

MARINE CORPS WARFIGHTING LABORATORY

Tactical All Terrain Vehicle (TATV), is a standard 4-wheel, all-wheel drive (AWD), commercial ATV with specific modifications for use in military service. Recent action in Operation Enduring Freedom has shown a need for a small, highly mobile vehicle able to carry not only the operator, but mission essential equipment weighing in excess of 500 pounds into austere environments at altitudes above 10,000 feet.

Background: The developer took a 700 cc, commercial ATV and designed an exoskeleton around the original frame, incorporated appropriate suspension to allow the vehicle to carry up to 600 lbs. of external load. In addition to the exoskeleton, there are other features including tie down points above and below the vehicle's chassis for both internal and external airlift, two fuel tanks holding 4 gallons respectively for a total of 8, an Infra-Red light for nighttime operation, run-flat tires, a roll bar, tow bar, NATO stretcher attachments, and winches front and rear for vehicle recovery. The TATV will give tactical Marine units the capability to extend their operational ranges in remote areas, carrying heavier loads, and lengthening their mission durations while maintaining a small, highly mobile footprint.

TATV is part of the Lab's Reconnaissance Surveillance Target Acquisition (RSTA) Technology effort to enhance USMC Reconnaissance. The Operating Forces, identifying the requirement for an All Terrain Vehicle, developed a Universal Needs Statement for this needed capability. TATV aims to address all the requirements found within this document. TATV was originally developed for Special Operations Command, but has now extended into the Marine Corps within the Lab for experimentation with Reconnaissance Units.

Description: The TATV is equipped with an automatic transmission, keyless ignition, 2 winches (front/rear), specialized cargo racks (front/rear) with a carrying capacity of 600 lbs, and two 4-gallon fuel tanks allowing for a 120+ mile range. It uses a 4-stroke, 683 cc, liquid cooled powerplant,

TACTICAL ALL TERRAIN VEHICLE *fact sheet*



has a top speed of over 50 m.p.h., and can tow more than 1200 lbs. TATV has a dry weight of 940 lbs, and overall dimensions of 95" length, 47.5" width, and 47" height. It was built for military operations and the accessing of tactical objectives where human access is impractical or unsustainable for lengthy periods of time. The TATV may also benefit other USMC units outside of the Reconnaissance community. Since the TATV can fit within the CH-46, CH-53E, and even the MV-22, uses in raid missions such as an airfield seizure are possible.

TATV experimentation began in 2003 and will continue through 2004 culminating with use during Sea Viking 04. MCWL RSTA Technology Section designed a formal TATV Safety Course in accordance with appropriate MCO and is based upon the civilian ATV Safety course. Further TATV training will be provided as the technology matures.

info: **Public Affairs Office:** (703) 784-5170
DTD: December 24, 2003



3255 MEYERS AVENUE
QUANTICO, VA 22134
WWW.MCWL.QUANTICO.USMC.MIL