

# Lockheed Martin— Aligning Logistics Career Development to their Corporate Business Strategy

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In Shakespeare's Julius Caesar, Brutus remarks insightfully to Cassius, "There is a tide in the affairs of men. Which, taken at the flood, leads on to fortune." They are, of course, discussing battle strategy, but this famous phrase is equally applicable in the business world.

Lockheed Martin corporation, long a leader in the design, development, and production of sophisticated defense systems, is rapidly recognizing, along with many other Aerospace and Defense (A&D) companies, that the "tide" of defense business is undergoing a paradigm shift, unveiling new and growing opportunities in the area of after market support services. The convergence of many factors, such as the end of the cold war technology race, the changing global threat environment, the decline in procurement of new systems and the corresponding rising cost of supporting aging systems, has prompted a new era and approach to defense system sustainment—those activities that assure operationally ready systems for today's national security environment.

## PERFORMANCE BASED LOGISTICS (PBL)

At the forefront of this paradigm shift is a fundamental restructuring of the product support process to an approach, entitled PBL, in which the DOD is transitioning from accomplishing support through the iterative, transactional acquisition of the basic elements of support (e.g. spares and repairs) to a more commercial model in which they enter into agreements with product support providers to deliver performance and support outcomes, such as system availability, and leave the determination of 'how' to achieve those outcomes to a Product Support Integrator (PSI).

The success of PBL, based on hundreds of programs over the last 9-plus years, has been exceptional. In implementing PBL, DOD has often turned to the defense industry to assume the PSI role. As a consequence, A&D companies are suddenly

discovering opportunities for business relationships that may span periods far longer than their core design and development business—as long as thirty or forty years, based on the current and planned useful life of most DOD systems.

Lockheed Martin is aggressively expanding their presence in this business sector. To better posture themselves for this growing market, they have instituted a comprehensive Logistics work force development effort aimed at equipping their logistics personnel with the requisite skills, knowledge, and abilities to successfully accomplish this business strategy.

## LOGISTICS AND SUSTAINMENT INSTITUTE

At the core of their professional development plan is the establishment in 2006 of the Logistics and Sustainment Institute, or LSI. The goal of the LSI is to establish a multi-dimensional framework that offers their 13,000 Logistics personnel (and 7000 other career-field personnel who frequently perform logistics-related activities) a career roadmap and structure to facilitate opportunities for career planning, education and training, professional certification, and a collaborative learning network.

When fully implemented, the career roadmap will provide clear guidance regarding the required and recommended education, training, credentials, and experience requirements necessary at progressive levels within the Logistics and Sustainment profession. The benefits will be two-fold; employees will benefit from having an established career development path, and corporate management will gain visibility of the level of experience and training, across the logistics work force.

Patrice Jackson, the primary force behind the ongoing development of the LSI, emphasizes the value of the multi-dimensional approach. "In a complex discipline like logistics we need to be innovative with our career development program. We can't

# PROFESSIONAL DEVELOPMENT

limit our focus to a traditional path from college new hire through vice-president; we need to provide specific course curriculum and qualifications at progressive levels across a broad spectrum of career paths. This approach not only provides our managers insight into the levels of workforce expertise, but also provides our employees a clear understanding of their professional growth opportunities.

## COLLABORATIVE LEARNING NETWORK

In addition to training, we've added a virtual Collaborative Learning Network (CLN) dimension, which allows our logistics and sustainment professionals the opportunity to collaborate by sharing knowledge to increase their performance and in turn deliver better solutions to our customers."

## CENTER FOR PERFORMANCE EXCELLENCE

One of the critical foundation pillars in the framework is formal training. To ensure the ready availability of high quality internal training, Lockheed Martin established the Center for Performance Excellence (CPE), headquartered in Rockville Maryland, as a focal point for internal professional development education. The CPE provides training across several functional disciplines, including Program Management, Engineering, Software, Business Management, Quality Assurance, and, recently added, Logistics.

Doug Rowell, who manages the CPE, stresses the critical role of training in the overall corporate framework and business strategy. "The Center for Performance Excellence provides training and professional services across the corporation. CPE training integrates the program performance curriculum, mentioned above, to ensure that Lockheed Martin professionals understand the full spectrum of capabilities required of our leaders and individual contributors. The CPE is focused on flawless execution because our primary goal is to support programs in the pursuit of perfect program performance."

## KNOWLEDGE ACQUISITION AND CULTURAL ACCLIMATIZATION

Logistics training within the overall company strategy is equal parts knowledge acquisition and cultural acclimatization. Lockheed Martin has exceptionally qualified logisticians—lack of logistics skills is not the imperative. However, application of those skills is significantly different in a sustainment environment versus a production environment. Planning a supply chain strategy for a manufacturing process primarily involving the procurement of new components that feed the production line is markedly dissimilar from a sustainment setting where a significant percent of spare part components result from repair and overhaul processes rather than new procurements.

The unique nature of the PBL business relationship, where industry providers take on significant responsibility for managing most aspects of support over the life cycle, brings new risk into the equation, such as obsolescence management and mitigation of aging and wear out events. Consequently there is an enhanced role for leveraging industry technical engineering expertise in planning and executing PBL sustainment strategies. This means that Lockheed Martin's logistics training has to ensure a blend of traditional logistics with a significant level of technical content. Clearly, the business value proposition in taking on PBL work requires addressing not only the objective system supported (e.g. an aircraft) but the enabling support systems as well (supply maintenance, transportation, configuration management) over the life cycle.

### PBL COURSEWARE

With a primary focus on capturing Performance-Based Logistics business, the CPE (in coordination with the LSI) is implementing a Logistics curriculum fully aligned with corporate business processes. To date three courses have been developed, with a fourth course planned for delivery in the fourth quarter of 2008. Each of the courses, and their relationship to enabling the corporate business strategy, are summarized below.

- **Introduction to PBL:** This 2-day course provides a solid foundation in the concepts, application options, cost and technical trade space analysis,

designing, and implementing of PBL strategies

- **Design for Sustainment:** This 3-day course emphasizes the application of engineering and related technical methodologies to optimize the design of systems for supportability, not only at initial fielding but throughout the service life. Advances in sensor-based technologies are facilitating the development of 'autonomic' systems on board the objective system that enable continual health monitoring and management for improved supportability, a key outcome requirement in PBL support
- **Win PBL:** This four-day course puts students through an intense week long 'war game' scenario in which teams compete to "capture" (build a winning proposal for) PBL business. PBL contracts, as already mentioned, are much more than routine sales of transactional goods. They are complex, evolving sustainment plans tailored to the operational role and environment of the system to be supported—hence the need to craft a viable proposal that delivers the specified outcomes at best value to the customer while providing business value to the corporation
- **Execute PBL:** This four-day course (in development) completes the PBL 'cycle' of training by putting students through a discrete set of system scenarios in a war game environment to design, develop, and present a feasible PBL implementation and execution strategy that will meet customer requirements while maintaining flexibility to adapt to evolving system, operational, and financial factors throughout the system life.

In summary, students completing this cycle of courses have gained valuable training ranging from a fundamental understanding of PBL to leveraging corporate technical expertise for supportability to capturing PBL business to successfully executing PBL strategies throughout the life cycle.

The competition for PBL business and, in the broader sense, after market support services, is intense and will remain so for the foreseeable future. But with a comprehensive Logistics career development plan and corresponding training aligned with their corporate business strategy,

Lockheed Martin looks well postured to capture a significant share of this business while providing excellent value and service to their customers.

### LEARNING OBJECTIVES:

- Learn the role of Performance Based Logistics in DOD's transition from iterative, transactional acquisition to commercial models delivering performance
- Gain understanding of the importance of professional development to insure expertise for delivering PBL
- Understand the role of knowledge acquisition and cultural acclimatization in logistics training

### DEFINITIONS

- **Performance Based Logistics** – buying Performance, not transactional goods and services. PBL delineates outcome performance goals of weapon systems, ensures that responsibilities are assigned, provides incentives for attaining these goals, and facilitates the overall life-cycle management of system reliability, supportability, and total ownership costs. It is an integrated acquisition and logistics process for buying weapon system capability. (Defense Acquisition University)
- **Cultural acclimatization** – Incorporating corporate culture, made up of attitudes, experiences, beliefs and values of an organization . . ."the specific collection of values and norms that are shared by people and groups in an organization and that control the way they interact with each other and with stakeholders outside the organization. (Kotter, John. 1992 Corporate Culture and Performance, Free Press)
- **Sustainment** – "the provision of personnel, logistic, and other support required to maintain and prolong operations or combat until successful accomplishment or revision of the mission or of the national objective." (Joint Publication 1-02, DOD [Department of Defense] Dictionary of Military and Associated Terms. DTJ

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