed to adding the vehicle to their armies.

An earlier version of the LAV entered Marine Corps service in 1983, and was employed in Operation Just Cause in Panama. LAVs were also employed in



The Mobile Gun System firing its 105mm cannon in a firepower test. The cannon is a low recoil version of the L68 cannon that equipped the M60 and early M1-series tanks.

— GM-GDLS Photos



These three views are of the infantry carrier version of the LAV III, the most numerous variant in the new brigade structure. In addition, there will be reconnaissance, NBC surveillance, ATGM (TOW), fire support and engineer support variants, a mortar carrier, an armored ambulance, and a command vehicle.

Desert Storm, IFOR and KFOR in the Balkans, and in Somalia.

The infantry combat vehicle variant weighs 37,796 lbs., and is capable of carrying a nine-man squad up to 60 mph. Its Caterpillar diesel and Allison transmission have a low acoustic signature and consume 5.7 miles per gallon. The vehicle has a range of 300 miles.

The design includes a fire suppression system, run-flat tires that remain mission capable when perforated, and a remote weapon station capable of mounting the .50 caliber heavy ma-

chine gun or the Mark 19 grenade machine gun.

Protection levels include all-around protection from 14.5mm heavy machine guns with an applique option to protect against the RPG-7. The top deck will protect against 152mm airbursts.

Logistics are simplified since the family of vehicles share 85 percent of their parts. This will also simplify the maintenance challenge for units in forward areas where there is little infrastructure. Once on the ground, the vehicles are

self-deployable, eliminating the need for heavy equipment transporters. When bogged down, a winch can be used for self-recovery.

Fort Benning's Infantry Center has primary proponentcy for the new brigades, except for the Mobile Gun System units and the reconnaissance functions, which are Fort Knox's responsibility.

This article was prepared by the ARMOR staff from Army and corporate news releases.