

# MARINE CORPS WARFIGHTING LABORATORY

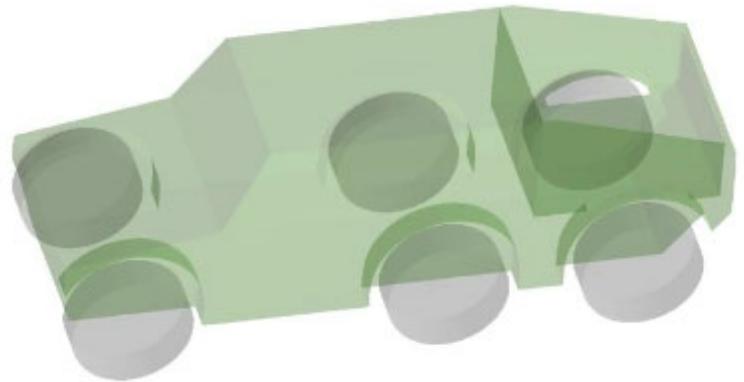
The purpose of the **Advanced Light Strike Vehicle** (ALSV) program is to conduct necessary trade-off studies, proceed to a paper design of a vehicle, and produce a working ALSV prototype. This program will use the most advanced prototyping tools available to design and build a combat suitable and combat effective ALSV that is internally transportable in the MV-22 Osprey and that is acceptable to the Marine Corps infantry. Once the paper design is approved, the Lab in conjunction with industry, will build a working prototype and assess its performance in a wide range of environments and mission scenarios.

**Background:** The single greatest challenge for ALSV vehicle design is to comply with the internal MV-22 aircraft transportability Key Performance Parameter (KPP) and also to produce a vehicle with the necessary strike/attack capabilities. The specific Marine Corps mission requirement shortfall driving the vehicle design is the need for a motorized offensive strike platform transportable in the MV-22 aircraft. Mission effective and mission suitable production vehicles (Commercial Off the Shelf) that are transportable by the MV-22 do not currently exist. A team comprised of Marine Corps operational/mission subject matter experts (SME), Navy vehicle design and aircraft design SMEs, and commercial entities will, starting with the KPPs, design from the ground up, the optimum light strike mission vehicle internally transportable by the MV-22 aircraft.

The design phase will incorporate proprietary technologies, independent research and development, and emerging technologies to design a working prototype. Additionally, this team will leverage lessons learned from past vehicle design efforts, and efforts to adapt commercial vehicles to internal transport aboard MV-22s. The combination of technical expertise, extensive vehicle design tools, and state-of-the-art prototyping processes are expected to provide substantial cost avoidance and shortened development time.

## ADVANCED LIGHT STRIKE VEHICLE

*fact sheet*



### Specifications:

1. MV-22 Internally Transportable (design must be capable of aircraft certification).
2. Capable of mounting heavy machine guns.
3. Must carry 2 crewman, plus driver.
4. Incorporates latest mature technology for suspension and drive train.
5. Diesel powered motor.

**Deliverable Product:** One working prototype vehicle.

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