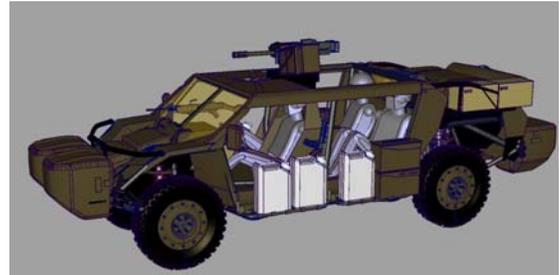


Advanced Light Strike Vehicle (ALSV)

Purpose: To design, on paper, an ALSV that meets the Marine infantry combat effective and combat suitable requirements using the most advanced prototyping tools available. Once Marine Infantry advocates approve the paper design, 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 in vehicle design is the internal MV22 transportability Key Performance Parameter (KPP). The specific Marine Corps mission requirement shortfall driving the vehicle design is the need for a motorized offensive strike platform transportable in the MV22. Mission effective and mission suitable production vehicles (Commercial Off-the Shelf) transportable by the MV22 do not exist.



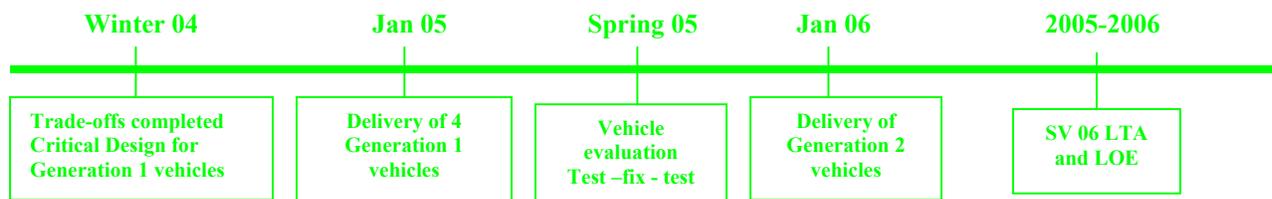
A team comprised of Marine Corps operational/mission subject matter experts (SMEs), Navy vehicle design and aircraft design SMEs, and partnered commercial entities will, starting with the KPPs, design from the ground up the optimum light strike mission vehicle internally transportable by the MV22. The 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.

Description: The design phase will incorporate proprietary technologies, independent research and development, and emerging technologies to design a working prototype ALSV. Additionally, this team will leverage all lessons learned from past vehicle design efforts, and efforts to adapt commercial vehicles to internal transport aboard MV22s.

- MV-22 Internally Transportable (design must be capable of aircraft certification)
- Capable of mounting heavy machine guns (M-2 and MK-19)
- Must carry 2 crewman, plus driver
- Incorporates latest mature technology for suspension and drive train
- Diesel powered motor capable of using JP fuels
- Automatic transmission
- Tubular frame
- Trafficability better than or equal to the HMMWV

Deliverable Product(s): Four working prototype vehicles.

Milestones:



Action Officer: 784-3425