
LSI P-3 FMS Training Support Catalog

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Table of Contents

1.0	Corporate Introduction.....	1
1.1	About LSI	1
2.0	LSI’s Curriculum Development Process.....	3
3.0	LSI Developed Instructor-Led and Self-Paced Curriculum for P-3 FMS.....	4
4.0	Publications Support	7
5.0	LSI Past Performance.....	7

List of Figures

Figure 1.	LSI’s Corporate Headquarters	2
Figure 2.	LSI location Cecil Airport, Florida.....	2
Figure 3.	LSI’s Taiwan P-3 Training Team.....	8

LSI P-3 Foreign Military Sales (FMS) Training Support Catalog

1.0 Corporate Introduction

Logistic Services International (LSI) is pleased to provide our customers with a response to the several inquiries obtained for a P-3 FMS Training Support Catalog. LSI has the proven experience, documented past performance, export compliance process, and technical capabilities that are directly aligned with the requirements specified by the International Operators of the P-3 Aircraft worldwide.

Initially established in 1978 to meet the aviation training and support needs of foreign militaries operating U.S. Navy aircraft and systems, LSI has developed an enviable reputation for innovation, responsiveness, and reliability among a customer base that includes the U.S. DoD, Department of Homeland Security (DHS), and numerous international militaries. Our technical and management processes have been developed and refined over those years of business providing training solutions, part-task trainers, desktop simulations, complementary Curriculum, instructor services, and technical documents. LSI provides support to meet Government services requirements for numerous military academic courses to include courses actively supporting Building Partner Capacity (BPC). LSI has completed numerous high risk Foreign Military Sales (FMS) training evolutions as evidenced in sections 2-4 below. LSI's unique experience in FMS, foreign military training, allocation of excess defense articles to foreign countries, technology transfer, as well as direct commercial sales provides the USG with a "go to" vendor in supporting Security Cooperation and for the professional execution of the BPC and mission.

1.1 About LSI

LSI is a privately-held, employee-owned training company incorporated in the state of Florida as a Sub-Chapter S Corporation. LSI's Corporate Headquarters (Figure 1) is in Jacksonville, FL at Cecil Airport (Figure 2) and primary training device production facilities are in Pensacola, FL, with satellite offices in Virginia and California. LSI's management and production processes are certified under the International Organization for Standardization ISO 9001:2008. LSI has earned an enviable reputation for training innovation, responsiveness, and reliability providing a full range of training services among a customer base that includes the DoD, numerous foreign militaries and some of the largest defense companies in the United States. LSI has been one of the premier training companies for the U.S. Army, U.S. Navy/Marine Corps, the U.S. Coast Guard and partner nations. LSI's training products span the spectrum ranging from training analysis services, web-based Curriculum, desktop simulations, part task trainers, virtual environment training applications, electronic classrooms, instructor services and other training related services including technical data support. Our training devices are developed to fully conform to IEEE Standard 12207-2008.

As one of the US Department of Defense's prime contractors for training and support, LSI has conducted a number of successful training programs under FMS agreements. Specifically, LSI has provided in-country training support to Argentina, Egypt, Germany, Greece, Norway, Pakistan, Portugal, Republic of Korea, Kingdom of Saudi Arabia, and Taiwan. This training support

includes site surveys, training plans, curriculum development, simulator manufacturing, electronic classroom installation, as well as podium, field and in-flight instructor services.

Our corporate facilities, located on the former NAS Cecil Field with runway access, features a fully-integrated communications system with all workstations and offices linked by a high-speed data network for data sharing by all employees LSI facilities are equipped with state-of-the-art environmental control/energy conservation devices, as well as an automatically monitored and electronically controlled personnel access system.



Figure 1. LSI's Corporate Headquarters



Figure 2. LSI location Cecil Airport, Florida

LSI Training Support Catalog:

LSI has substantial experience operating in numerous foreign environments around the globe. LSI is the premier provider of U.S. Navy P-3 Orion training and has been the leader in P-3 Foreign Military Sales (FMS) Training support for the past 20 years. *LSI has successfully completed FMS P-3 training support programs for the following FMS customers:*

- Taiwan (2010-2015)
- Portugal (2008-2010)
- Germany (2008-2009)
- Pakistan (2006-2012)
- Netherlands (2002-2005)
- Argentina (1998)
- Norway (1997-Ongoing)
- Greece (1996-1997) / (2016-TBD)
- Thailand (1995-1996) / (2010)
- Republic of Korea (1995-1997)

LSI's Team of instructional professionals specialize in providing quality full spectrum P-3 training support which includes:

- P-3 Curriculum Development
- Electronic Classroom Design and Assembly
- Classroom Instruction
- Practical Job Training (PJT)
- Flight Simulator Training
- Flight Training
- Maintenance Part-Task Training
- Mission Systems Training
- Flight and Maintenance Manuals
- Mobile Training Teams (MTT)

2.0 LSI's Curriculum Development Process

LSI would develop or revise training curriculum pertaining to the fundamentals necessary for safe operation of the P-3 aircraft. Training curriculum for varying models and configurations of the aircraft will be developed per the individual customers' requirements on a customized basis.

For efforts associated with the development of Computer Assisted Instruction (CAI), LSI utilizes three specific production models of relative decreasing production time - New Development, Complex Revision, and Basic Revision. The "New Development" production model is appropriate for a new aircraft system or significant changes to existing systems for which training materials have never previously been developed. The "Complex Revision" model is germane to those production efforts in which some form of training already exists, but extensive modifications are required to the available training for art work, verbiage, lesson plans, training guides, etc. The "Basic Revision" model is appropriate for CAI modifications to previously

existing training materials in which there are minimal changes required for art work, verbiage, etc., a model under which most previously developed P-3 training curriculum would fall.

3.0 **LSI Developed Instructor-Led CAI and Self-Paced Interactive Curriculum for P-3 FMS**

LSI has developed instructor-led computer assisted instruction (CAI) for the following P-3 Courses:

- **Basic P-3 Flight Crew and Maintenance Training curricula for:**
 - Pilot
 - Flight Engineer
 - Tactical Coordinator
 - Navigator/Communicator
 - Sensor Station 1 & 2
 - Sensor Station 3
 - In-Flight Technician
 - Power Plants Technician
 - Structural/Hydraulics Technician
 - Environmental Systems Technician
 - Survival Equipment Technician
 - Avionics Technician
 - Electrical/Instruments Technician
 - Armament/Ordnance Technician
- **Advanced P-3 Flight Crew and Maintenance Personnel Qualification Standard (PQS) for:**
 - All Flight Crew positions
 - All O-Level maintenance technicians
- **Instructor P-3 Flight Crew Training curricula for:**
 - Instructor Pilot
 - Instructor Flight Engineer
 - Instructor Tactical Coordinator
 - Instructor Navigator/Communicator
 - Instructor Sensor Station 1 & 2
 - Instructor Sensor Station 3
 - Instructor In-Flight Technician
- **Prerequisite P-3 Training curricula for:**
 - P-3 Flight Engineer System Familiarization

- P-3 NFO Primary and Fundamental Navigation

LSI has also developed P-3 Self-Paced Interactive Curriculum for the following P-3 positions and systems:

- **P-3 Pilot Training**
 - Digital Autopilot System
 - AFCS Autopilot System
 - V/UHF Radio System
 - P-3 Virtual Tour
 - P-3 Basic Aircraft Systems Introduction
 - P-3 T-56 Engine System
 - P-3 Fuel Systems
 - P-3 Electrical System
 - P-3 Air Conditioning/Pressurization System
 - P-3 Foul Weather Systems
 - P-3 Hydraulic System
 - P-3 Propeller System
 - P-3 Performance Tables
 - P-3 Weight and Balance Tables
 - Transponder
 - P-3 Electronic Flight Display System
 - Electronic Warfare System
- **P-3 Flight Engineer Training**
 - P-3 Virtual Tour
 - P-3 Basic Aircraft Systems Introduction
 - P-3 T-56 Engine System
 - P-3 Fuel Systems
 - P-3 Electrical System
 - P-3 Air Conditioning/Pressurization System
 - P-3 Foul Weather Systems
 - P-3 Hydraulic System
 - P-3 Propeller System
 - P-3 Performance Tables
 - P-3 Weight and Balance Tables
- **P-3 NFO Training**
 - P-3 Tactical Common Data Link
 - V/UHF Radio System

- V/UHF Radio System
- P-3 Missile System
- P-3 Virtual Tour
- P-3 Data Management System
- P-3 Tactical Mission Software
- P-3 Navigation System
- NFO Primary and Fundamental Navigation
- (Using P-3 Navigation Desktop Simulator)
- Dual Inertial Navigation System
- P-3 Electronic Flight Display System
- P-3 Communication Systems
- P-3 ICS
- P-3 Secure Communications Subsystems
- P-3 Data Link System
- Electronic Warfare System
- **P-3 Acoustic Operator Training**
 - P-3 Virtual Tour
 - Acoustic Processor System
- **P-3 Non-Acoustic Operator Training**
 - EO/IR System
 - Radar System
 - ESM System
 - P-3 Virtual Tour
 - IFF Interrogator
 - MAD System
 - P-3 Virtual Tour
- **P-3 Ordnance Training**
 - P-3 Missile System
 - Electronic Warfare System

4.0 Publications Support

The LSI Publications Department has developed customized operator and maintenance publications for P-3 aircraft for the last 30 years. Based on the individual operator's requirements and equipment, these manuals are supplements (or standalone if required) to the common US Navy P-3 technical manuals including the fourteen (14) Crew Station Maintenance Manuals, seven (7) Maintenance Instruction Manuals, seven (7) Wiring Data Manuals, and ten (10) Illustrated Parts Breakdown Manuals. In addition, LSI can provide Software Reference Manuals, In-Flight Handbooks, Maintenance Requirement Cards, Connector Repair Manuals, and various common Airframe and Power Plant Manuals. The NATOPS series of manuals is based on the latest version of the US Navy PAG NATOPS. This includes the Flight Station, Mission Systems, Functional Check Flight Checklist, Combined Card Checklist, and Ditching and Bailout Placards.

5.0 LSI Past Performance

LSI has an abundance of experience operating in numerous foreign environments around the globe. LSI is the premier provider of U.S. Navy P-3 Orion training and has been the leader in P-3C Foreign Military Sales (FMS) Training for the past 20 years. LSI has successfully completed FMS P-3C training programs for the following FMS customers:

- Taiwan (2010-2015)
- Portugal (2008-2010)
- Germany (2008-2009)
- Pakistan (2006-2012)
- Netherlands (2002-2005)
- Argentina (1998)
- Norway (1997-Ongoing)
- Greece (1996-1997) / (2016-TBD)
- Thailand (1995-1996) / (2010)
- Republic of Korea (1995-1997)

LSI's Team of highly motivated instructional professionals specialize in providing quality full spectrum P-3C training which includes:

- P-3C Curriculum Development
- Electronic Classroom Design and Assembly
- Classroom Instruction
- Practical Job Training (PJT)
- Flight Simulator Training
- Flight Training
- Maintenance Part-Task Training
- Mission Systems Training
- Flight and Maintenance Manuals
- Mobile Training Teams (MTT)

A recent example of the type of quality training LSI provides is evidenced specifically, in support of the Taiwan Air Force (TAF) and Taiwan Navy (TN) P-3 Program under a Naval Aviation

Warfare Center FMS contract, upon completion of the Basic Phase of training for TAF/TN Aircrews 1 through 4 at Naval Air Station Jacksonville, Florida. The program transitioned outside of the continental United States (OCONUS) to Pingtung Airbase in Taiwan. LSI conducted a complete ground up build of the TAF/TN P-3 maintenance and aircrew training program.

LSI provided thirty-four Naval Aviation Maintenance Program (NAMP), Government Flight Representative (GFR), and Government Ground Flight Representative (GGFR) qualified maintenance instructors and maintenance support personnel in order to maintain four Taiwan P-3 aircraft. Utilizing those aircraft as well as curriculum developed utilizing the above referenced process, LSI delivered a Cadre Course of Instruction (COI) for both Organizational (“O”) and Intermediate (“I”) level P-3 Aviation Maintenance across the following rates; Aviation Power Plants Technician (AD), Aviation Structural/Hydraulics Mechanic (AM), Aviation Environmental Systems Technician (AME), Aviation Survival Equipment Technician (PR), Aviation Electronics Technician (AT), Aviation Electrical/Instruments Technician (AE), Aviation Armament/Ordnance Technician (AO). The COI included both practical job training (PJT) and on the job training (OJT) as well as personnel qualification standards (PQS) ultimately leading to positional qualification in the respective rate. Upon completion of the training program, the TAF maintenance personnel accepted and maintained the follow-on delivered aircraft for operational use.

LSI also provided twenty-three Naval Aviation Training and Operating Procedures Standardization NATOPS/GFR/GGFR qualified aircrew instructors while delivering a COI for Advanced Positional Pilot, Naval Flight Officer (NFO), Acoustic and Non-acoustic Warfare Officer (AWO), and In-flight Technician (IFT) P-3 operator flight training for four TAF aircrews (Aircrews 1 through 4). Additionally, they conducted an Instructor Under Training (IUT) COI for two of those four aircrews. LSI then provided sixteen NATOPS/GFR/GGFR qualified aircrew instructors augmented by the TAF/TN aircrew instructors in order to conduct both a Basic and Advanced Positional Pilot, NFO, AWO, and IFT P-3C operator flight training COI for four additional TAF/TN aircrews (Aircrews 5 through 8).

During the OCONUS portion of training LSI maintained four TAF P-3 Orion training aircraft. These aircraft were maintained at a 91% sortie completion rate. LSI flew over 300 sorties and over 1100 flight hours. To date, LSI has flown over 4500 mishap free flight hours of P-3C Orion training across all international programs.

LSI certified instructors provided all aspects of stand-up instruction as well as performance monitoring during all phases of training including device sessions on the ground and in-flight training. Additionally, all course material was monitored and updated by LSI instructors as changes were identified.

LSI knows how to deploy numerous employees to foreign areas and complete the mission on time and under budget. LSI employs Program Managers who have planned and organized multiple active duty tours/deployments overseas.

LSI is familiar with the many special requirements associated with FMS work. Phasing in employees involves numerous administrative pre-deployment requirements. LSI employs a full time facility security officer in order to screen and provide timely and accurate security documentation for contractor personnel. All LSI employees comply with the applicable partner nation general protection/security policies and procedures and in the Taiwan example provided all

required information to gain base access badges at Pingtung Airbase. LSI employees deploying to Taiwan were required to conduct Information Assurance Training, Anti-Terrorism Awareness Training, Advanced SERE Training, OPSEC Training, Annual Threat Awareness and Classified Material Handling Training. They met all Combatant Commander (COCOM) required travel requirements, and liberty policy restrictions. LSI is familiar with the Foreign Clearance Guide and has utilized the Synchronized Pre-deployment and Operational Tracker (SPOT).

LSI demonstrated its competence in full spectrum contract management as evidenced by their multiple exceptional contractor performance (CPRS) ratings for both quality and management throughout the Taiwan contract. LSI is dedicated to maintaining sustained lines of communication with both the contracting officer's representative (COR) and customer technical point of contact (TPOC). LSI assisted in the development of task order Performance Work Statements, coordinated all Kick-Off Meetings (KOM's), in progress reviews (IPR's), and contract administration requirements flawlessly. They executed this high risk, high visibility, training program on time and under budget. LSI was able to de-obligate 5.5 million dollars back to the contract due to cost efficiencies they created.

