One broad area that has witnessed significant programmatic transformation over the past year encom-
passes the Marine Corps medium and heavy tactical vehicle fleets.

Original Portfolio

The original PEO Land Systems portfolio contained two tactical vehicle systems: the Medium Tactical
Vehicle Replacement (MTVR) and the Logistics Vehicle System Replacement (LVSR).

MTVR is a family of vehicles that perform a growing variety of logistics and tactical functions. Often
called the “7-ton” due to its cross-country maximum load, it can carry up to 15 tons on the road.
Manufactured by Oshkosh Defense, the vehicles were first fielded in 2001 as replacements for the obsolete
M813 series, M923 series and M925 series vehicles.

The platforms have an on-road cruising range of 300 miles (483 kilometers), the ability to ford five
feet (1.5 meters) of water, and can traverse a 60 percent gradient and 30 percent side slope with the
maximum cross-country load. Operational performance is further enhanced by advanced technologies
like the Oshkosh TAK-4® independent suspension system and Command Zone™ integrated control and
diagnostics system.

MTVR variants include: Standard Cargo and Extended Wheel Base Cargo Trucks; dump trucks; tractors; wreckers; and High Mobility
Artillery Rocket System Resupply Trucks. The vehicles are reducible or non-reducible height and about half are armored.

The LVSR system serves as the “heavy logistics” counterpart to MTVR. The LVSR is replacing the Marine Corps’ aging Logistics Vehicle
System (LVS), which incorporates the MK 48/MK 48A1 front power unit with associated Rear Body Units (RBUs) to transport large quantities of
supplies around the battlefield.

Developed by Oshkosh Defense, the LVSR includes three variants: MKR 18 Cargo, MKR 16 Tractor, and MKR 15 Wrecker. Company
descriptions highlight the system as ‘One of the world’s most techno-
logically-advanced logistics platforms,’ pointing to its 22.5-ton (20,412
kilograms) on-road/16.5-ton (14,969 kilograms) off-road payload,
600 horsepower diesel engine, Command Zone™ integrated control
and diagnostics, and factory-installed armor integrated into the initial
vehicle design.

Program Realignments

The end of 2011 witnessed a significant portfolio expansion
through the directed realignment of the entire Motor Transport port-
folio from Marine Corps Systems Command Product Group 15 to
the Program Executive Office. The realignment, which focused on
the synergies to be obtained from consolidating similar capabilities,
brought in programs like the current LVS, the P-19 series fire truck,
and multiple trailer programs affiliated with medium and heavy
tactical vehicles.

According to Program Manager Medium/Heavy Tactical Vehicles
Bryan Prosser of PEO Land Systems, the program consolidation did
not come as a complete surprise.

“I will admit that we went through several weeks if not a couple of
months of anticipation and expectation without any of the specific
details on the ‘who, what and where’ of the new portfolio. But we were
still trying to plan for it and getting ready to make it happen,” he said.
“As part of that process we started out trying to expand our connections with the folks in ‘Motor T,’” he explained. “Obviously there were already connections between our two offices on some level, but the new connections focused on ‘one team’ of Medium and Heavy Tactical Vehicles.”

The new team set about identifying a set of common issues surrounding the expanded portfolio, ranging from program status to key issues to upcoming decision points.

“Wouldn’t you know that every one of these programs were facing a major milestone decision in the near term,” Prosser said. “And in many cases those had to be adjusted because there were other issues which needed resolved first and this impacted the schedules. It would have been nice if we could have started the process a little earlier, but in the end the team did an excellent job adjusting with the schedule realities.”

Acknowledging that one structure for the expanded organization could have inserted the former MARCORSYSCOM elements as “their own team,” Prosser countered, “I really didn’t want to do that because that would have fostered an ‘us and them’ mentality. So we worked with the structure by teams that we had, spreading them out to not only make them a part of the team but to give them an opportunity to possibly work on other things than just the programs they had arrived with. “And every day since has been a new adventure,” he added.

Recent and Pending Milestones

Asked about recent and pending milestones across the Medium and Heavy Tactical Vehicle fleets, Prosser highlighted the Flatrack Refueling Capability (FRC), which had a Milestone C low rate initial production (LRIP) decision milestone on April 16, 2012. Heil manufactures the FRC, describing the program as: “The Flatrack Refueler (FR) is a fueling/defueling system built in an ISO container. It’s designed to transport, store and distribute JP-8, JP-5, DF-2 and other kerosene-based fuels in the expeditionary environment for Marine Corps aircraft and tactical ground vehicles. The fuel capacity of the FR is approximately 2,800 gallons. The FR is capable of being loaded, secured, transported and unloaded by the USMC cargo variant using the LVSR’s integral method of loading ISO containers or flatracks. The FR is fully operational as a standalone system, or integrated with the LVSR. The FR minimizes fuel operating costs, enhances performance and supportability, and meets all applicable military requirements. Standard equipment includes a fuel filter separator, relaxation chamber, meter, hose reels, pressure and vacuum vents, portable grounding rod, static discharge system, vapor recovery, electronic liquid level indicator, engine and pump assembly. The FR is Air Transportable, Rail Transportable, RO-RO capable with top lift and tie down eyes.”

“The FRC will provide an enhanced refueling/defueling capability,” Prasser continued. “It is definitely expeditionary, a feature that becomes obvious when you compare it to driving out with your big tanker truck. Now we will have a 2,500-gallon fuel tank that can be transported on our LVSR, which has tremendous capability both on-road and off-road. You can get this fuel capability to anywhere you want and you can leave it on the LVSR or offload the flatrack and leave it sitting at an air station or forward operating base.”

The April FRC decision was actually something of a ‘limited LRIP,’” Prosser acknowledged. “The full quantity of LRIP was approved, but the Acquisition Decision Memorandum (ADM) restricted us to only buying four until we could go out and do a little additional testing. But we have now completed that testing. The system passed. And we’ve received permission to procure the remaining 33 LRIP quantities.”

Other ongoing activities surround a pending MTVR contract with Oshkosh Defense.

“In the aggregate, we have procured our MTVR AAO [Authorized Acquisition Objective],” Prosser said. “But when they [CD&I] changed the AAO they also changed the mix of variants that were required. Essentially, we bought more vehicles than the AAO specified, but we didn’t have the right mix. Therefore, we are in the process of procuring a few more vehicles from Oshkosh. It won’t get us the whole way, but it will get us closer to the mix we want. The PMO is considering a wide variety of options to digress of excess variants.”

Another pending milestone surrounds the associated MTVR trailers. However, according to Prasser, the situation is a little bit complicated.

“The MTVR trailer has already had a Full Rate Production decision,” he began. “And there are three variants of that trailer: cargo, general
and geographic environments that, quite frankly, were not expected when the vehicle was acquired. Take a look at things like the armoring we have applied to them or equipping them with a manned weapon station. Now I’m not going to say that they look like a combat vehicle; but they certainly don’t look like a truck either.

“In fact, those are some of the big issues that the Marine Corps is facing in terms of what we do with some of those ‘armored up’ vehicles,” he added. “We really need to evaluate how many armored MTVRs and armored LVSRs we need running around Camp Lejeune and Camp Pendleton or anywhere else in the United States. We think we want to keep them in an armored configuration, but the question becomes what we are going to do with them – store them, use them for training, or continue to run them regularly as an armored vehicle. So we have those things to work out along with the whole reset/reconstitution effort.”

He continued, “Another thing I would highlight is that the last word in both truck names is ‘Replacement,’ so they were both replacements for old systems in the Marine Corps. They were both built with basically a 22-year service life. And at this point the first MTVR vehicles that were fielded are halfway through their expected service lives. However, if you look at our budgets, it’s clear that there’s not a replacement for the MTVR or LVS out there. If there was we probably should be working on it already.

“Their planned 22-year service life did not include a depot maintenance rebuild program for them because of their technology and ruggedness,” he stated. “And right now there is no SLEP [Service Life Extension Program] or modernization upgrade on the schedule. None of that is planned. So one of the things that this program office has to start thinking about is the point where we have to do a major overhaul on these vehicles, an upgrade, or a SLEP to keep them effective well into the future. We don’t have the answers to that yet, but those are some of the things we are starting to explore.”