Protection improvements option for hmmwvs

Government, Military



Protection Improvements Option for HMMWVs The vision of army truck has evolved from unguarded motor transport to a protected system functioning effectively in full view non-linear battleground. Three primary functions of the Light Tactical Vehicle (LTV) fleet, the High Mobility Multipurpose Wheeled Vehicle (HMMWV) include up-armored, extra space, and load carrying capacity besides sophisticated add-ons comprising a vast range of Control, Communications and Computers, and Intelligence, Surveillance and Reconnaissance (C4ISR) equipment (Department of the Army 4). The HMMWV of the U. S. Army is in need of a huge recapitalization program aimed at protection improvement. According to the U.S. Army representative remarks at the recent Association of the U.S. Army's "AUSA Winter" symposium held in Ft. Lauderdale, Fla., Feb. 24-26, 2010, "The HMMWV Recap requirement exists to address needed repair and rework of existing HMMWVs used in tactical operations while at the same time modernizing through upgrade existing HMMWVs to improve their operational capability" (Scott para 2-3).

Under the new approach of revamping the HMMWVs, one option is to develop a single integrated system to be kept on the chassis of HMMWV after taking down its body to fit the new capsule structure on it to be integrated with the current subsystems of the HMMWV. This approach would facilitate not discarding most of the parts of the HMMWV (Scott para 9). The capsule approach can provide the protection improvement needed in uparmored HMMWV because of reduction in weight helping in its load carrying capacity and mobility. Designing of the capsule adds to the protection level in the internal and external body structure of the HMMWV (Scott para 10).

As per the US Army TWV Strategy Report, adding armor kits to the vehicles was an afterthought; the vehicles were not designed to carry 3000+ pounds in weight, which is affecting the performance of the vehicles. Considering the future demands on the fleet, the proposed solution stated above would offer the perfect balance in the 3-Ps (Payload, protection, and performance) besides offering a sophisticated fleet, robust enough to host varied modern electronics, essential during any war operations. The proposed capsule approach option is cost-efficient to fulfill the sustainability and affordability issues arising in the future particularly on the right mixing of quality and quantity parameters (7-9).

Good thing about the proposed protection improvement option is the cost effectiveness of the Small Combat Tactical Vehicle Capsule (SCTVC) approach, developed by Chris Berman, a former Navy SEAL and the founder and president of Granite Tactical Vehicles – the designer of the SCTVC approach (Scott 6-7).

In comparison to the fully up-armored HMMWV, the proposed protection improvement capsule approach option would not only reduce the weight but would be cost-efficient as well. It is possible because of reusing the old parts. Some of the crucial issues related to protection improvement deal with durability, mobility, and thermal testing, which would be conducted very soon besides the independent corporate ballistic and blast testing of the capsule design, which has already been accomplished in November 2009 (Scott 11).

Works Cited

Department of the Army. US Army TWV Strategy Report. (Tactical Wheeled

Vehicle Acquisition Strategy) Report to the Congress, June 2010. .

Scott, R. Gourley. " AUSA Winter" Spotlights Future HMMWV Options." 3

March 2010. Defense Media Networks. 31 March 2011.

US Army. The Army TWV Tactical Wheeled Vehicle Strategy. 15 September

2010. < http://defensenews.

com/blogs/ausa/files/2010/10/The_Army_TWV_Strategy_lq. pdf>.