MX-8 Armored Escort Vehicle

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The MX-8 Armored Escort Vehicle is an experimental armored vehicle developed by Steelcraft Industrial & Development Corporation in collaboration with the Philippine Army. It was designed to fulfill a need for a smaller, more maneuverable armored vehicle capable of performing escort and patrol missions in dense jungle terrain — a role not adequately addressed by larger armored vehicles in service. The designation "MX-8" stands for "Military Experimental 8," continuing a series of prototype vehicles produced by Steelcraft during the latter half of the 20th century. The Philippine Army has expressed significant interest in the project, providing partial funding and indicating plans to acquire units once the MX-8 completes development and testing.

Development

The first MX-8 prototype was produced in 2005 under the Philippines' Self-Reliant Defense Posture Law. Steelcraft had previously developed the country's first locally produced armored personnel carrier, the Hari-Digma ("King of Battle"), along with its derivative, the MX-1 Kalakian. The MX-8 is intended to provide small, armored escorts capable of operating in rebel-controlled jungle regions, complementing larger vehicles such as the Cadillac Gage Commando and LAV-300, which are less suited for dense terrain operations.

Although not officially designated by Steelcraft or the Philippine Army, the MX-8 has been nicknamed "Barako" ("Wild Boar") by members of the Philippines Defense Forces Forum. Designed to be cost-effective yet durable, the MX-8 offers armor protection comparable to the South African Simba vehicle, with a unit price estimated at Php 6.8 million (approximately US$150,000).

Following initial testing at the Light Armored Division's Research and Development Command, several issues were identified in the first

prototype's frame and drivetrain. These have been addressed in the second prototype, which is currently awaiting additional evaluation.

Engine and Drivetrain

The MX-8 is powered by an off-the-shelf Mitsubishi medium-duty truck engine to balance cost and reliability. The powertrain consists of a 4-cylinder, 4.3-liter turbocharged intercooler engine producing 150 horsepower, paired with a 5-speed manual transmission. Power is delivered to a four-wheel-drive platform featuring a live-axle, semi-elliptical leaf spring suspension at the rear and double wishbone, coil springs at the front.

The vehicle achieves speeds of 100–120 km/h on paved surfaces, with lower speeds expected on rough terrain. Its power-to-weight ratio is approximately 35.9:1, providing adequate performance for jungle patrols and convoy escort missions.

Armor and Protection

The MX-8 features a monocoque hull constructed from ¼-inch rolled steel plates, capable of withstanding 7.62 mm armor-piercing rounds from front, rear, and side at close range. Glancing shots from .50-caliber rounds may be deflected, but direct impacts can penetrate armor panels.

The monocoque design enhances structural rigidity and simplifies production while accommodating a semi-V-shaped hull and blow-away wheel wells, which improve survivability against anti-vehicle mines and improvised explosive devices (IEDs).

Armament

Armament is constrained by the MX-8's compact size and turret dimensions. The standard 1-meter fully enclosed turret supports multiple weapons configurations:

- 7.62 mm machine gun
- 40 mm automatic grenade launcher
- M2 .50-caliber heavy machine gun
- Remote-controlled turret systems

Alternatively, the turret can be replaced with a simpler open ring mount for a heavy or general-purpose machine gun, equipped with a gunner shield. The Philippine Army has also experimented with M134 Vulcan Minigun-mounted Humvees, a setup that may be adapted for future MX-8 variants.

Variants

The MX-8 platform is designed to be modular, allowing adaptation for multiple operational roles:

1. **Standard Escort Variant** – Baseline model for convoy escort and jungle patrol, featuring the fully enclosed turret for small arms and grenade launcher support.
2. **Reconnaissance and Command Variant** – Equipped with enhanced communications, observation tools, and command equipment for battlefield scouting and coordination.

3. **Light Fire-Support Variant** – Designed to provide fire support to infantry units, capable of mounting heavier or remote-controlled weapons.

4. **Medical Evacuation Variant** – Modified for casualty transport with an enclosed compartment for stretchers and medical personnel.

5. **Special Operations Variant** – Optimized for small-unit operations in dense or urban terrain, featuring stealth modifications, enhanced suspension, and specialized equipment.

6. **Engineering/Utility Variant** – Supports missions such as route clearance or transport of engineering tools, potentially removing the turret for utility mounts.

7. **Experimental Weapon Integration Variant** – Serves as a test platform for new technologies, including automated turrets, UAV integration, or hybrid powertrains.

The MX-8's modular approach allows the vehicle to fulfill diverse roles while maintaining its key attributes: affordability, maneuverability, and survivability in challenging terrain.

Conclusion

The MX-8 Armored Escort Vehicle represents a significant step in the Philippines' pursuit of locally produced, versatile armored vehicles. By combining low-cost design, modularity, and effective protection, the MX-8 addresses operational gaps left by larger armored vehicles. Its multiple potential variants allow it to perform a wide range of missions, from convoy escort and reconnaissance to medical evacuation and fire support.

Grounded in the principles of self-reliant defense, the MX-8 highlights the capability of Philippine industry to provide tailored solutions for jungle and irregular warfare, while offering a cost-effective platform adaptable to evolving military needs.