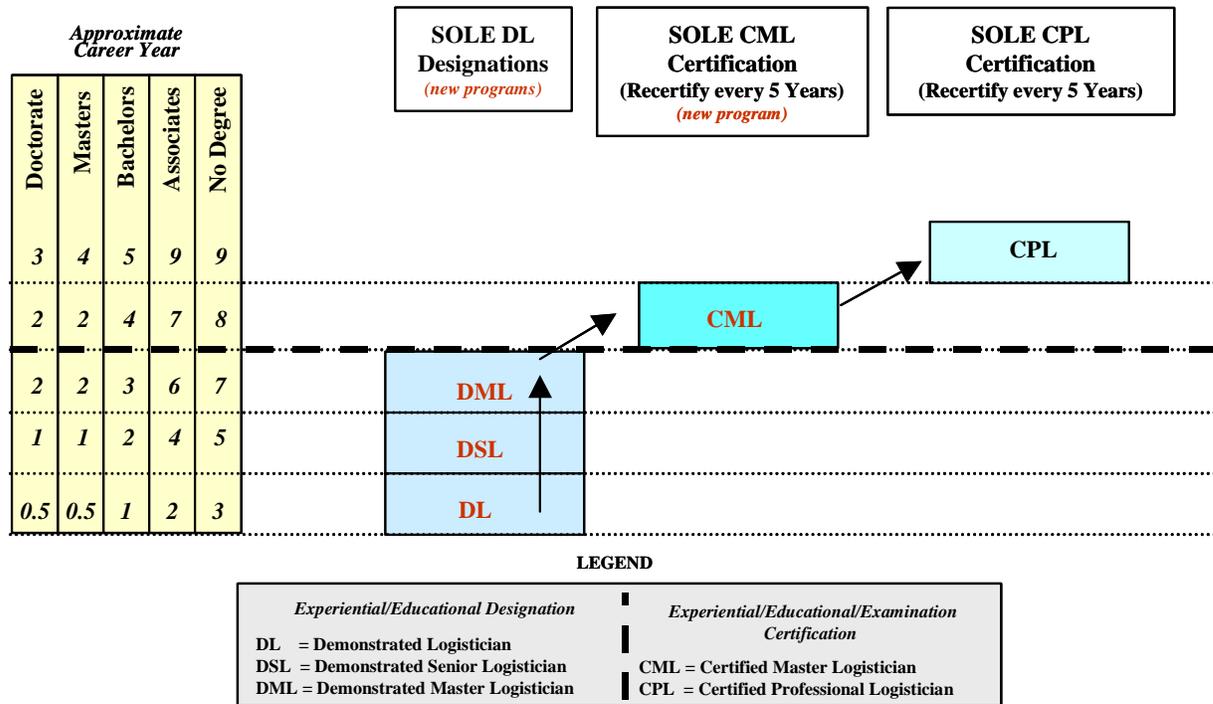


# Raytheon Implementation of the Demonstrated Logistician Program of SOLE – The International Society of Logistics

## 1 Introduction

SOLE – The International Society of Logistics (“SOLE”) provides a designation program for continued professional performance and education of logisticians through its Demonstrated Logistician Program. This program is implemented in the DoD, Military Services and Industry as an intermediate recognition program as logisticians hone their skills and work toward full professional certification either as a Certified Master Logistician or a Certified Professional Logistician from SOLE; or other professional certification in the areas of program management, quality or reliability.

The program as noted in Figure 1-1 constitutes a continuing growth path for each employee. As shown in the figure, the initial recognition is as a Demonstrated Logistician (DL), the next level is recognition as a Demonstrated Senior Logistician (DSL) and the final step is a Demonstrated Master Logistician (DML). Each step in the process has logistics job performance, continuing education, functional skill training, and enabler skills training requirements.



**Figure 1-1**

The Placement of the Demonstrated Logistician Program in the individual career development paths.

At Raytheon the program is implemented through the employee and the immediate supervisor. Immediate supervisors are required to work with employees to define the optimum combination of training through academic courses, non-academic courses with Continuing Education Unit (CEU) recognition, functional and enabler skill training through the Raytheon Learning Institute (RLI) and/or the Defense Acquisition University (DAU).

## 2 Demonstrated Logistician Program Elements

### 2.1 Job Performance

Each logistician must maintain a continuing performance evaluation of “M” or higher during the entire period, to qualify for the next higher level of designation. Supervisory evaluations are an integral element in the overall growth of the employee and recognition of the levels of performance is a positive element in the appraisal and growth process. Once awarded the designation is not lost should performance fall below the “M” level, however the employee must regain the rating for the designated period before advancing in the program

**Table 2.1-1  
Job Performance Experience Requirements for each level of designation based on Individual Education Level**

Program Level	Education				
	High School	Associate Degree	Bachelors	Masters	Doctorate
Demonstrated Master Logistician	7	6	3	2	2
Demonstrated Senior Logistician	5	4	2	1	1
Demonstrated Logistician	3	2	1	0.5	0.5

Note: It is anticipated that those with an educational degree at the Masters or Doctorate level may wish to pursue certification as a Certified Master Logistician (CML) or Certified Professional Logistician (CPL) through SOLE – The International Society of Logistics.. However should they desire they may pursue recognition under this program prior to doing so.

### 2.2 Continuing Professional Development and Education

Recognizing that the educational process is a journey and not a destination the requirements for the Demonstrated Logistician program are built on a continuum of education in three areas:

- Continuing Education
- Functional Skill Training
- Enabler Skill Training

Continuing education achieved through attendance at academic institutions offering for-credit courses; or non-academic courses offering CEU credits. These must be courses in areas of education where there is a focused association with personal development in the areas of Business, Logistics or Engineering. General Education leading to a degree is acceptable only for the first level of recognition (i.e., Demonstrated Logistician/DL). Non-credit courses with no awarded CEUs, and audited courses are not counted toward this requirement, but may be counted toward the Functional and Enabler Skill Training requirements below. A suggested list of study areas is shown at Attachment B. (Note that these courses were extracted from multiple college catalogue descriptions and may not be the same in all locations.) It is incumbent upon each employee to work closely with management to select courses that are best suited for his/her individual growth and work requirements.

Functional Skill Training is comprised of those courses generally associated with the performance of the logistics functions and directly related to them. RLI and DAU offer courses in this area. Alternatively the corporate organizations may present short (4-8 hour) course based on local needs. Such courses must be added to the RLI course catalogue to provided continuing application for all elements of the workforce.

Each supervisor and employee must define the applicable courses based on individual employee needs. Courses may be offered on-line or in residence and must be directly applicable to the employee in the specific logistics skill areas as described in Table 2.2-1 and Attachment C.

Enabler Skill Training is comprised of courses not directly associated with the direct job skill areas, but necessary to the continued growth of the employee and performance and functioning in the corporate environment. Examples are those RLI courses associated with employee relationships, financial management or ethics, as described in Table 2.2-2 and Attachment D. DAU offers similar courses but these tend to focus on the DoD environment rather than the Raytheon corporate environment.

**Table 2.2-1  
Required Continuing Education (College Credits or CEUS) Based on Level in Program and Education Level**

Education	Program Level		
	Demonstrated Logistician	Demonstrated Senior Logistician Delta/Total	Demonstrated Master Logistician Delta/Total
Doctorate	0	0	0
Masters	0	0	0
Bachelors	6	6/12	12/24
Associate	9	9/18	12/30
High School	12	12/24	12/36

Note 1: Numbers indicate cumulative college course credits or CEUs required for the recognition.

Note 2: Should an additional degree be earned between levels of designation being awarded the delta continuing educational requirements for the designation at the new degree level will be required.

**Table 2.2-2  
Required Number of Functional and Enabler Training Courses from RLI, DAU or local presentations**

Training Courses	Program Level		
	Demonstrated Logistician	Demonstrated Senior Logistician Delta/Total	Demonstrated Master Logistician Delta/Total
Functional Courses (see Attachment C)	12	6/18	6/24
Enabler Courses (see Attachment D)	10	5/15	5/20

Note: Since most RLI and DAU courses cannot be equated to the academic hours for credits they are shown as course requirements. RLI and DAU resident courses can be applied as three courses in the appropriate area for each week of resident instruction.

### 3 Process

Immediate supervisors sit down with each employee and mutually develop a plan for continued growth and development along the requirements established in this directive.

Employees complete the educational and course objectives and notify individual supervisors, Human Resources and Raytheon Learning Institute (RLI).

Supervisors and Human Resources maintain the individual employee records.

Raytheon Learning Institute maintains the employee training records for completion of the RLI and DAU courses.

At the end of the required job performance period as noted for the designation level, employees and supervisors prepare an Application for Designation (Attachment A) and submit with the required fee to SOLE for processing.

Note that employees who have amassed the service requirements for performance at higher levels of the program may enter the program at that level by submitting their first application accompanied by their CV and documentation of all continuing education and skill training as applicable. SOLE will evaluate the application and issue the highest designation that can be presented based on the evidence submitted.

SOLE Headquarters (SOLE HQ) processes the application and records the level awarded; and issues the applicable designation certificate and pin to the individual.

On receipt of the certificate from SOLE – The International Society of Logistics the individual employee forwards a copy to his/her immediate supervisor and to HR for posting in the employee record folder.

Individual may apply for reimbursement of the \$50.00 fee upon receipt of the certificate

**Attachment A  
Application for Designation**



**Raytheon**

**SOLE - The International Society of Logistics**

For Designation as (*check one*):

- Demonstrated Logistician (DL)**
- Demonstrated Senior Logistician (DSL)**
- Demonstrated Master Logistician (DML)**

Last Name \_\_\_\_\_ First Name \_\_\_\_\_ MI \_\_\_\_\_ Suffix \_\_\_\_\_

Employee Number/SSAN (*required for identification and record keeping*): \_\_\_\_\_

**Educational Level** (*level/type, e.g., BS/BA/MS/MBA/Ph.D.*):

High School \_\_\_\_\_ Associates Degree \_\_\_\_\_ Bachelors \_\_\_\_\_ Masters \_\_\_\_\_ Doctorate \_\_\_\_\_

**Employment Certification**

This is to certify that the applicant has completed the prescribed years of satisfactory employment required for the designation being sought.

Supervisor: Signature \_\_\_\_\_ Printed Name: \_\_\_\_\_

**Continuing Education**

The following courses have been completed and the transcript(s) from the issuing institution is/are attached:  
(*attach additional sheets, as necessary*)

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

The Following Functional and Enabler training courses have been completed and certificates or other forms of documentation are attached (*attach additional sheets, as necessary*):

Functional Training	Functional Training
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.
6.	6.

**I certify that the information contained in this application is true and correct:**

\_\_\_\_\_  
Applicant's Signature Date

**SOLE Headquarters Use Only**

**Date Received** \_\_\_\_\_ **Check/MO No.** \_\_\_\_\_ **Date** \_\_\_\_\_

**Credit Card No.** \_\_\_\_\_ **Expiration Date** \_\_\_\_\_

**Level Awarded** \_\_\_\_\_ **Certificate Number** \_\_\_\_\_ **Date Issued** \_\_\_\_\_

Submit the original completed application along with the required **\$50.00** processing fee in check, money order or credit card information to:

**SOLE – The International Society of Logistics**  
8100 Professional Place, Suite 111  
Hyattsville, Maryland 20785-2229  
301-459-8446 voice; 301-459-1522 fax

**Attachment B**  
**Typical Educational Areas Appropriate to Logistics Designation Programs**

<i>Systems Management</i>	<i>Systems Development and Design</i>	<i>Acquisition and Product Support</i>	<i>Distribution and Customer Support</i>
Cost Accounting	Preliminary and Detailed Design Activities	Logistics Support Analysis and LSAR	Physical Supply and Distribution
Operations Research and Systems Analysis	Conceptual Design	Provisioning	Materials Requirements Planning
Contingency Planning	Reliability Engineering	Parts Control and Standardization	Packaging
Sensitivity Analysis	Maintainability Engineering	Procurement	Transportation
Risk and Uncertainty Determinations	Logistics Research	Contracts and Warranties	Traffic Administration
Financial Management	Computer Aided Acquisition and Logistics Support	Production Support	Warehousing and Storage
Human Resource Management	Computer Technology	Production Requirements	
Life Cycle Cost	Human Factors and Safety Engineering	Production Planning	International Commerce and Shipping
Time Value of Money	Statistical Analysis	Production Engineering	Training and Education
Return on Investment	Civil Engineering	Production Management	
Payback and Break-even Analysis	Functional Testing	Production Analysis	
Management Information Systems	User Test and Evaluation	Plant Engineering	Systems and Equipment Phase-out
Logistics Planning and Management		Manufacturing Engineering	Environmental Science
Proposal Development		Estimating	Purchasing and Procurement
Contract Negotiations		Methods Engineering	Material Flow
Principles of Program Leadership		Production Control	Inventory Control
		Quality Assurance	Reverse Logistics
		Quality Control	Customer Service
		Queuing Analysis	Order Processing
		Materials Requirements Planning and Analysis	Supply Chain Management
			Logistics Organizations

## Attachment C Functional Training Areas

### Program Management and Performance Based Logistics

- ILS Planning
- Risk Management
- Developing Short and Long Term Support Concepts
- Developing Integrated Supply Concepts
- Performance Based Logistics During Acquisition
- Performance Based Logistics During Sustainment
- Retirement and Recycling

### Logistics Systems Engineering

- Develop Support Concepts
- Provide Design Influence for Supportability
- Design Support System
- Perform Task and Skills Analysis
  - Identify manpower and personnel requirements
  - Identify Tools and Support Equipment Identification
  - Computer Resource Definition
- Spares and Level of Repair Analysis
- Perform FMEA/FMECA
- Perform RCM Analysis
- Maintain FRACAS data
- Develop and Implement Warranty program
- Maintain Configuration Management Data Base
- Obsolescence Management (COTS insertion)
- Qualification Testing

### Life Cycle Costing

- Life Cycle Modeling
- Compute Total Ownership Costs
- Model Costs as an Independent Variable
- Optimize Total Ownership Costs

### Provisioning

- Provisioning Planning
- Provisioning Data Requirements
- Provisioning Technical Documentation
- Spares Calculations
- Running/Supporting Provisioning Conferences
- Replenishment
- Unprocurable Parts

### Reliability

- Reliability Planning and Allocation
  - Selection of Figures of Merit
- Reliability Centered Maintenance Analysis

- Failure Modes and Effects (Criticality) Analysis
- Reliability Modeling Techniques
  - Hardware Reliability
  - Software Reliability
  - Electronic Circuits

### Maintainability

- Maintainability Planning and Allocations
  - Selection of Figures of Merit
- Maintainability Demonstrations
- Testing Maintainability Criterion

### Training

- Training Program Planning
- Course Development
  - Task Allocations
    - ◆ Prerequisite Skill Development
      - ◇ Classroom and Hands On
    - ◆ Post Schoolhouse OJT
    - ◆ SOJT
  - Methods of Instruction
    - ◆ Classroom
    - ◆ Hands On
    - ◆ Remote Interactive
    - ◆ CBT
    - ◆ On Line
- Training Technical Documentation

### Technical Data

- Technical Data Elements
- Technical Publications Planning
- Technical Publications Development
  - On Line
  - Hard Copy
  - Integrated
  - Interactive Electronic Technical Manuals

- Technical Writing

### Human Factors

- Ergonomics
- Sensory Factors
- Physiological Considerations
- Anthropomorphic Design Impacts

### Safety

- System Safety Programs
- Equipment Safety
- Operator/Maintainer Safety

### Quality

- Manufacturing Quality Process
- Use of Six Sigma Techniques
- Lean Process Improvements

## Supply Chain

- Planning
- Forecasting
- Source Selection
- Make / Buy Decision Making
- Delivery and Stock Operations
  - Transportation and Routing
  - Packaging
  - Warehousing
  - Data Reporting

## Engineering Technical Services

### Environmental Engineering

**Attachment D**  
**Enabler Training Areas**

Personnel Selection and Training  
Personnel Management Techniques and Tools  
Integrated Engineering and Product Development  
Earned Value Management  
New Business Development – Proposals  
DoD Operations  
Budget Process and “Colors” of Money  
Partnerships (Teaming & Public-Private)  
FAR/DFARS & Congressional Statutes  
Acquisition Reform  
Subcontracting  
Internal  
External  
Risk Management  
Mathematics for Decision Making  
Statistical Mathematics  
Financial Analysis  
LSA Tools and Techniques (Eagle – MIMS, etc.)  
CM/DM Tools  
Office Tools  
Presentation Skills