L3HARRIS™
FAST. FORWARD.
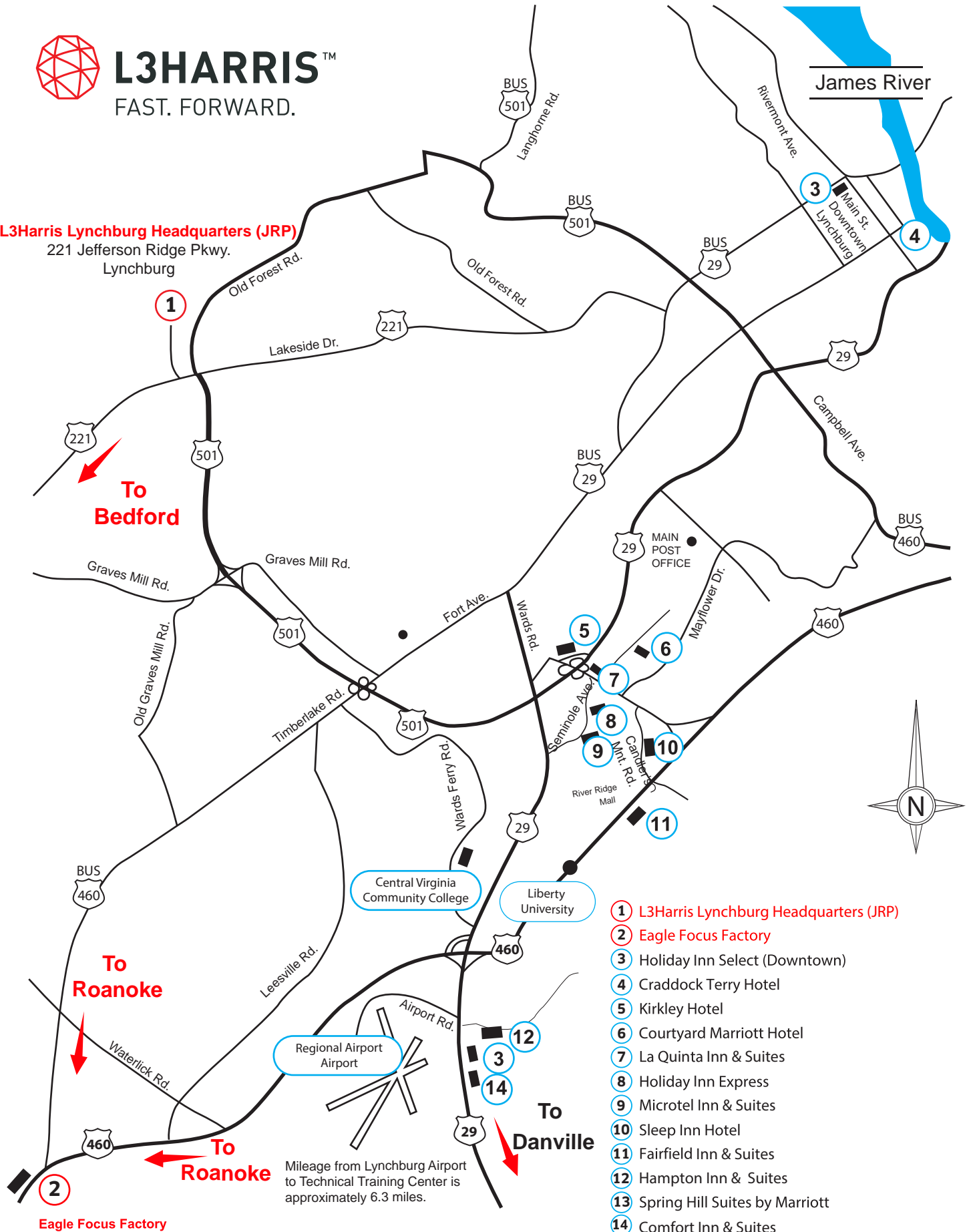
2021 TECHNICAL
TRAINING CATALOG

L3HARRIS™
FAST. FORWARD.

James River

BUS 501
Langhorne Rd.
BUS 501
BUS 29

L3Harris Lynchburg Headquarters (JRP)
221 Jefferson Ridge Pkwy.
Lynchburg

①

Old Forest Rd.
Old Forest Rd.
221
Lakeside Dr.
③ Main St. Downtown Lynchburg
④
29
Campbell Ave.

221
501
To Bedford

Rivermont Ave.

BUS 460

Graves Mill Rd.
Graves Mill Rd.
BUS 29
29 MAIN POST OFFICE
460
Old Graves Mill Rd.
501
Fort Ave.
Wards Rd.
Mayflower Dr.
⑤
⑥
⑦
Seminole Ave.
⑧
⑨
⑩
Candlers Mtn. Rd.
River Ridge Mall
⑪

Timberlake Rd.
501

Wards Ferry Rd.

BUS 460
To Roanoke
Leesville Rd.
29
Central Virginia Community College
Liberty University
460

Waterlick Rd.
Airport Rd.
Regional Airport Airport
⑫
③
⑭
To Danville

460
To Roanoke
29

Mileage from Lynchburg Airport to Technical Training Center is approximately 6.3 miles.

N

① **L3Harris Lynchburg Headquarters (JRP)**
② **Eagle Focus Factory**
③ Holiday Inn Select (Downtown)
④ Craddock Terry Hotel
⑤ Kirkley Hotel
⑥ Courtyard Marriott Hotel
⑦ La Quinta Inn & Suites
⑧ Holiday Inn Express
⑨ Microtel Inn & Suites
⑩ Sleep Inn Hotel
⑪ Fairfield Inn & Suites
⑫ Hampton Inn & Suites
⑬ Spring Hill Suites by Marriott
⑭ Comfort Inn & Suites

②
Eagle Focus Factory

TRAINING DEPARTMENT MISSION

To deliver high-quality, performance-based training that gives our customers the knowledge and skills to effectively operate, manage and self-maintain their Harris communications network.

L3HARRIS™

FAST. FORWARD.

2021 TECHNICAL TRAINING CATALOG

Table of Contents

L3HARRIS

Table of Contents (continued)

L3HARRIS

Table of Contents (continued)

L3HARRIS

Introduction

Mission Statement	Our mission is to deliver high-quality, performance-based training that gives our customers the knowledge and skills to effectively operate, manage, and self-maintain their L3Harris communications network.
What's New in 2021	Starting in 2021, the P25 system maintenance technician training program will use a blended learning approach comprised of virtual and traditional classroom training and asynchronous training similar to what we implemented for P25 system administrators and managers in 2019.

Virtual classroom training is live, instructor-led training over the Internet. It is ideal for transferring knowledge and provides a cost savings by eliminating travel and living expenses for the instructor or students. Additionally, we limit each virtual classroom session to only four hours per day allowing participants to perform their normal job duties during the remainder of the day.

Traditional classroom training is live, face-to-face, instructor-led training used to perform hands-on instruction. This training is attended at the L3Harris Technical Training Center in Lynchburg, Virginia or conducted on site, as appropriate.

Asynchronous training is self-paced, web-based training hosted by L3Harris Technical University. It provides refresher training on assorted subjects and provides an on-the-job training aid to assist maintenance technicians in performing their day-to-day duties.

The blended learning approach for maintenance technicians was successfully piloted for select customers in 2020 as a direct response to the COVID-19 pandemic, and is now part of the new normal.

Purpose	This catalog is designed to provide you with information about our training services and to help you select the appropriate course of instruction for operating, managing, and maintaining your radio system. A brief description of each course is provided along with flowcharts that illustrate the recommended sequence of courses for management and maintenance training. Additionally, information is provided about L3Harris Technical University, our web-based training offering. A Training Registration Form and the 2021 Training Center Schedule are also included.

L3HARRIS

Introduction (continued)

Customer Satisfaction	It is very important to the Training Team that our services meet and exceed customer expectations. To measure our performance, students complete a Class Evaluation Form after every training course. We are very proud of the fact that for greater than a decade our customer satisfaction rating has either met or exceeded our goal.
Technical Training Center	The L3Harris Technical Training Center is located at 221 Jefferson Ridge Parkway in Lynchburg, Virginia. The facility includes multiple radio systems dedicated to training, as well as well-equipped classrooms and laboratories to support hands-on training.

Training Methodology	To provide high-quality performance-based training, we develop and maintain our training courses using a systematic approach. This methodology identifies the training necessary for each job position and focuses on the performance of tasks. We design and develop training courses with explicit learning objectives and appropriate content. Training effectiveness is evaluated and the results are used to maintain and improve our training programs.
	The systematic approach to training methodology also ensures that training is delivered in the most effective learning environment, such as traditional or virtual classroom or laboratory, and a proper mixture of discussion, lecture, and hands-on training are used to provide optimal learning. In addition, we create easy-to-follow student materials that support the training and provide appropriate technical documentation.

L3HARRIS

Introduction (continued)

On-Site Training

In addition to the regularly scheduled open-enrollment virtual and traditional classroom courses attended at the Technical Training Center, most of the courses offered in this catalog can be conducted on site. If conducted on-site, the customer must provide the facility and any tools and equipment needed to support the hands-on portion of the training.

On-site training prices can be found starting on page 39 of this catalog and are scheduled on mutually agreeable dates by the customer and L3Harris Training Manager.

More Information

For more information about our training programs, contact the Training Registrar or the Training Manager by e-mail at pspc_training@L3Harris.com or call 1-800-528-7711 (option #1).

Student Feedback

"Amazing instructor and has limitless knowledge. Answered all questions and concerns."

L3HARRIS

P25 System Management Training

Overview

P25 system administrators and managers have overall responsibility for defining and maintaining the system's configurable parameters. This role has evolved as radio systems have become larger and more complex. Their responsibilities include the following:

- Defining the fleet map
- Defining wide-area roaming capabilities
- Planning radio feature usage and personalities
- Configuring dispatch consoles
- Maintaining unit and group databases
- Enabling and disabling subscriber units
- Generating reports
- Monitoring system performance

Student Feedback

"The instructor was extremely helpful in clearly explaining a very complicated system. Great trainer who kept the class engaged."

L3HARRIS

P25 System Management Training (continued)

P25 System
Management Training
Program

The following flowchart illustrates the P25 system administrator and manager training program, and the recommended sequence of completing the training, as applicable, through traditional (live, face-to-face, instructor-led training) and virtual (live, instructor-led training over the Internet) classroom instruction.

Traditional Classroom Training	Virtual Classroom Training
P25 Fleet Mapping Workshop (MAYT-BSN6A) *	P25 System Overview (YTSN4F-A)
Console Configuration (YTSN3H-B) *	Unified Administration System (YTSN4G-A)
P25 System Implementation Workshop (YTSN9N-A) **	Regional Network Manager (YTSN4H-A)
Over-The-Air Rekeying (MAYT-BSN6C) *	
ISSI Configuration & Administration (YTSN9L-B) *	
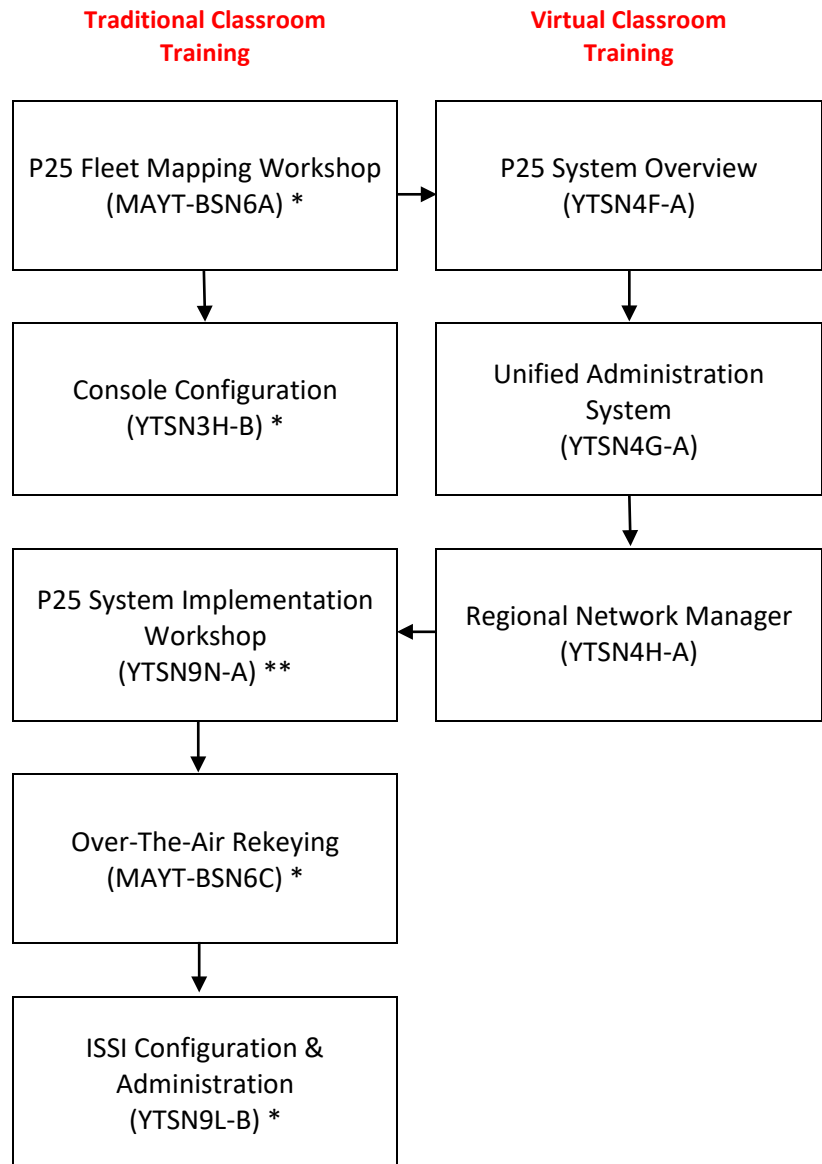
*   This course is only conducted on-site at a customer facility.

**   This course is only conducted at the L3Harris Technical Training Center. The student is responsible for his/her travel and living expenses.

L3HARRIS

P25 System Management Training (continued)

P25 System
Management
Asynchronous Training
Package

In addition to the recommended virtual and traditional classroom training, L3Harris highly recommends P25 system administrators and managers purchase the P25 System Management Asynchronous Training Package, which consists of the following training modules:

- P25 Fleet Mapping Overview
- XL-200P Radio Operation
- Symphony Console Operation
- Radio Programming Overview
- Radio Personality Manager (RPM and RPM 2)
- Advanced Access Control (AAC)
- Unified Administration System (UAS) Overview
- UAS "How to…"
- Regional Network Manager (RNM) Overview
- Active Directory
- Activity Warehouse
- Enterprise Network Manager (ENM) Overview
- Over-The-Air Programming (OTAP)
- Over-The-Air Rekeying (OTAR) Fundamentals
- OTAR "How to…"
- Inter-RF Subsystem Interface (ISSI) Fundamentals

These training modules provide P25 system administrators and managers with supplemental training to optimize learning and provide an on-the-job training aid. Unlimited access to the training package is provided for one year. Additional self-paced training modules are added to the asynchronous training program, as developed, at no additional cost if you have an active account. The account can be renewed annually.

Bundled P25 System
Manager Training
Program (MAYT-ASN8L)

A person must complete multiple training courses to develop the required knowledge and skills to effectively perform day-to-day system management tasks. Attending training requires a time commitment by the employee and a financial commitment by the employer. Therefore, L3Harris offers a discount to reward our customers who are committed to training their personnel and makes it more affordable for people to complete a series of training activities to meet their responsibilities.

L3HARRIS

P25 System Management Training (continued)

Bundled P25 System Manager Training Program (continued)

The bundled P25 System Manager Training Program consists of one seat in the following blended learning program:

- P25 System Overview (virtual classroom)

- Unified Administration System (virtual classroom)

- Regional Network Manager (virtual classroom)

- P25 System Implementation Workshop (traditional classroom)

- One year of unlimited access to the P25 System Management Asynchronous Training Package

The total tuition if these courses are purchased individually is $8,250.00. However, with this package you only pay $7,000.00 for a savings of $1,250.00.

The bundled P25 System Manager Training Program must be paid in full prior to attending the first course. Courses must be attended by the same student and must be attended within one year of purchase. The program price is not valid with any other discounts and is not retroactive.

P25 Fleet Mapping Workshop (MAYT-BSN6A)

This on-site workshop assists new customers in defining the system fleet map and planning radio personalities. The workshop begins with an abbreviated overview of the P25 system that focuses on system design and operation so that participants can make informed decisions about the fleet map. The workshop explores advantages of different talk group structures and configuration parameters (e.g., property classes, priority levels, etc.) associated with talk groups and radio users. We include discussion of other configuration options such as announcement groups and the workshop will also ensure definition of interoperability talk groups.

Did you know?

The transition to a P25 trunked radio system is facilitated by the energy and effort put into system planning during the P25 Fleet Mapping Workshop.

L3HARRIS

P25 System Management Training (continued)

Console Configuration (YTSN3H-B)

This on-site course provides system administrators and managers and dispatch supervisors with the knowledge and skills to configure the Symphony Dispatch Console to meet operational needs. The training includes a detailed operational overview that introduces participants to the various features and capabilities of the console. Participants will work within the Configuration Utility to explore the various settings and how these settings impact the operation of the console. With an understanding of the Configuration Utility settings, participants will have the requisite knowledge to define the parameters that best suit their operational needs.

P25 System Overview (YTSN4F-A)

This virtual classroom course provides system administrators and managers with an understanding of terminology, equipment, components, and operational processes associated with the P25 system. Topics include RF communication basics, VIDA network and site equipment, call processing, wide-area coverage solutions, interoperability, and much more. This course provides prerequisite knowledge for system management application training on the Unified Administration System and Regional Network Manager.

Unified Administration System (YTSN4G-A)

This virtual classroom course provides system administrators and managers with the knowledge to create and maintain system databases using the Unified Administration System (UAS). Course topics include logging into the UAS, establishing user accounts, navigating through the user interface, creating and changing parameter values, and adding/deleting radio users and talk groups.

The *P25 System Overview* (YTSN4F-A) virtual classroom course is a required prerequisite. Prior completion of the following asynchronous training courses is highly recommended: *P25 Fleet Mapping Overview*, *Unified Administration System (UAS) Overview*, and *Active Directory*.

Student Feedback

"Very good class. Instructor was challenging and knowledgeable. Highly recommend."

L3HARRIS

P25 System Management Training (continued)

Regional Network Manager (YTSN4H-A)	This virtual classroom course provides system administrators and managers with the knowledge to monitor and manage the P25 system using the Regional Network Manager (RNM). Course topics include system access, monitoring the status of system equipment, identification and acknowledgement of system faults, historical views of system performance, and exploring real-time viewers.

The *P25 System Overview* (YTSN4F) virtual classroom course is a required prerequisite. Prior completion of the following asynchronous training courses is highly recommended: *Regional Network Manager (RNM) Overview* and *Active Directory*.

P25 System Implementation Workshop (YTSN9N-A)	This hands-on workshop allows participants to implement the knowledge acquired during prerequisite virtual classroom and asynchronous training. The workshop includes structured hands-on exercises on the Unified Administration System (UAS), Regional Network Manager (RNM), and radio programming.

Participants are divided into teams to plan, implement, and operate the Training Center's P25 radio system based on the communication requirements of an imaginary town. Activities include defining a fleet map, planning radio personalities, establishing UAS databases, configuring dispatch consoles, programming radios, and operating the system.

Since this workshop is primarily hands-on and builds upon previously acquired knowledge, it is important for students to meet the prerequisites for optimal learning and to gain the most benefit from this course.

The *P25 System Overview* (YTSN4F-A), *Unified Administration System* (YTSN4G-A) and *Regional Network Manager* (YTSN4H-A) virtual classroom courses are required prerequisites. Additionally, prior completion of the following asynchronous training modules is highly recommended:

- Radio Programming Overview
- Radio Personality Manager 2 (RPM 2)
- Advanced Access Control (AAC)
- Symphony Dispatch Console Operation
- XL-200P Radio Operation

L3HARRIS

P25 System Management Training (continued)

Over-The-Air Rekeying (MAYT-BSN6C)

This on-site course provides system administrators and managers with the knowledge and skills to manage encryption keys using the Key Management Facility (KMF) product in a P25 network. This includes defining Crypto Officer Administration classes and user privileges; managing Crypto Officer user accounts; configuring crypto nets; and rekeying talk groups, users and system keys using the Unified Administration System (UAS).

The *P25 System Overview* (YTSN4F-A) and *Unified Administration System* (YTSN4G-A) virtual classroom courses are recommended prerequisites.

ISSI Configuration & Administration (YTSN9L-B)

This on-site course provides system administrators and managers with the knowledge and skills to configure and implement the Inter-RF Subsystem Interface (ISSI) using the Unified Administration System (UAS). Course topics include configuring the UAS for local and foreign ISSI gateways, creating an ISSI Region, establishing System Assigned ID (SAID) ranges for foreign talk groups and users, determining shared users and talk groups available to foreign systems, and creating foreign user permission templates.

The *P25 System Overview* (YTSN4F-A) and *Unified Administration System* (YTSN4G-A) virtual classroom courses are recommended prerequisites.

Student Feedback

"The instructor was clear, knowledgeable and concise. I wish I would have had this training sooner. I would highly recommend the instructor and class to my peers and anyone else looking to understand the system."
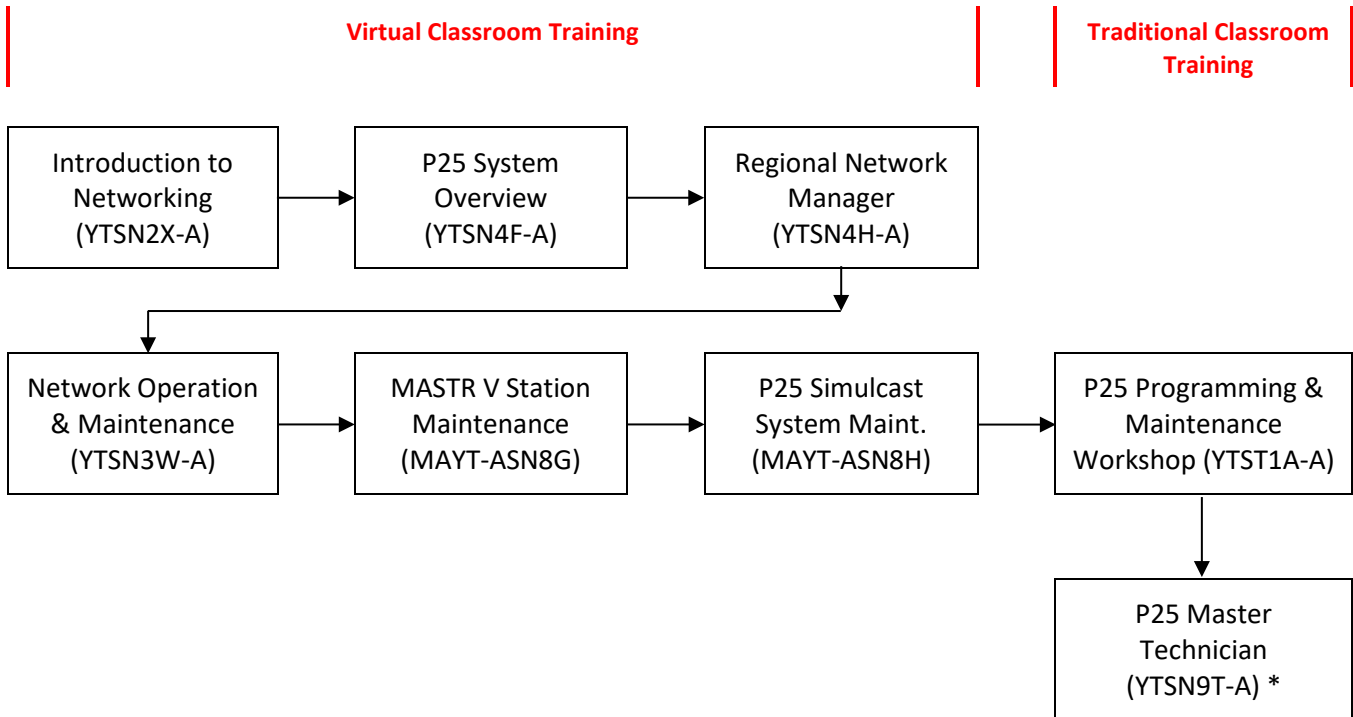
P25 System Maintenance Training

Overview

A P25 system maintenance technician must be familiar with all aspects of system operation and maintenance. This includes both site equipment and the VIDA IP network. System maintenance training provides technicians with the knowledge and skills needed to conduct preventive maintenance, troubleshoot problems, and take corrective action.

P25 System Maintenance Training Flowchart

The following flowchart illustrates the P25 system maintenance technician training program, and the recommended sequence of completing the training, as applicable, through virtual (live, instructor-led training over the Internet) and traditional (live, face-to-face, instructor-led training) classroom instruction.

Virtual Classroom Training   **Traditional Classroom Training**

```
Introduction to        P25 System          Regional Network
Networking     ──▶     Overview     ──▶    Manager
(YTSN2X-A)             (YTSN4F-A)           (YTSN4H-A)
                                                  │
        ┌─────────────────────────────────────────┘
        ▼
Network Operation      MASTR V Station      P25 Simulcast        P25 Programming &
& Maintenance   ──▶    Maintenance   ──▶    System Maint.  ──▶   Maintenance
(YTSN3W-A)             (MAYT-ASN8G)         (MAYT-ASN8H)         Workshop (YTST1A-A)
                                                                         │
                                                                         ▼
                                                                 P25 Master
                                                                 Technician
                                                                 (YTSN9T-A) *
```

*   This course is only conducted at the L3Harris Technical Training Center. The student is responsible for his/her travel and living expenses.

L3HARRIS

P25 System Maintenance Training (continued)

P25 System
Maintenance
Asynchronous Training
Package

In addition to the recommended virtual and traditional classroom training, L3Harris highly recommends P25 system maintenance technicians purchase the P25 System Maintenance Asynchronous Training Package, which includes all of the training modules in the P25 System Management Asynchronous Training Package plus the following:

- MASTR V Station Traffic Controller Field Replacement Procedure
- MASTR V Station Baseband Module Field Replacement Procedure
- P25 Miniature Mobility Exchange (MME)
- P25 Network Sentry
- P25 Symphony Installation and Configuration
- P25 Device Manager Introduction
- UAC Interoperability Gateway Overview
- VIDA Network Navigation
- Introduction to VMware and the vCenter Console Server (VCC)
- Security Update Management Service (SUMS) Overview
- Cisco Configuration - Backup and Restore

These training modules provide P25 system maintenance technicians with supplemental training to optimize learning and provide an on-the-job training aid. Unlimited access to the training package is provided for one year. Additional self-paced training modules are added to the asynchronous training program, as developed, at no additional cost if you have an active account. The account can be renewed annually.

Bundled P25 System
Maintenance Training
Program (MAYT-ASN8N)

A person must complete multiple training courses to develop the required knowledge and skills to effectively perform preventive and corrective system maintenance. Attending training requires a time commitment by the employee and a financial commitment by the employer. Therefore, L3Harris offers a training discount to reward our customers who are committed to training their personnel and makes it more affordable for people to complete a series of training activities to meet their responsibilities.

The bundled P25 System Maintenance Training Program consists of one seat in the following blended learning program:

continued on next page

L3HARRIS

P25 System Maintenance Training (continued)

Bundled P25 System Maintenance Training Program (continued)

- P25 System Overview (virtual classroom)

- Regional Network Manager (virtual classroom)

- Network Operation & Maintenance (virtual classroom)

- MASTR V Station Maintenance (virtual classroom)

- P25 Simulcast System Maintenance (virtual classroom)

- P25 Programming & Maintenance Workshop (traditional classroom)

- One year of unlimited access to the P25 System Maintenance Asynchronous Training Package

The total tuition if these courses are purchased individually is $11,675.00. However, with this package you only pay $9,950.00 for a savings of $1,725.00.

The bundled P25 System Maintenance Training Program must be paid in full prior to attending the first course. Courses must be attended by the same student and must be attended within one year of purchase. The program price is not valid with any other discounts and is not retroactive.

Introduction to Networking (YTSN2X-A)

This course is for system technicians and administrators, and anyone else who requires a solid understanding of the fundamental principles of installing and supporting networks. This course is based upon the CompTIA Network+ certification learning objectives. Topics include network media and devices; addressing and routing; network applications; network security; and network management, monitoring, and troubleshooting.

In addition to building a solid knowledge foundation of networking principles, this course will help prepare an individual to achieve CompTIA Network+ certification. This certification ensures that the successful candidate has the important knowledge and skills necessary to manage, maintain, troubleshoot, install, operate and configure basic network infrastructure.

This course is a highly recommended prerequisite for individuals who have never had any formal network training and plan to attend the *Network Operation & Maintenance* (YTSN3W-A) course.

L3HARRIS

P25 System Maintenance Training (continued)

P25 System Overview (YTSN4F-A)	This virtual classroom course provides technicians with an understanding of terminology, equipment, components, and operational processes associated with the P25 system. Topics include RF communication basics, VIDA network and site equipment, call processing, wide-area coverage solutions, interoperability, and much more. This course provides prerequisite knowledge for additional P25 system maintenance training.
Regional Network Manager (YTSN4H-A)	This virtual classroom course provides technicians with the ability to monitor and troubleshoot the system using the Regional Network Manager (RNM). Course topics include system access, monitoring the status of system equipment, identification and acknowledgement of system faults, historical views of system performance, and exploring real-time viewers. Additionally, technicians are introduced to Activity Warehouse, a system report generating application. Completion of the *P25 System Overview* (YTSN4F-A) course is a prerequisite.
Network Operation & Maintenance (YTSN3W-A)	This virtual classroom course introduces maintenance technicians to basic networking concepts and provides them with the ability to maintain the VIDA Core and virtual machine infrastructure. Topics covered include the VIDA IP addressing and DNS schemes, critical database backup and storage, router and switch configuration backup and recovery, VAS configuration and Network Switching Center failover operation. The *Introduction to Networking* (YTSN2X-A) course is a highly recommended prerequisite for individuals who have never had any formal network training.
MASTR V Station Maintenance (MAYT-ASN8G)	This virtual classroom course covers the theory of operation and maintenance procedures for the MASTR V base station used in the P25 radio system. Topics covered include station architecture, module overview, software overview, network configuration, station configuration, troubleshooting and testing. Completion of the *P25 System Overview* (YTSN4F-A) <u>and</u> *Network Operation & Maintenance* (YTSN3W-A) courses are recommended prerequisites.

L3HARRIS

P25 System Maintenance Training (continued)

MASTR III Station
Maintenance
(YTSP3T-B)

This on-site course covers the theory of operation and maintenance procedures for the MASTR III Station that is used in either a conventional or trunked configuration. Frequency bands covered include VHF-HI, UHF, and 800 MHz. Hands-on laboratory exercises on testing and aligning RF modules, and setting station levels allow for optimal learning. This includes performing bench alignments utilizing the TQ0650 test fixture, as well as field alignments and frequency changes utilizing RF module extender cards.

P25 Simulcast System
Maintenance
(MAYT-ASN8H)

This virtual classroom course provides technicians with the ability to operate, maintain, and troubleshoot a P25 simulcast system. Topics include simulcast system operation and concepts, such as capture, and non-capture zones and delay spread, signal flow, GPS timing synchronization and alignment, distributed control point architecture and configuration, bypass operation, and system troubleshooting and replacement of failed components. Completion of the *MASTR V Station Maintenance* (MAYT-ASN8G) course is a recommended prerequisite.

P25 Programming &
Maintenance Workshop
(YTST1A-A)

This hands-on course provides technicians with an opportunity to put into practice the knowledge developed during prerequisite virtual classroom training on network and site equipment. Hands-on exercises include programming radios, using the Regional Network Manager, configuring equipment with VIDA Device Manager, backing up and restoring Cisco device configurations, deploying SUMS patches, backing up and restoring databases, and performing a VIDA network health check.

P25 Master Technician
(YTSN9T-A)

This hands-on course focuses on advanced topics and system troubleshooting techniques for experienced P25 system technicians. Procedures to monitor, analyze, and isolate problems are discussed and practiced using the Training Center's radio system. Actual faults are installed in the system to simulate typical on-the-job scenarios. At least six months of hands-on experience maintaining a P25 system and completion of *P25 System Overview* (YTSN4F-A), *Regional Network Manager* (YTSN4H-A), *Network Operation & Maintenance* (YTSN3W-A), *MASTR V Station Maintenance* (YTSN8G), and *P25 Programming & Maintenance* (YTST1A-A) courses are mandatory prerequisites for this training.

L3HARRIS

Operational Training

Overview	Operational training provides dispatch personnel and radio users with the knowledge and skills to operate their respective dispatch consoles and terminal products, and includes a course on radio programming.
	Dispatch personnel are at the core of effective and efficient implementation of a radio system. While the time required for training is minimal, the payback is immense. A solid understanding of both console and system operation is required to effectively train dispatch personnel on the operation of a dispatch console. Therefore, our instructor conducts dispatch console operational training directly for dispatchers and their supervisors. A train-the-trainer format is not recommended.
	The importance of field equipment users understanding basic system operation and the operation of their portable and/or mobile radios must not be underestimated. We offer two options for providing user equipment operator training: train-the-user and train-the-trainer.
	During radio programming training, participants learn to create a radio personality that meets operational requirements and is user friendly to facilitate effective communications.
Console Equipment Operator Training (YTSP5P-B)	This course provides dispatchers and their supervisors with the knowledge and skills to operate the Symphony Dispatch Console. The customer's operational consoles are used during this training. The training includes a discussion on the differences between conventional and trunked radio systems, if applicable, an overview of the customer's system, and basic system operation. The training is held in small groups with no more than two people on an operating console. This maximizes the effectiveness of the hands-on portion of the training. Each training session is four hours in length.
User Equipment Operator Training (YTSP7R-B)	We offer two options for providing user equipment operator training: train-the-user and train-the-trainer. The train-the-user option uses our instructors to conduct training directly to field personnel on the operation of the portable and mobile radios to be used in the system. The train-the-trainer option uses our instructors to conduct training for designated customer trainers who then instruct the rest of the radio users.

L3HARRIS

Operational Training (continued)

User Equipment Operator Training (continued)

Each of these options has certain benefits. The train-the-user option has the following benefits:

- Our instructors are training professionals who know how to transfer knowledge and skills to adults.

- Our instructors have the technical competency to answer radio and system operational questions with accuracy and confidence.

- Our instructors are motivated to perform this task.

There are two main benefits from using the train-the-trainer approach.

- The train-the-trainer approach is more cost effective. It takes less time for L3Harris to train designated customer trainers than it does for our instructors to directly instruct all end users.

- Designated customer trainers are more knowledgeable about the daily operation of their agencies and have an established relationship with the end users.

The following topics are included in both options:

- A comparison of conventional and trunked operation, and analog and digital voice (as applicable)

- An overview of the customer's radio system

- A description of system operation including failure modes

- A discussion of radio/system coverage expectations

- A demonstration of radio operation including proper radio use

- Hands-on practice with the radios

- A discussion of basic radio care including battery maintenance

Train-the-user sessions are typically two-to-four hours in length to ensure adequate time for questions and answers. Participants are provided with high-quality, customized handouts for their respective radios for optimal learning.

Train-the-trainer sessions are typically one day in length. Customer trainers are provided with hard and soft copies of customized presentation material to allow for additional customization, if desired.

L3HARRIS

Operational Training (continued)

XL Radio Programming
& Operation
(MAYT-ASN6X)

This course provides in-depth instruction on programming and operating XL radios for system administrators, technicians, and anyone else who needs the knowledge and skills to create a radio personality to meet operational needs. Although the course focuses on the XL-200P radio when attended at the L3Harris Technical Training Center, it is beneficial for anyone who needs to learn radio programming using the Radio Personality Manager 2 (RPM 2) application.

In this course, participants learn the process of creating a master radio personality using RPM 2. This includes creating frequency and group sets to build "systems/zones," and selecting radio options (i.e., power-up options, display settings, alert tones, timer settings, emergency features, supervisory features, etc.). The operational impact of selecting different options is explored and the modification of existing radio personalities is addressed. The training also includes manually generating and loading encryption keys using the Key Manager application.

If conducted on site, the training can be customized based on the specific radio models used by the customer. The training will use equipment and software (e.g., radios, computers, programming cables, key loaders, etc.) provided by the customer. It is essential that at least one computer, loaded with the applicable software, is provided for every two participants for optimal learning.

Student Feedback	"Even with all our questions, the instructor kept us focused. This was a great class."

Portable & Mobile Radio Maintenance Training

Overview	Radio maintenance courses are available on the XL family of portable and mobile radios, and XG family of portable and mobile radios that use Open Multimedia Application Platform (OMAP) microprocessors. Radios that use OMAP microprocessors, such as the XG-75P and XG-75M, have common software and similar maintenance procedures, which allows us to deliver training on the portable families of radios in one course and the mobile families of radios in a second course. Radio maintenance training is based on the field serviceability plan established for that specific radio.
XL Portable Radio Maintenance (YTSN4A-A)	This course provides technicians with the knowledge and skills to program, test and maintain an XL portable radio in accordance with the maintenance manual. Upon completion of the training, technicians will be able to install a maintenance personality into the radio for use during standardized testing; setup and perform standard transmitter and receiver tests on the radio using a P25-capable service monitor; disassemble and reassemble the radio; install the LTE module into the radio; perform automatic test and alignment on the radio using the Cobham (Aeroflex) 3920B service monitor and Auto Test software; perform select alignments independent of the AutoTest software; and upgrade the software in the radio.
XL Mobile Radio Maintenance (YTSN4V-A)	This course will provide technicians with the knowledge and skills to maintain an XL mobile radio. During this course, technicians will learn how to program, operate, and maintain the XL mobile radio. Hands-on exercises include programming the radio for manual testing, and conducting standard transmitter and receiver performance tests using a P25-capable test set. Radio alignment will be reviewed and conducted per the field serviceability plan of the radio using communication test equipment that supports L3Harris automatic testing and tuning. Technicians will also learn how to perform software maintenance and will be fully prepared to conduct any field maintenance on an XL mobile radio.

L3HARRIS

Portable & Mobile Radio Maintenance Training (continued)

OMAP Portable
Radio Maintenance
(MAYT-ASN8J)

This course provides in-depth discussion and hands-on exercises to maintain L3Harris portable radios that utilize Open Multimedia Application Platform (OMAP) microprocessors. Technicians will participate in classroom presentations and discussions on radio programming for testing as well as radio personality modification to meet specific needs. Radio disassembly will be demonstrated and discussed, and field replaceable parts and service tools will be identified. Individual radio field serviceability plans including field replaceable modules and components will be covered. Hands-on exercises include radio programming, testing, and maintenance to the level authorized by the field serviceability plan.

OMAP Mobile
Radio Maintenance
(MAYT-ASN8K)

This course provides in-depth discussion and hands-on exercises to maintain L3Harris mobile radios that utilize Open Multimedia Application Platform (OMAP) microprocessors. Installation of the mobile radios, including the CH721 and CH25 control units, will be discussed. Technicians will participate in classroom presentations and discussions on radio programming for testing as well as personality modification to meet specific needs. Disassembly of the radios and control units will be demonstrated and discussed, and field replaceable parts and service tools will be identified. Individual radio field serviceability plans including field replaceable modules and components will be covered. Hands-on exercises include radio wiring installation, programming, testing, and maintenance to the level authorized by the field serviceability plan.

Mobile Radio
Installation
(MAYT-BSN7U)

This on-site course is designed for personnel tasked with the installation of mobile radios in a typical land vehicle, which excludes trains, buses, fuel or munitions vehicles. Course topics include installation planning and preparation; safety considerations; pre-installation tasks; installation of the antenna, cables, radio, and control head; and post-installation inspection, testing, and troubleshooting. Additionally, installers will learn about basic radio operation, and programming software applications and personalities.

L3HARRIS

L3Harris Technical University

Overview	The importance of properly trained personnel cannot be overstated. Often, radio users, dispatchers, and technical personnel only receive training during initial implementation of a radio system. How much of this training is absorbed and retained? How many operational features are not being used correctly, if at all? How many tasks are not being performed properly?
	L3Harris Technical University consists of asynchronous training courses that effectively deliver ongoing training and reinforce knowledge transfer that took place during instructor-led training. Web-based training builds the confidence of personnel by improving their knowledge of system operation and skills to operate their equipment, which will enhance performance and reduce the number of trouble reports. L3Harris Technical University can also be used to augment training for new personnel due to turnover.
Benefits	The benefits of an asynchronous training approach are numerous and include the following:

- Training is accessible whenever it is needed (24 hours a day, seven days a week) from any location that has access to the Internet.
- Courses are self-paced, highly interactive, and developed utilizing animation and other multimedia tools to help keep students engaged, which increases retention.
- It is cost-effective, especially when student or instructor travel and living expenses associated with attending standard classroom instruction are considered.
- Training delivery is consistent and structured to ensure learning objectives are met.

Available Asynchronous Training Packages	L3Harris offers the following asynchronous training packages:

- P25 System Management
- P25 System Maintenance
- Radio Operation
- Console Operation
- Radio Programming
- BeOn Operation

Each package includes unlimited access to the training modules for one year. Additional modules are added to the training packages as developed and applicable at no additional cost if you have an active account.

L3HARRIS

L3Harris Technical University (continued)

P25 System
Management
Asynchronous
Training Package

The P25 System Management Asynchronous Training Package is comprised of the following training modules:

- P25 Fleet Mapping Overview

- XL-200P Radio Operation

- Symphony Console Operation

- Radio Programming Overview

- Radio Personality Manager (RPM and RPM 2)

- Advanced Access Control (AAC)

- Unified Administration System (UAS) Overview

- UAS "How to…"

- Regional Network Manager (RNM) Overview

- Active Directory

- Activity Warehouse

- Enterprise Network Manager (ENM) Overview

- Over-The-Air Programming (OTAP)

- Over-The-Air Rekeying (OTAR) Fundamentals

- OTAR "How to…"

- Inter-RF Subsystem Interface (ISSI) Fundamentals

This package is included in the bundled P25 System Manager Training Program described on page 6. It can also be purchased separately for $1,500 and access can be renewed for a second year for $1,000.

P25 System
Maintenance
Asynchronous
Training Package

The P25 System Maintenance Asynchronous Training Package includes all of the training modules in the P25 System Management Asynchronous Training Package plus the following training modules:

- MASTR V Station Traffic Controller Field Replacement Procedure

- MASTR V Station Baseband Module Field Replacement Procedure

- P25 Miniature Mobility Exchange (MME)

L3HARRIS

L3Harris Technical University (continued)

P25 System Maintenance Asynchronous Training Package (continued)

- P25 Network Sentry
- P25 Symphony Installation and Configuration
- P25 Device Manager Introduction
- UAC Interoperability Gateway Overview
- VIDA Network Navigation
- Introduction to VMware and the vCenter Console Server (VCC)
- Security Update Management Service (SUMS) Overview
- Cisco Configuration - Backup and Restore

This package is included in the bundled P25 System Maintenance Technician Training Program described on page 12. It can also be purchased separately for $2,000 and access can be renewed for a second year for $1,500.

Radio Operation Asynchronous Training Package

The Radio Operation Asynchronous Training Package includes access to all radio operational courses. This is especially beneficial to end users who operate and require training on both portable and mobile radios.

The following is a screen capture from the XL-200P Radio Operation Course.
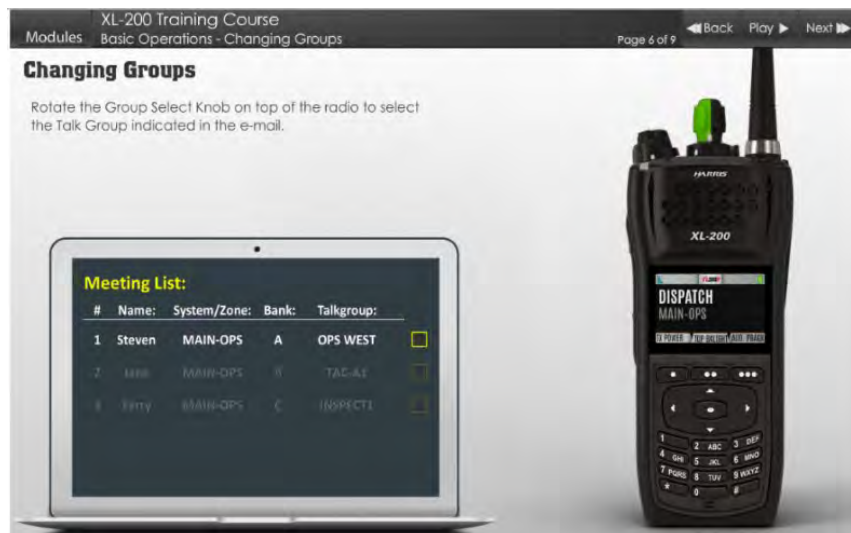
This package can be purchased for $60 for one radio user. Contact the Training Manager by e-mail at pspc_training@L3Harris.com or call 1-800-528-7711 (option #1) for bulk pricing information.

L3HARRIS

L3Harris Technical University (continued)

Console Operation
Asynchronous
Training Package

The Console Operation Asynchronous Training Package includes access to the Symphony Dispatch Console Operation course and covers tasks such as making and receiving group calls, making and receiving individual calls, responding to emergency calls, creating patches and simulselects, and much more.

This package can be purchased for $180 for one dispatcher. Contact the Training Manager by e-mail at pspc_training@L3Harris.com or call 1-800-528-7711 (option #1) for bulk pricing information.

Radio Programming
Asynchronous
Training Package

The Radio Programming Asynchronous Training Package is comprised of the following training modules:

- Radio Programming Overview

- Radio Personality Manager (RPM and RPM 2)

- Advanced Access Control (AAC)

The following is a screen capture from the instructor-led, voice-over-PowerPoint RPM 2 Course.

This package can be purchased for $200 for one technical person.

L3HARRIS

L3Harris Technical University (continued)

BeOn Operation
Asynchronous
Training Package

The BeOn Operation Asynchronous Training Package is comprised of operation courses for both Android and iOS devices. The following is a screen capture from the BeOn for iOS Operation Course.
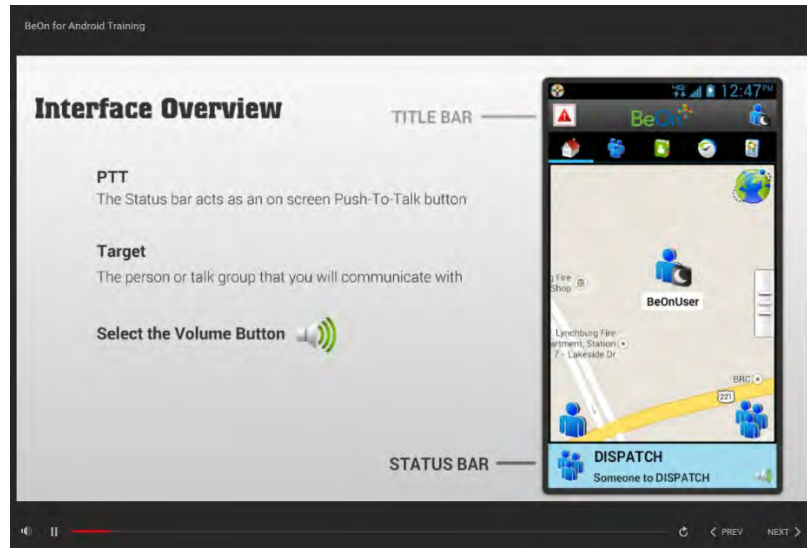
This package can be purchased for $1,000 for up to 100 BeOn users.

Learning Management
System

L3Harris can provide a designated customer individual with administrative rights to the L3Harris Technical University Learning Management System so that you can directly assign specific training courses to students, monitor student activity and progress in completing courses, and generate reports.

Contact the Training Manager by e-mail at pspc_training@L3Harris.com or call 1-800-528-7711 (option #1) for more information about the requirements to access the Learning Management System.

Customer Feedback

"We found the training to be a very effective and easy way to efficiently inform our users on the new radios and system we deployed in early August. The ability to have a consistent message provided to our entire user base was valuable as this minimized the transition difficulties with users understanding the operational changes that come with equipment upgrades.

The tracking and reporting information was also helpful in managing the training provided. A very nice product that helps with our P25 migration."

L3HARRIS

Virtual Classroom Training

Overview

The L3Harris Technical Training Department conducts regularly scheduled open-enrollment courses and offers customized instructor-led training over the Internet using Adobe Connect. This virtual classroom environment is ideal for transferring knowledge when hands-on instruction isn't required and provides customers with a cost savings by eliminating travel and living expenses for the instructor and students. Additionally, we limit each virtual classroom session to four hours per day to allow participants to perform their normal job duties during the remainder of the day.

Adobe Connect is a feature rich solution for conducting virtual classroom instruction. Features include the following:

- The instructor can share assorted media such as PowerPoint presentations and videos, as well as radio system specific applications such as the Unified Administration System, Device Manager, and Radio Personality Manager.

- The instructor and students interact using notes, Q&A, chat, polling, and a virtual whiteboard.

- The instructor and students can share their screens.

The following is a screen capture from a virtual classroom session.

Virtual Classroom Training (continued)

Equipment Requirements

Student computers must have an HTML 5 capable browser (e.g., Chrome, Firefox, Microsoft Edge – select "Open in Browser").

An Adobe Connect plugin download is required for Internet Explorer versions 11.0 and earlier.

The following audio options will be available once you log into the classroom:

- Dial out to your phone

- Dial-in information from your phone

- Voice-over-IP or Listen-Only options (request the instructor via chat to enable microphone rights if the Listen-Only option is selected)

Procurement

Contact the Training Manager to discuss the content, overall length, and scheduling of the desired customized virtual classroom training course. L3Harris recommends that each day of virtual classroom instruction is limited to four hours and that the training is delivered over consecutive days, as required. For example, 16 hours of instruction is conducted over four consecutive days.

The total price for a customized virtual classroom training course is calculated based on the number of four-hour sessions. The price for each four-hour session is $2,500. Each session may have up to 12 students and each student will be provided with an electronic copy of the presentations used during the training.

Student Feedback

"I want to thank you for the P25 Overview and UAS training that was completed this week. I want to let you know the Adobe Connect virtual version of the course was great. We were able to play L3Harris Jeopardy and take quizzes allowing everyone to test their understanding. Very professional and a lot of attention time detail was put into it to make sure we got all the instructor could fit into 16 hours. The instructor made us feel like he was actually standing in front of the class.

I really appreciate the effort and support put into making this class a success and I look forward to coordinating one of these again in the future."

Satisfied Customer

L3HARRIS

Enrollment Information

When to Enroll	Registration for classes will be accepted until the business day before a class is scheduled to begin. However, it is a good idea to enroll as soon as possible to ensure a seat is available in the course on the dates you would like to attend.
How to Enroll	You can enroll by completing and submitting a Training Registration Form online at www.harris.com//solution/pspc-technical-training. A Training Registration Form is also included in this catalog. You can e-mail the completed registration form to pspc_training@L3Harris.com or fax the form to (434)455-6788.
Enrolling in the P25 Master Technician Course	If you are enrolling in the *P25 Master Technician* (YTSN9T-A) course, you must complete an application in addition to the Training Registration Form. The two-page application is included in this catalog and is also available on our web page. The application serves two purposes. It allows the instructors to verify that the student meets the prerequisites for the course, which is designed for experienced P25 technicians. Secondly, it provides information about your system, which will be factored into the training. The completed application should be submitted to the Training Registrar along with your Training Registration Form.
Enrollment Verification	Upon receipt of your completed Training Registration Form, the Training Registrar will verify space availability in the course. If space is available and the appropriate prerequisite courses have been taken, you will receive a confirmation letter.
Cancellation Policy	The Training Registrar must receive a cancellation notice at least 10 working days prior to the start of the class if you are unable to attend. A cancellation fee will be charged if a student fails to cancel his/her registration in this time frame or does not attend the course. Substitutions may be made if someone else can attend in his/her place. Substitutes must meet applicable course prerequisites. The cancellation fee will be the normal fee for the course.

L3HARRIS

Enrollment Information (continued)

Class Start & Stop Times	Open-enrollment traditional classroom courses conducted at the L3Harris Technical Training Center begin promptly at 8:30 a.m. each day and end at approximately 4:30 p.m. On Friday, the last day of class for 4½-day courses, training usually ends at noon to facilitate travel arrangements, unless otherwise specified in your course confirmation notice.
	Open-enrollment virtual classroom courses are conducted from 12:30 p.m. to 4:30 p.m. (Eastern Time) each day.
Attendance Requirements	Students are expected to maintain full attendance to receive a certificate of completion.
Travel & Lodging Arrangements	The Training Center does not make travel arrangements for students. However, hotel information and an area map are included in an information packet, which is sent to the student once a Training Registration Form is received and the student is confirmed in the class. Hotel information is also available online at the Technical Training website.
Schedule Changes	The Training Center reserves the right to make changes to the schedule and training location. If such changes are necessary, notification via e-mail, telephone, or fax will be made to the student or person making the reservation as soon as possible, normally within 10 days prior to the scheduled start of a course.
Canadian Customers	Canadian customers should contact their sales representative for a quotation prior to enrolling in any standard open-enrollment course or for any on-site training.

L3HARRIS

2021 Training Schedule & Tuition

P25 System Administrative Training

Course #	Course Name	Virtual Classroom		Tuition
YTSN4F-A	P25 System Overview	Feb. 1 – Feb. 5 Apr. 12 – Apr. 16	Aug. 2 – Aug. 6 Nov. 29 – Dec. 3	$1,625
YTSN4G-A	Unified Administration System	Feb. 8 – Feb. 10 Apr. 19 – Apr. 21	Aug. 9 – Aug. 11 Dec. 6 – Dec. 8	$975
YTSN4H-A	Regional Network Manager	Feb. 11 – Feb. 12 Apr. 22 – Apr. 23	Aug. 12 – Aug. 13 Dec. 9 – Dec. 10	$650
Course #	Course Name	Lynchburg, Virginia		Tuition
YTSN9N-A	P25 System Implementation Workshop	Feb. 22 – Feb. 26 May 3 – May 7	Aug. 23 – Aug. 27 Dec. 13 – Dec. 17	$3,500

P25 System Maintenance Training

Course #	Course Name	Virtual Classroom	Tuition
YTSN4F-A	P25 System Overview	March 1 – March 5 June 7 – June 11 October 4 – October 8	$1,625
YTSN4H-A	Regional Network Manager	March 10 – March 11 June 16 – June 17 October 13 – October 14	$650
YTSN3W-A	Network Operation & Maintenance	March 15 – March 19 June 21 – June 25 October 18 – October 22	$1,625
MAYT-ASN8G	MASTR V Station Maintenance	March 23 – March 25 June 29 – July 1 October 26 – October 28	$975
MAYT-ASN8H	P25 Simulcast System Maintenance	March 29 – April 1 July 12 – July 15 November 1 – November 4	$1,300
Course #	Course Name	Lynchburg, Virginia	Tuition
YTST1T-A	P25 Programming & Maintenance Workshop	April 5 – April 9 July 19 – July 23 November 15 – November 19	$3,500
YTSN9T-A	P25 Master Technician	April 26 – April 30 September 13 – September 17	$3,500

L3HARRIS

2021 Training Schedule & Tuition (continued)

Network Core Training

Course #	Course Name	Virtual Classroom	Tuition
YTSN2X-A	Introduction to Networking	May 17 – 20, May 24 - 27 September 20 – 23, September 27 - 30	$2,600

Portable & Mobile Radio Maintenance Training

Course #	Course Name	Lynchburg, Virginia	Tuition
YTSN4A-A	XL Portable Radio Maintenance	April 19 – April 20 September 20 – September 21	$1,000
YTSN4V-A	XL Mobile Radio Maintenance	April 21 – April 22 September 22 – September 23	$1,000
MAYT-ASN8J	OMAP Portable Radio Maintenance	February 22 – February 26 August 16 – August 20	$2,500
MAYT-ASN8K	OMAP Mobile Radio Maintenance	May 10 – May 14 December 6 – December 10	$2,500

Radio Programming & Operation Training

Course #	Course Name	Lynchburg, Virginia	Tuition
MAYT-ASN6X	XL Radio Programming & Operation	February 17 – February 18 August 31 – September 1	$1,000

Notes:

(1)   Virtual classroom sessions are conducted from 12:30 p.m. to 4:30 p.m. (Eastern Time Zone).

(2)   Canadian customers should contact their sales representative for a quotation prior to enrolling in a standard open-enrollment course.

L3HARRIS

2021 On-Site Training Prices

P25 System Training

Course #	Course Name	Course Length	Price per Course*
MAYT-BSN6A	P25 Fleet Mapping Workshop	4 days	$22,200
YTSN3H-B	Console Configuration	2 days	$11,600
MAYT-BSN6B	Unified Administration System	2 days	$11,600
YTSN3V-B	Regional Network Manager	2 days	$11,600
MAYT-BSN6C	Over-The-Air Rekeying	1 day	$6,300
YTSN9L-B	ISSI Configuration & Administration	1 day	$6,300
YTSN3W-B	Network Operation & Maintenance	4 days	$22,200
MAYT-BSN6G	MASTR V Station Maintenance	2 days	$11,600
YTSP3T-B	MASTR III Station Maintenance	3 days	$16,900
MAYT-BSN8H	P25 Simulcast System Maintenance	3 days	$16,900
YTST1A-B	P25 Programming & Maintenance	5 days	$27,500

Operational Training

Course #	Course Name	Course Length	Price per Course*
YTSP5P-B	Console Equipment Operator Training	4 hours	Call
YTSP7R-B	User Equipment Operator Training	2 - 8 hours	Call
MAYT-BSN6X	Radio Programming	2 days	$11,600

Network Core Training

Course #	Course Name	Course Length	Price per Course*
YTSN2X-B	Introduction to Networking	4½ days	$27,500

Portable & Mobile Radio Maintenance Training

Course #	Course Name	Course Length	Price per Course*
YTSN4A-B	XL Portable Radio Maintenance	2 days	$11,600
YTSN4V-B	XL Mobile Radio Maintenance	2 days	$11,600
MAYT-BSN8J	OMAP Portable Radio Maintenance	4½ days	$27,500
MAYT-BSN8K	OMAP Mobile Radio Maintenance	4½ days	$27,500
MAYT-BSN7U	Mobile Radio Installation	2 days	$11,600

* The price for on-site training in the continental United States is listed in U.S. dollars. It includes materials for a maximum class size of ten (10) students and the instructor's travel and living expenses. On-site training is scheduled by the Training Manager and typically requires three months of lead time to schedule. For an on-site training quotation outside the continental United States, contact the Training Manager, except for Canadian customers who should contact their sales representative.

L3HARRIS

Technical Training Team

Customer Commitment	Our Training Team is committed to providing the highest quality training to our customers whether delivering a virtual classroom session or an open-enrollment course at the Technical Training Center in Lynchburg, Virginia, or conducting customized on-site training. To ensure a successful learning experience, customer training is delivered by our technical training staff that is comprised of training professionals with extensive experience in both adult learning and telecommunications. Each instructor is certified to ensure the trainer possesses the instructional skills and technical competencies to deliver high-quality training to our customers. Instructors are also evaluated regularly and participate in a continuing instructor development program to maintain and improve their technical and instructional knowledge and skills. The following is a profile of our team members.
Frank Ober	Frank is the Training Manager. He began his training career in 1979 as a U.S. Navy instructor, training the initial crews assigned to Trident missile submarines. After leaving the Navy, Frank joined Babcock & Wilcox (B&W) as a senior reactor operator instructor. From 1989 - 1995, he managed B&W's nuclear services training group. Frank joined GE/Ericsson in 1995 and has been the training manager since 1996.
Desha Best	Desha joined the Training Team in 2020 after working in the Customer Service and Mental Health fields for over ten years. Desha spent five years as a Customer Service and Retention Specialist at GEICO in Virginia Beach, Virginia. She then transitioned to the Mental Health, Human Services field as a Case Manager, Prevention Specialist and ultimately as a Therapeutic Day Treatment Counselor. Desha has a B.A. in Sociology with a concentration in Criminal Justice.
Steve Clark	Steve rejoined L3Harris in 2018 after spending 25 years in the Law Enforcement community as both a police officer and most recently as the Training Coordinator for the Law Enforcement Division at the Virginia Department of Criminal Justice Services. His law enforcement career included nine years with York Regional Police in Southern Ontario, Canada and four years with the Lynchburg Police Department in Virginia.

L3HARRIS

Technical Training Team (continued)

| Bruce Eck | Bruce started his technical training career with the U.S. Navy in 1995 training personnel on nuclear reactor systems. Upon leaving the Navy, Bruce became a senior instructor for AREVA, training equipment technicians on subjects ranging from basic electronics to robotic control systems and networking. Bruce is the product manager for our web-based training programs. He has an Associates of Science and Technology (AST) degree with a Nuclear specialty and a Bachelor of Science and Technology (BST) in Electro-Mechanical Studies. |

| Andrew Haney | Andrew holds a B.S. in Electrical Engineering Technology and has seven years of experience with L3Harris radio system equipment. He managed and maintained a regional P25 Phase II system in Georgia before becoming the latest addition to the L3Harris Technical Training Team in 2020. Andrew enjoys helping people and feels that he can help customers more efficiently configure, operate, and maintain their equipment through training. |

| Chris Jamerson | Chris joined the Technical Training Team in 2011 after graduating from college with a B.S. in Digital Arts & Design and a M.S. in the Production of Interactive Multimedia. Chris has been instrumental in the advancement of the online training content provided to our customers. By incorporating state of the art graphics, intelligent instructional design concepts, and an outside the box mindset, he creates training that captivates students while providing them with the information needed to be successful. |

| Todd Keller | Todd has over 25 years of experience working in the telecommunications field and specializes in network information assurance. Todd began his career in the U.S. Air Force where he served as a Communications Signals Analyst. After several field assignments, Todd was selected for instructor duty at the Center for Information Dominance in Pensacola, FL. There, he trained hundreds of multi-service military personnel and DoD civilians on RF and signals analysis techniques. He later went on to instruct a U.S. Cyber Command sponsored cyber operations and planning course. Todd holds an A.A.S. in Communications Technology and in Instructional Technology. He also holds the Air Force Master Instructor, CISSP, and Security+ certifications. |

Technical Training Team (continued)

Randall Russell	Randy has over 25 years of experience in electronics and working on L3Harris radio systems. He is a veteran of the U.S. Navy, where he worked as an Electronics Technician on shipboard HYDRA communication systems. After his military service, Randy worked on EDACS modem and GPS simulcast systems for the City of New Orleans, and City of Oklahoma City, respectively, and a P25 simulcast system for the County of St. Mary's. He has achieved Master Technician status on both EDACS and P25 systems.
Scott Steph	Scott joined the Technical Training Team in 2015 after over 25 years in the information technology field as a certified trainer, network engineer, and college instructor. Scott spent 12 years designing and implementing global networks for WilTel, Autodesk Inc., and other Fortune 500 companies. Scott has a B.S. in Information Technology and his industry certifications include Network +, A+, and MCSE.
Lewis Padgett	Lewis joined the Technical Training Team in 2020 after 28 years of electronics experience working on cellular equipment with Ericsson and Commscope. Lewis is skilled in equipment maintenance and repair, and has assumed primary responsibility for training technicians on portable and mobile maintenance of the XL and XG families of radios. He has an Associate of Arts and Science degree focused in Electrical/Electronic Maintenance and Repair Technology.

L3HARRIS

Training Registration Form

Date: _____

Training Course(s):

Course Number	Course Name	Preferred Dates
_____	_____	_____
_____	_____	_____
_____	_____	_____

Student Information: **(All information must be completed for registration confirmation.)**

First & Last Name: _____

Organization: _____

Telephone Number: _____

E-Mail Address: _____

Person Making Reservation: _____

First & Last Name: _____

Organization: _____

Telephone Number: _____

E-Mail Address: _____

Method of Payment: **(You must select one of the following billing options.)**

1. _____ Check or Credit Card
2. _____ Contract
3. _____ Invoice:
   - Does your organization require a purchase order?   Yes _____   No _____
   - **If yes, please include the PO number:** _____

   Billing Address:

   Company: _____

   Attention: _____

   Street Address: _____

   City / State / Country: _____

   Postal Code: _____

4. _____ L3Harris Employee

<u>All</u> registration requests must be in writing. **One form per student please.**

Return by   Mail: L3Harris Corporation   <u>OR</u>   Fax: (434)455-6788
221 Jefferson Ridge Parkway
Lynchburg, VA 24501   E-Mail: pspc_training@L3Harris.com
Attention: Training Registrar

L3HARRIS

P25 Master Technician Course Application

Thank you for enrolling in the P25 Master Technician course. Please complete this two-page application and return it to the Training Registrar along with your Training Registration Form. The instructors will use this information for course planning. One form per student is required.

Student's Name: _____

Company/Organization: _____

Telephone Number: _____

E-Mail Address: _____

Course Dates: _____

Please indicate when you took the following prerequisite courses:

Course	Dates	Location
P25 System Overview (YTSN4F-A)		
Regional Network Manager (YTSN4H-A)		
Network Operation & Maintenance (YTSN3W-A)		
MASTR V Station Maintenance (MAYT-ASN8G)		
P25 Programming & Maintenance (YTST1A-A)		

As a part of this course, your P25 system knowledge and troubleshooting skills will be assessed. Will your supervisor or manager want to know your results?   Yes or No   (please circle one)

If yes, complete the following:

Manager or Supervisor's Name: _____

Company/Organization: _____

Telephone Number: _____

E-Mail Address: _____

Please briefly describe your radio system experience including the type of system, location, duties, and responsibilities.

_____

_____

_____

_____

_____

_____

L3HARRIS

P25 Master Technician Course Application (cont.)

Complete the following to tell us about your P25 system and your responsibilities. This information will help us place you in appropriate teams, as well as help determine the troubleshooting problems used in this course.

RF Band: _____ MHz   System Version (e.g., SR10A.3) _____

P25 Phase 1 or Phase 2: _____

HAVE = I have this equipment in my system.

Place a "Y" for Yes in the appropriate field.   RESPONSIBLE = I am responsible for this equipment.

P25 System/Equipment	Have	Responsible
System Type (choose one)		
Single Site System		
Multi-Site System		
Simulcast System		
Hybrid (Simulcast & Multi-Site)		
Network Equipment		
Network Switching Center (NSC):		
Non-High Availability (non-HA)		
High Availability (HA)		
Interoperability Gateway		
ISSI Gateway		
Site Equipment		
Base Stations:		
MASTR III		
MASTR V		
Dispatch Consoles		
C3 Maestro^{IP} Dispatch Console		
V^{IP} Console		
Symphony Console		

Describe any areas of interest or concern:

_____

_____

Instructor Review:			Approved
	_____ Signature	_____ Date	Disapproved

L3HARRIS

FAST. FORWARD.

L3HARRIS™

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.