

# Palletized Load System (PLS) and PLS Extended Service Program (ESP)

## INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

### MISSION

To support combat units by performing cross-country movement of configured loads of ammunition and other classes of supply loaded on flat racks or in containers.

### DESCRIPTION

The Palletized Load System (PLS) provides the timely delivery of a high tonnage of ammunition, unit equipment, International Organization for Standardization (ISO) containers/shelters, and all classes of supply to using units and weapon systems as far forward in the maneuver battalion area as the tactical situation allows. The PLS consists of the PLS truck, PLS trailer (PLS-T), and demountable flat racks. The PLS truck is a 10-wheel-drive (10x10) prime mover with an integral onboard load handling system that provides self-loading and unloading capability.

There are two PLS truck variants, the basic PLS truck (M1075) and the PLS truck with material handling crane (M1074). The system also includes the PLS trailer (M1076), Container Handling Unit (CHU) for transporting 20-foot ISO containers, the M3/M3A1 Container Roll-in/Out Platform (CROP), and the M1/M1077A1 flat racks. The PLS has the ability to operate with a degree of mobility commensurate with the supported weapon systems, to facilitate the fighting capabilities of the supported systems and units.

The PLSA1 model is planned for fielding in 2010. It will include: independent front suspension, a new C-15 engine, the Allison 4500 transmission, J-1939 data-bus, and a cab that will be common with the HEMTTA4 and Long Term Armor Strategy (LTAS)-compliant.

The PLS Extended Service Program (ESP) is a recapitalization program that converts high-mileage PLS trucks to 0 miles/0 hours and to the current A0 and future A1 production configurations. The

trucks are disassembled and rebuilt with improved technology such as an electronically controlled engine, electronic transmission, air ride seats, four-point seatbelts, bolt-together wheels, increased corrosion protection, enhanced electrical package, and independent front suspension on the A1.

### SYSTEM INTERDEPENDENCIES

None

### PROGRAM STATUS

- **Current:** To date, fielded approximately 5,500 PLS trucks and 9,081 PLS trailers.

### PROJECTED ACTIVITIES

- **2QFY09:** Complete PLSA1 Product verification testing (PVT) at Aberdeen Test Center (ATC), MD
- **2QFY09:** Testing of the Enhanced Container Handling Unit (E-CHU)
- **2-3QFY09:** PLSA1 Logistics demonstration and verification of technical manuals
- **1QFY10:** Type classification/materiel release of Enhanced CHU
- **2QFY10:** Modify existing FHTV3 contract to include production and RECAP of the PLSA1
- **FY10:** PLSA1 TC/MR)
- **FY10:** PLSA1 First unit equipped (FUE)

## ACQUISITION PHASE

Technology Development

Engineering & Manufacturing Development

Production & Deployment

Operations & Support



## Palletized Load System (PLS) and PLS Extended Service Program (ESP)

### FOREIGN MILITARY SALES

Turkey, Israel, Jordan

### CONTRACTORS

Oshkosh Truck Corp. (Oshkosh, WI)  
Detroit Diesel (Emporia, KS; Redford, MI)  
Allison Transmissions (Indianapolis, IN)  
Michelin (Greenville, SC)  
Summa Technologies (Cullman, AL)  
GT Machine and Fabrication (Napanee,  
Ontario, Canada)

	PLS	PLSA1
<b>ENGINE</b>	DDC 8V92 - 500 horse power	CAT C-15 - 600 hp @ 2100 RPM
<b>TRANSMISSION</b>	Allison CLT-755 - 5 Speed	Allison HD 4500 - 6 Speed
<b>TRANSFER CASE</b>	Oshkosh 55,000 - 2 Speed	New Oshkosh - 2 Speed
<b>AXLES - FRONT TANDEM</b>	Rockwell SVI 5MR	Oshkosh / Rockwell
<b>SUSPENSION - FRONT TANDEM</b>	Hendrickson RT-340 - Walking Beam	Oshkosh TAK-4TM Steel Spring
<b>AXLES - REAR TRIDEM</b>	Rockwell SVI 5MR	Rockwell SVI 5MR
<b>SUSPENSION - AXLE #3</b>	Hendrickson-Turner Air Ride	Hendrickson-Turner Air Ride
<b>SUSPENSION - AXLES #4 &amp; #5</b>	Hendrickson RT-400 - Walking Beam	Hendrickson RT-400 - Walking Beam
<b>WHEEL ENDS</b>	Rockwell	Rockwell
<b>CONTROL ARMS</b>	N/A	PLS Block 1 - New
<b>STEERING GEARS - FRONT</b>	492 Master/M110 Slave	M110 Master/M110 Slave
<b>STEERING GEARS - REAR</b>	492	M110
<b>FRAME RAILS</b>	14 inch	14 inch
<b>CAB</b>	PLS	Common Cab
<b>RADIATOR</b>	PLS - Roof Mount	PLS Block 1 - Side Mount
<b>MUFFLER</b>	PLS	PLS Block 1 - New
<b>AIR CLEANER</b>	United Air	United Air
<b>LHS</b>	Multilift MK V	Multilift MK V
<b>CRANE</b>	Grove	Grove
<b>TIRES</b>	Michelin 16.00 R20 XZLT	Michelin 16.00 R20 XZLT
<b>SPARE TIRE</b>	1 - Side Mounted	1 - Roof Mounted
<b>CTI</b>	CMA	CMA
<b>AIR COMPRESSOR</b>	1400 Bendix	922 Bendix
<b>STARTER</b>	Prestolite	Prestolite
<b>ALTERNATOR</b>	12/24V	24 Volt- 260 Amp Niehoff

