

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

## INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

## MISSION

Supports 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) is a 10-wheel-drive (10x10), multidrive truck with 16.5 ton capacity that 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 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 for transporting 20-

foot ISO containers, the M3/M3A1 Container Roll-in/Out Platform, 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 began fielding in 2011. It incorporates 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 it is long-term armor strategy compliant.

The PLS Extended Service Program (ESP) is a recapitalization program that converts high-mileage base PLS trucks to 0 miles/0 hours and to the current 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 6,000 PLS trucks and 13,000 PLS trailers

## PROJECTED ACTIVITIES

- **FY10:** PLSA1 type classification/materiel release
- **FY11:** PLSA1 first unit equipped
- **FY12:** PLSA0 RECAP begins

## ACQUISITION PHASE

Technology Development

Engineering and Manufacturing Development

Production and Deployment

Operations and Support



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

### FOREIGN MILITARY SALES

Israel, Jordan, Turkey

### CONTRACTORS

#### Prime:

Oshkosh Corp. (Oshkosh, WI)

#### Engine:

Detroit Diesel (Emporia, KS; Redford, MI)

Caterpillar C-15 (Peoria, IL)

#### Transmission:

Allison Transmission (Indianapolis, IN)

#### Tires:

Michelin (Greenville, SC)

	PLS	PLSA1
<b>ENGINE</b>	DDC 8V92 - 500 horsepower	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	Standard MTRV on Front Tandem
<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	PLSA1 - Side Mount
<b>MUFFLER</b>	PLS	PLSA1 - 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>	CM Automotive	Dana
<b>AIR COMPRESSOR</b>	1400 Bendix	922 Bendix
<b>STARTER</b>	Prestolite	Prestolite
<b>ALTERNATOR</b>	12/24V	24V - 260 Amp Niehoff

