

Accomplishment Summary

Depot Profile

[Letterkenny Army Depot](#) (LEAD) is a Government-owned and operated installation located in Chambersburg, Pennsylvania with an area of over 17,500 acres and approximately one million square feet of interior space. LEAD is part of the Army Aviation and Missile Command (AMCOM), which is a major subordinate command of the [Army Materiel Command](#) (AMC). LEAD is the largest employer in Franklin County, providing over one quarter billion dollars into the region annually. LEAD further contributes to the community via special emphasis programs focused on equality, as well as charitable actions, which provide outreach and assistance to those in need.

Mission

LEAD is responsible for providing the Armed Forces with “capabilities-based” worldwide logistics and depot-level maintenance support that is reliable, timely and cost-effective. Services include a full spectrum of program management, overhaul, upgrades, modifications, manufacturing, field-level support, systems integration and product support. Services are applied to weapons systems, major end items, assemblies, subassemblies and components. LEAD’s mission also includes equipment preservation and storage in support of wartime readiness. Included on the depot is a munitions center used to conduct maintenance, modification, storage and demilitarization of tactical missiles and ammunition.

Product: PATRIOT Missile System

PATRIOT serves as a long-range, all-altitude, all-weather system able to counter enemy missiles and aircraft. PATRIOT is employed around the globe by US and foreign military services and has been deployed during Operations Desert Storm and Iraqi Freedom. As the Center of Industrial and Technical Excellence for Air Defense and Tactical Missile Systems, LEAD is

responsible for the recapitalization (Recap) of all major components of the PATRIOT missile system to a near zero hour/zero miles standard. This is accomplished through a complete disassembly of all end items and replacement of all expendable and aged components, reconditioning of structural components, modifications, alterations, and retrofitting in accordance with the statement of work. This program is representative of LEAD’s tradition of excellence. LEAD has recapped approximately 70% of the PATRIOT fleet since the program commenced.

People

Letterkenny is comprised of over 2,800 Army civilians, contractors and military personnel. Employees are empowered and encouraged to participate in formal and informal events, and to recommend improvements through the Army Suggestion and/or Value Engineering Programs. Currently, 80% of employees in the PATRIOT Value Stream have participated in “Lean 101” and 6S training, and 84% have participated in at least one lean event. There are seven full-time lean team members representing a cross-section of the depot who make up the “core” team of facilitators. The depot population includes 32 “change agents” that have served as facilitators in the lean office on a permanent or rotational basis.

Process Improvement

LEAD’S business model is built upon the fundamentals of lean. The depot began its lean journey in 2002 and has focused its effort on transforming the culture to one that both understands and embraces continuous improvement. Implementation of lean has been transferred to each functional area and rotational facilitators have been strategically redeployed into the depot’s key Value Streams to help drive change at the shop floor level. The depot utilizes Policy Deployment and the A3 process to ensure alignment of business goals.

The A3 begins at the enterprise level and cascades down to the Value Stream level. This process is used to communicate the business plan and progress (who, what, when, where, and how) to all members of the team. All new employees receive six hours of lean basic training, (Lean 101) including a presentation and hands-on simulation representing a manufacturing process producing a tangible product. Trainees get the opportunity to “learn by doing” as they witness a factory’s transformation, observe and document the process, and make incremental changes with the use of Standard Work and Poka-Yoke. Trainees get to apply the basic lean tools and see the evolution from batch-and-queue processing to a one-piece flow concept.

Depot Achievements

- Five time winner of Shingo Public Sector Prize (four consecutive years)
- Army Superior Unit Award (two awards)
- Department of Defense Award for Continuous Process Improvement
- Defense Logistics Agency Customer of the Year Award
- Secretary of the Army Environmental Award

Quality

- ISO 9001 certified since 2004.
- A 16% reduction in final inspection rejects, since 2007.
- Customer satisfaction rating is 100%.

Delivery

- 100% on time delivery to the Warfighter.
- Used Lean initiatives to Reduce flow time by 200 hours per radar.

Cost

- Cost per Battalion has been reduced by 33% since 2004.
- \$2.8 million returned to customer in 2008. The customer used this money to fund additional workload at LEAD.

- Rapid Improvement Events in the PATRIOT Value Stream yielded a:
 - 42,320 square foot reduction in floor space in 2008. This resulted in \$182,000 per year annual lease savings.
 - 98 mile reduction in travel distance per radar trailer.
 - \$1.3 million reduction in launcher labor costs in 2008.
 - \$57,800 reduction in launcher labor costs in 2009.
 - \$415,150 reduction in trailer labor cost in 2009.
 - Reduction of 322 miles of travel per year starting in 2008 by relocating a PATRIOT weld cell.
 - Reduced launcher trailer flow time and associated WIP by 47%.
 - \$1.0 million reduction in other PATRIOT major end items.

Safety and Environmental

- ISO 14001 certified since 2004.
- Working towards ISO 18001 safety certification by November 2009.
- OSHA Recordable rate reduced from 4.07 to 2.03.
- 40-hour Advanced Ergonomics course for lean facilitators and supervisors.
- 10 and 30-hour OSHA courses for employees and supervisors, respectively.
- OSHA VPP and Army Composite Risk Management training completed for all employees.
- 68% of the waste stream is recycled.
- Energy utilization, BTU’s used per direct labor hour, has been reduced by 52 % since 2004.
- Hazardous waste generated per direct labor hour has been reduced by 10% since 2005.

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