

## Section 1

# INTRODUCTION

*“The ATIP demonstrates our continued focus on concept-aligned, capability-based technology transitions into programs of record and is designed to foster collaboration, align S&T investments and support effective technology insertion within PEO LS programs.”*

**Senior Executive Officer (SES) Bill Taylor, Marine Corps PEO LS**

The fifth edition of the Advanced Technology Investment Plan (ATIP) identifies and prioritizes the Top Technical Issues within PEO LS, with the goal of informing, influencing, and aligning S&T investments with current and future programs of record (POR). As with previous editions, this document will foster communication between government, industry, and academia to successfully resolve program technical issues and support the transition of critical and affordable capabilities to the warfighter.

In today’s environment—with decreased budgets, reduced manpower, rapid technical innovation, and fiscal uncertainty—PEO LS’ objective is to deliver critical capability to the warfighter while optimizing cost, schedule, and performance. The 2014 ATIP assists in meeting this objective by promoting collaboration within the 3 Circles to inform requirements, reduce program risk, and facilitate the modernization of the force after decades of increased operational tempo. Working closely with the Office of Naval Research (ONR), Marine Corps Systems Command (MCSC), the Army’s Tank Automotive Research, Development and Engineering Center (TARDEC), and other Government agencies as well as with industry and academia, PEO LS has made great strides towards achieving this objective.

The key goals of this edition are:

- ▶ Identify and prioritize Top Technical Issues within PEO LS programs;
- ▶ Inform, influence, and align S&T investments;
- ▶ Resolve capability gaps and technology issues; and
- ▶ Support technology insertion and transition into PORs and eventually to the Warfighter.

The ATIP is developed and distributed to inform the S&T Enterprise concerning the S&T needs of the Marine Corps’ major Acquisition Category (ACAT) I & II programs within PEO LS. By publishing this information in one source, common S&T needs throughout each program can be recognized and leveraged in order to better address overall S&T needs within PEO LS. With common S&T needs identified, industry and the S&T Community can optimize S&T investments to design and deliver critical technologies in a more affordable and timely manner.

In its seven-year history, PEO LS has developed a winning formula for delivering required capabilities to meet the warfighter’s needs, as evidenced in having recently achieved the following milestones:

- ▶ Sixty-six Joint Light Tactical Vehicles (JLTV) entered a 14-month Government test effort in late summer of 2013, which capped a highly successful engineering and manufacturing development (EMD) effort, with the Joint program garnering the Packard Award in the process;
- ▶ Common Aviation Command and Control System (CAC2S) Phase I achieved full operational capability (FOC) in the fall of 2013, with final fielding at Dam Neck, Va.;
- ▶ P-19 R (Replacement) Fire Truck entered into the EMD phase with Oshkosh Defense on contract to develop 164 vehicles, the first fire trucks procured by the Marine Corps in 30 years;
- ▶ Flat Rack Refueling Capability (FRC) entered into full rate production (FRP) in late summer of 2013;
- ▶ A Milestone C decision to send the Ground/Air Task Oriented Radar (G/ATOR) Program into low-rate-initial production (LRIP).

PEO LS is poised to continue this success with mature competency-aligned resources to ensure the assigned programs are well supported for successful outcomes.

PEO LS is pursuing several technology development efforts in 2014 to provide additional improvements for the warfighter:

- ▶ Procurement of approximately 460 Seat Survivability Upgrade (SSU) Kits and

*“Since the PEO’s inception, we put into place robust, formalized, disciplined, standardized operating processes and procedures that have been proven throughout the rest of DoD.”*

**Senior Executive Officer (SES) Bill Taylor, Marine Corps PEO LS**

780 Egress Modification Kits involving front door upgrade, rear door with rear step upgrade, and exhaust for the MRAP family of Marine Cougar vehicles.

- ▶ Assault Amphibious Vehicle (AAV) Survivability Upgrade to improve force protection to the AAV Personnel Carrier Variant platform.
- ▶ The High Mobility Multi-Purpose Wheeled Vehicle (HMMWV) Sustainment Modification Initiative (SMI) to improve the safety, performance and reliability of the HMMWVs Expanded Capacity Vehicle. This initiative is designed to extend the viability of remaining HMMWV fleet elements that will not be replaced by JLTV.

*“We’re going to do more with less.”*  
**Gen. James F. Amos, the 35th Commandant**

PEO LS will assist in building the most ready Marine Corps the nation can afford by remaining true to its moorings in devoting full-time attention to Marine Corps Weapon Systems acquisition, while partnering with MCSC to develop, deliver, and provide life-cycle planning for its assigned programs.

The overall technology requirements for PEO LS programs remain consistent from previous years and are as follows:

- ▶ Reliable and efficient electrical power generation to supply energy for our modern force;
- ▶ Increased survivability while maintaining mobility;
- ▶ A Government owned and operated Modeling and Simulation (M&S) capability that can accurately predict cost and performance solutions;
- ▶ Open Plug and Play Communications Architecture in Marine Corps vehicles.

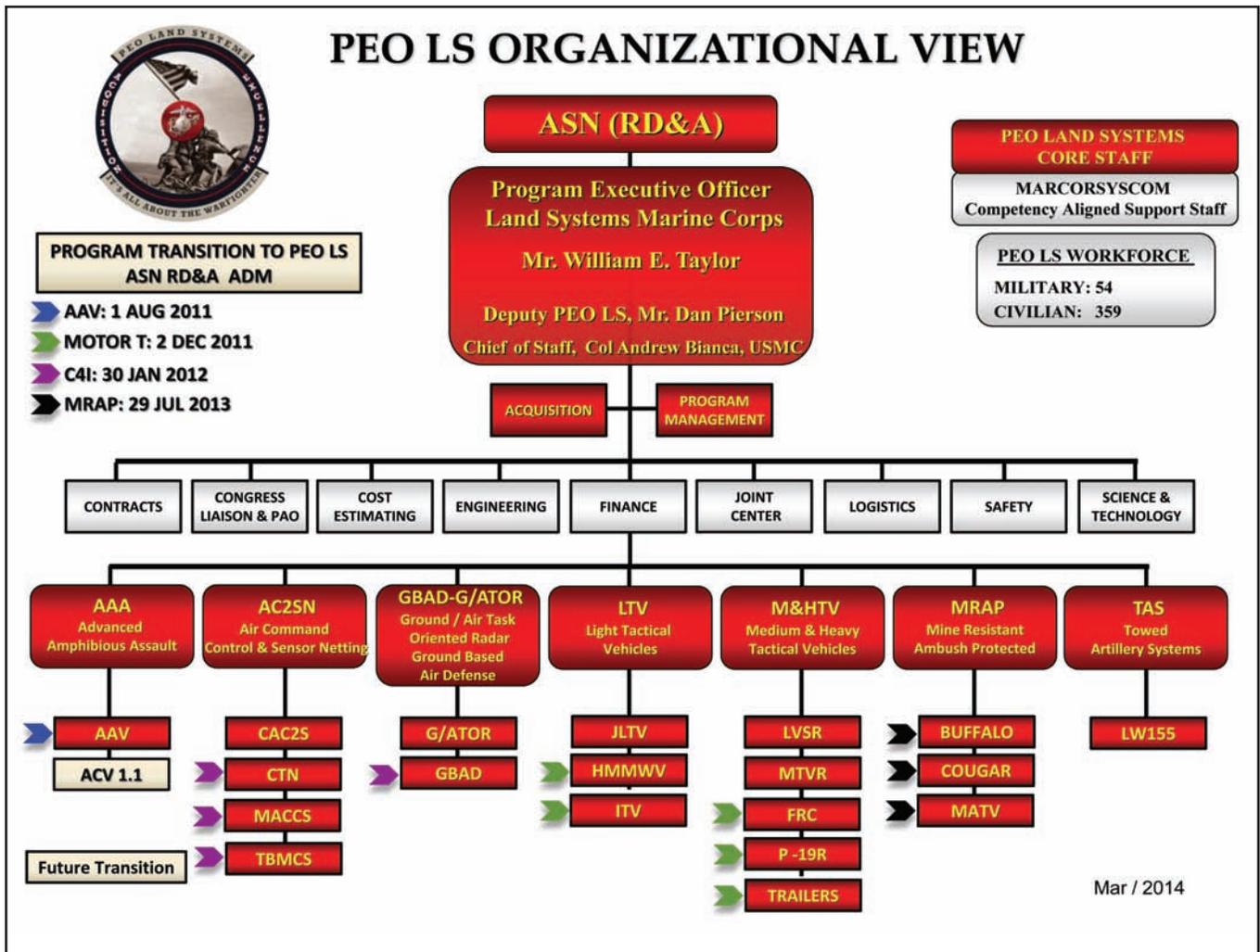


Figure. 1-1. PEO LS Organizational View

## PEO LS Organization

Program Executive Officer Land Systems—located at historic Hospital Point, Building 2210, Marine Corps Base Quantico, Va.—is the Corps’ first PEO. PEO LS is a separate command that reports directly to the Assistant Secretary of the Navy for Research Development and Acquisition (ASN (RDA)). PEO Land Systems’ integral relationship with MCSC leverages infrastructure, competencies, and technical authority.

*“When it comes to acquisition, it’s safe to say affordability is foremost on the minds of defense policymakers and decision makers today. Achieving greater efficiency and productivity in defense spending is the focus of the acquisition community now and far into the future.”*

**Mr. Dan Pierson, Deputy, Marine Corps PEO LS**

Figure 1-1 illustrates the current organization of Program Executive Officer Land Systems.