

TECHNICAL TRAINING

Technical training courses are conducted regularly via virtual classroom training, which is live instructor-led training over the Internet, and at the Technical Training Center in Lynchburg, Virginia. You can register for courses online at our website at <http://pspc.harris.com/Service/TechnicalTraining.asp> or contact the Training Registrar at 1-434-455-9469. Training courses can also be conducted at a customer's location. Contact the Training Manager at 1-434-455-9454 to schedule on-site training, which typically requires two-to-three months' lead time.

The List Prices provided are the tuition per student for regularly scheduled open-enrollment training via virtual classroom or training attended at the Technical Training Center.

Technical Training focuses on three job categories: administration, maintenance, and operation.

- Administrative training provides management personnel with the knowledge and skills to plan and manage the radio system.
- Maintenance training prepares a technician to perform preventive and corrective maintenance on radio system equipment.
- Operational training is designed for field equipment users and dispatchers to facilitate the transition to a radio system.

OPERATIONAL TRAINING

Operational training provides dispatch personnel and field equipment users with the knowledge and skills to operate their dispatch consoles and radios, respectively. It also includes a course on radio programming.

Dispatch personnel are at the core of effective and efficient implementation of the 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 (2) options for providing user equipment operator training: train-the-user and train-the-trainer.

Creating a radio personality through programming and configuring a radio that meets operational requirements and is user friendly helps ensure effective communications.

The table on the following page provides a list of standard training courses. The table includes the course number and the location where the training can be conducted as indicated by the course length.

TECHNICAL TRAINING**OPERATIONAL TRAINING (Cont'd)**

	Course No.	L3Harris Facility	On-Site
Operational Training			
Console Equipment Operator Training	YTSP5P-B	-	4 hours
User Equipment Operator Training	YTSP7R-B	-	2-8 hours
XL Radio Programming & Operation	MAYT-ASN6X	2 days	-
XL Radio Programming & Operation	MAYT-BSN6X	-	2 days

E/C	Model No.	List Price \$	Description
BC	YTSP5P-B	CALL	CONSOLE EQUIPMENT OPERATOR TRAINING This course provides dispatchers and supervisors with the knowledge and skills to operate the Symphony™ Dispatch Console. The customer's operational consoles are utilized 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.
BC	YTSP7R-B	CALL	USER EQUIPMENT OPERATOR TRAINING This course is typically conducted in a train-the-trainer format. Customer instructors learn how to operate the mobile and portable radio equipment and how to train other personnel. The training includes an introduction to trunked systems, a discussion of the differences between conventional and trunked radio systems, and an overview of the customer's system. Support materials are provided for the instructors to assist in the user training. Training varies in length depending on the complexity of the customer's radio system. Operator training can also be provided for all customer personnel by an L3Harris instructor if desired.
N	MAYT-ASN6X	1,000.00	XL RADIO PROGRAMMING & OPERATION 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 XL radios when attended at the L3Harris Technical Training Center, it is beneficial to anyone who needs to learn radio programming using the Radio Personality Manager 2 (RPM2) application. In this course, participants learn the process of creating a master radio personality using RPM2. 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 also addressed. The training also includes manually generating and loading encryption keys using the Key Manager application.

TECHNICAL TRAINING**OPERATIONAL TRAINING (Cont'd)**

E/C	Model No.	List Price \$	Description
BC	MAYT-BSN6X	CALL	XL RADIO PROGRAMMING & OPERATION This on-site 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. This course is beneficial to anyone who needs to learn radio programming using the Radio Personality Manager 2 (RPM2) application. In this course, participants learn the process of creating a master radio personality using RPM2. 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 also addressed. The training also includes manually generating and loading encryption keys using the Key Manager application.

TECHNICAL TRAINING

P25 SYSTEM ADMINISTRATIVE TRAINING

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

- defining the fleet map
- maintaining unit and group databases
- defining wide-area roaming capabilities
- planning radio feature usage and personalities
- configuring dispatch consoles
- enabling and disabling subscriber units
- generating reports
- monitoring system performance

The following table provides a list of standard training courses. The table includes the course number and the location where the training can be conducted as indicated by the course length.

	Course No.	Virtual Classroom	L3Harris Facility	On-Site
P25 System Administrative Training				
P25 System Overview	YTSN4F-A	5 four-hour sessions	-	-
P25 Fleet Mapping Workshop	MAYT-BSN6A	-	-	4 days
Console Configuration	YTSN3H-B	-	-	2 days
Unified Administration System	YTSN4G-A	3 four-hour sessions	-	-
Unified Administration System	MAYT-BSN6B	-	-	2 days
Regional Network Manager	YTSN4H-A	2 four-hour sessions	-	-
Regional Network Manager	YTSN3V-B	-	-	2 days
P25 System Workshop	YTSN9N-A	-	5 days	-
Over-the-Air Rekeying (OTAR)	MAYT-BSN6C	-	-	1 day
ISSI Configuration & Administration	YTSN9L-B	-	-	1 day

E/C	Model No.	List Price \$	Description
N	YTSN4F-A	1,625.00	P25 SYSTEM OVERVIEW This virtual classroom course is for individuals responsible for system implementation and management, and consists of five (5) four-hour sessions. It provides 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 is a prerequisite for the Unified Administration System (YTSN4G) and Regional Network Manager (YTSN4H) virtual classroom courses and is the first training activity that should be completed by a P25 system administrator or manager.

TECHNICAL TRAINING**P25 SYSTEM ADMINISTRATIVE TRAINING (Cont'd)**

E/C	Model No.	List Price \$	Description
BC	MAYT-BSN6A	CALL	P25 FLEET MAPPING WORKSHOP This on-site workshop assists new customers in defining the system's fleet map and planning radio personalities. The advantages of different group structures and associated property, priority and coverage options are explored, and fleet mapping experience gained from other customers is shared. System configuration, interoperability scenarios, and radio programming options (i.e., wide-area roaming, scanning, and emergency calls) are also examined.
BC	YTSN3H-B	CALL	CONSOLE CONFIGURATION 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.
N	YTSN4G-A	975.00	UNIFIED ADMINISTRATION SYSTEM 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.
BC	MAYT-BSN6B	CALL	UNIFIED ADMINISTRATION SYSTEM The purpose of this on-site course is to provide system administrators and managers with the capability to create and maintain system databases using the Unified Administration System (UAS). This hands-on course requires an in-depth understanding of the job functions within the customer's organization as well as an operational understanding of the radio system. 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 talkgroups.

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P25 SYSTEM ADMINISTRATIVE TRAINING (Cont'd)

E/C	Model No.	List Price \$	Description
N	YTSN4H-A	650.00	REGIONAL NETWORK MANAGER 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-A) virtual classroom course is a required prerequisite.
BC	YTSN3V-B	CALL	REGIONAL NETWORK MANAGER This on-site course provides system administrators and managers with the ability to monitor and manage 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, exploring real-time viewers, and running activity and status reports on system performance. The P25 System Overview (YTSN4F-A) virtual classroom course is a required prerequisite.
N	YTSN9N-A	3,500.00	P25 SYSTEM WORKSHOP This hands-on workshop allows participants to implement the knowledge acquired during prerequisite virtual classroom and asynchronous training. The workshop begins with students completing structured hands-on exercises on the Unified Administration System (UAS), Regional Network Manager (RNM), and radio programming. Participants are then 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.

TECHNICAL TRAINING**P25 SYSTEM ADMINISTRATIVE TRAINING (Cont'd)**

E/C	Model No.	List Price \$	Description
BC	MAYT-BSN6C	CALL	OVER-THE-AIR REKEYING This on-site course provides system administrators and managers with the knowledge and skills to manage encryption keys using the Network 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 talkgroups, 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.
BC	YTSN9L-B	CALL	ISSI CONFIGURATION & ADMINISTRATION 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 talkgroups and users, determining shared users and talkgroups 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.

TECHNICAL TRAINING

P25 SYSTEM MAINTENANCE TRAINING

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

The following table provides a list of standard training courses. The table includes the course number, and the location where the training can be conducted as indicated by the course length.

	Course No.	Virtual Classroom	L3Harris Facility	On-Site
P25 System Maintenance Training				
P25 System Overview	YTSN4F-A	5 four-hour sessions	-	-
Introduction to Networking	YTSN2X-A	8 four-hour sessions	-	-
Introduction to Networking	YTSN2X-B	-	-	5 days
Regional Network Manager	YTSN4H-A	2 four-hour sessions	-	-
Regional Network Manager	YTSN3V-B	-	-	2 days
Network Operation & Maintenance	YTSN3W-A	5 four-hour sessions	-	-
Network Operation & Maintenance	YTSN3W-B	-	-	4 days
MASTR® V Station Maintenance	MAYT-ASN8G	3 four-hour sessions	-	-
MASTR® V Station Maintenance	MAYT-BSN8G	-	-	2 days
MASTR® III Station Maintenance	YTSP3T-B	-	-	3 days
P25 Simulcast System Maintenance	MAYT-ASN8H	4 four-hour sessions	-	-
P25 Simulcast System Maintenance	MAYT-BSN8H	-	-	3 days
P25 Programming & Maintenance Workshop	YTST1A-A	-	5 days	-
P25 Master Technician	YTSN9T-A	-	4½ days	-

E/C	Model No.	List Price \$	Description
N	YTSN4F-A	1,625.00	P25 SYSTEM OVERVIEW This virtual classroom course is for individuals responsible for system implementation and management, and consists of five (5) four-hour sessions. It provides 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 is a prerequisite for additional maintenance training.

TECHNICAL TRAINING**P25 SYSTEM MAINTENANCE TRAINING**

E/C	Model No.	List Price \$	Description
N	YTSN2X-A	2,600.00	INTRODUCTION TO NETWORKING This virtual classroom course is designed 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.
BC	YTSN2X-B	CALL	INTRODUCTION TO NETWORKING This on-site course is designed 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.
BC	YTSN4H-A	650.00	REGIONAL NETWORK MANAGER This virtual classroom course provides system administrators and managers with the ability to monitor and manage 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, exploring real-time viewers, and running activity and status reports on system performance.
BC	YTSN3V-B	CALL	REGIONAL NETWORK MANAGER This on-site course provides system administrators and managers with the ability to monitor and manage 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, exploring real-time viewers, and running activity and status reports on system performance.

TECHNICAL TRAINING**P25 SYSTEM MAINTENANCE TRAINING (Cont'd)**

E/C	Model No.	List Price \$	Description
N	YTSN3W-A	1,625.00	NETWORK OPERATION & MAINTENANCE This virtual classroom course introduces technicians to basic networking concepts and provides them with the ability to maintain the IP network and Network Switching Center. Topics covered include IP addressing and basic routing, database backup and storage, router and switch configuration management, high-availability Network Switching Server configuration and failover operation, and disaster recovery of network components.
BC	YTSN3W-B	CALL	NETWORK OPERATION & MAINTENANCE This on-site course introduces technicians to basic networking concepts and provides them with the ability to maintain the IP network and Network Switching Center. Topics covered include IP addressing and basic routing, database backup and storage, router and switch configuration management, high-availability Network Switching Server configuration and failover operation, and disaster recovery of network components.
N	MAYT-ASN8G	975.00	MASTR® V STATION MAINTENANCE This virtual classroom course covers the theory of operation and maintenance procedures for the MASTR V Station used in the P25 radio system. Topics covered include station architecture, module overview, software overview, network configuration, station configuration, troubleshooting and testing.
BC	MAYT-BSN8G	CALL	MASTR® V STATION MAINTENANCE This on-site course covers the theory of operation and maintenance procedures for the MASTR V Station used in the P25 radio system. Topics covered include station architecture, module overview, software overview, network configuration, station configuration, troubleshooting and testing.
BC	YTSP3T-B	CALL	MASTR® III STATION MAINTENANCE This on-site course covers the theory of operation and maintenance procedures for the MASTR III Station, including the P25 digital base station that is used in either a conventional or trunked configuration. Frequency bands covered include low band, VHF-HI, UHF, and 800 MHz. Hands-on laboratory exercises on testing and aligning RF modules and setting station levels allow for optimal learning.
N	MAYT-ASN8H	1,300.00	P25 SIMULCAST SYSTEM MAINTENANCE This virtual classroom course provides technicians with the knowledge and skills 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, bypass operation, and system troubleshooting and replacement of failed components.
BC	MAYT-BSN8H	CALL	P25 SIMULCAST SYSTEM MAINTENANCE This on-site course provides technicians with the knowledge and skills 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, bypass operation, and system troubleshooting and replacement of failed components.

TECHNICAL TRAINING**P25 SYSTEM MAINTENANCE TRAINING (Cont'd)**

E/C	Model No.	List Price \$	Description
N	YTST1A-A	3,500.00	P25 PROGRAMMING & MAINTENANCE 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.
N	YTSN9T-A	3,500.00	P25 MASTER TECHNICIAN This hands-on course focuses on 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 or YTSN3V-B), Network Operation & Maintenance (YTSN3W-A or YTSN3W-B), and either MASTR III Station Maintenance (YTSP3T-B) or MASTR V Station Maintenance (MAYT-ASN8G or MAYT-BSN8G), and P25 Programming & Maintenance (YTST1A-A) are mandatory prerequisites for this course.

TECHNICAL TRAINING

NETWORKFIRST® SYSTEM ADMINISTRATIVE TRAINING

The following table provides a list of standard training courses. The table includes the course number, and the location where the training can be conducted as indicated by the course length.

	Course No.	L3Harris Facility	On-Site
NetworkFirst Administrative Training			
NetworkFirst Operation & Administration	YTSN5A-B	-	3 days

E/C	Model No.	List Price \$	Description
BC	YTSN5A-B	CALL	NETWORKFIRST OPERATION & ADMINISTRATION This on-site course provides system administrators and managers with the knowledge and skills to configure and use the Unified Administration System (UAS) to manage talkgroups for both planned and unplanned interoperability events. The training includes an overview of the features and capabilities of NetworkFirst and an introduction to NetworkFirst equipment, components, and operational processes such as how to re-program an Interoperability Gateway. Participants are also introduced to the Regional Network Manager (RNM), which is used to view network talkgroup activity, monitor Interoperability Gateway status, and generate performance summary reports.

TECHNICAL TRAINING

NETWORKFIRST® SYSTEM MAINTENANCE TRAINING

The following table provides a list of standard training courses. The table includes the course number, and the location where the training can be conducted as indicated by the course length.

	Course No.	L3Harris Facility	On-Site
NetworkFirst System Maintenance Training			
Regional Network Manager	YTSN4H-A	2 four-hour sessions	-
Regional Network Manager	YTSN3V-B	-	2 days
Network Operation & Maintenance	YTSN3W-A	5 four-hour sessions	-
Network Operation & Maintenance	YTSN3W-B	-	4 days

E/C	Model No.	List Price \$	Description
N	YTSN4H-A	650.00	REGIONAL NETWORK MANAGER This virtual classroom course provides system administrators and managers with the ability to monitor and manage 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, exploring real-time viewers, and running activity and status reports on system performance.
BC	YTSN3V-B	CALL	REGIONAL NETWORK MANAGER This on-site course provides system administrators and managers with the ability to monitor and manage 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, exploring real-time viewers, and running activity and status reports on system performance.
N	YTSN3W-A	1,625.00	NETWORK OPERATION & MAINTENANCE This virtual classroom course introduces technicians to basic networking concepts and provides them with the ability to maintain the IP network and Network Switching Center. Topics covered include IP addressing and basic routing, database backup and storage, router and switch configuration management, high-availability Network Switching Server configuration and failover operation, and disaster recovery of network components.
BC	YTSN3W-B	CALL	NETWORK OPERATION & MAINTENANCE This on-site course introduces technicians to basic networking concepts and provides them with the ability to maintain the IP network and Network Switching Center. Topics covered include IP addressing and basic routing, database backup and storage, router and switch configuration management, high-availability Network Switching Server configuration and failover operation, and disaster recovery of network components.

TECHNICAL TRAINING

BeOn® SYSTEM ADMINISTRATIVE TRAINING

The following table provides a list of standard training courses. The table includes the course number, and the location where the training can be conducted as indicated by the course length.

	Course No.	L3Harris Facility	On-Site
BeOn System Administrative Training			
BeOn System Administration	YTSN2D-B	-	3 days

E/C	Model No.	List Price \$	Description
BC	YTSN2D-B	CALL	BeOn SYSTEM ADMINISTRATION This on-site course is designed for personnel who manage and administer the BeOn system using the Unified Administration System (UAS) and Regional Network Manager (RNM) applications, and is applicable to implementing the BeOn system as a standalone solution or integrating BeOn with a Land Mobile Radio (LMR) solution such as P25 or OpenSky®. Course topics include configuring the UAS for BeOn operation; assigning user accounts, permissions, and device/user parameters in the UAS to allow BeOn integration and operations; configuring encryption and provisioning BeOn devices with voice encryption keys; utilizing the BeOn Listing Utility to manage licenses; configuring the RNM to monitor BeOn services; accessing, navigating, and monitoring BeOn application services using the RNM; and operating BeOn subscriber devices.

TECHNICAL TRAINING

PORTABLE AND MOBILE RADIO MAINTENANCE TRAINING

Radio maintenance courses are available on XL and XG families of portable and mobile radios.

The following table provides a list of standard training courses. The table includes the course number, and the location where the training can be conducted as indicated by the course length.

	Course No.	L3Harris Facility	On-Site
Portable & Mobile Radio Maintenance Training			
OMAP Portable Radio Maintenance	MAYT-ASN8J	4½ days	-
OMAP Portable Radio Maintenance	MAYT-BSN8J	-	4½ days
OMAP Mobile Radio Maintenance	MAYT-ASN8K	4½ days	-
OMAP Mobile Radio Maintenance	MAYT-BSN8K	-	4½ days
XL Portable Radio Maintenance	YTSN4A-A	2 days	-
XL Portable Radio Maintenance	YTSN4A-B	-	2 days
XL Mobile Radio Maintenance	YTSN4V-A	2 days	-
XL Mobile Radio Maintenance	YTSN4V-B	-	2 days
Mobile Radio Installation	MAYT-BSN7U	-	2 days

E/C	Model No.	List Price \$	Description
N	MAYT-ASN8J	2,500.00	OMAP Portable Radio Maintenance This course provides in-depth discussion and hands-on exercises to maintain the XG family of portable radios, which utilize Open Multimedia Application Platform (OMAP) microprocessors. Students 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 replaceable parts and service tools will be identified. Hands-on exercises include radio programming, testing, and software maintenance.
BC	MAYT-BSN8J	CALL	OMAP Portable Radio Maintenance This on-site course provides in-depth discussion and hands-on exercises to maintain the XG family of portable radios, which utilize Open Multimedia Application Platform (OMAP) microprocessors. Students 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 replaceable parts and service tools will be identified. Hands-on exercises include radio programming, testing, and software maintenance.

TECHNICAL TRAINING**PORTABLE AND MOBILE RADIO MAINTENANCE TRAINING (Cont'd)**

E/C	Model No.	List Price \$	Description
N	MAYT-ASN8K	2,500.00	OMAP MOBILE Radio Maintenance This course provides in-depth discussion and hands-on exercises to maintain the XG family of mobile radios, which utilize Open Multimedia Application Platform (OMAP) microprocessors. Installation of the mobile radios, including the CH-721 control unit, will be discussed. Students will participate in classroom presentations and discussions on radio programming for testing as well as radio personality modification to meet specific needs. Disassembly of the radios and the CH-721 control unit will be demonstrated and discussed, and replaceable parts and service tools will be identified. Hands-on exercises include radio wiring, testing, and software maintenance.
BC	MAYT-BSN8K	CALL	OMAP MOBILE Radio Maintenance This on-site course provides in-depth discussion and hands-on exercises to maintain XG family of mobile radios, which utilize Open Multimedia Application Platform (OMAP) microprocessors. Installation of the mobile radios, including the CH-721 control unit, will be discussed. Students will participate in classroom presentations and discussions on radio programming for testing as well as radio personality modification to meet specific needs. Disassembly of the radios and the CH-721 control unit will be demonstrated and discussed, and replaceable parts and service tools will be identified. Hands-on exercises include radio wiring, testing, and software maintenance.
N	YTSN4A-A	1,000.00	XL PORTABLE RADIO MAINTENANCE This course provides technicians with the knowledge and skills to program, test, and maintain XL portable radios 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 Aeroflex™ 3920B service monitor and Auto Test software; perform select alignments independent of the AutoTest software; and upgrade the software in the radio.
BC	YTSN4A-B	CALL	XL PORTABLE RADIO MAINTENANCE This course provides technicians with the knowledge and skills to program, test, and maintain XL portable radios 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 Aeroflex™ 3920B service monitor and Auto Test software; perform select alignments independent of the AutoTest software; and upgrade the software in the radio.

TECHNICAL TRAINING**PORTABLE AND MOBILE RADIO MAINTENANCE TRAINING (Cont'd)**

E/C	Model No.	List Price \$	Description
N	YTSN4V-A	1,000.00	XL MOBILE RADIO MAINTENANCE This course will provide technicians with the knowledge and skills to maintain XL mobile radios. 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.
BC	YTSN4V-B	CALL	XL MOBILE RADIO MAINTENANCE This on-site course will provide technicians with the knowledge and skills to maintain XL mobile radios. 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.
BC	MAYT-BSN7U	CALL	MOBILE RADIO INSTALLATION 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.

TECHNICAL TRAINING

WEB-BASED TRAINING

The importance of properly trained end users cannot be understated. Therefore, we have developed a web-based training solution for our customers that provides operational training to radio users and dispatch personnel. Web-based training can build the end users' confidence by improving their knowledge of system operation and skills to operate their equipment, which will enhance performance and help reduce the number of trouble reports.

Often, radio users and dispatchers only receive training on their radios and dispatch consoles during initial implementation of a radio system. How much of this training is absorbed and retained? How many operational features are not being utilized correctly, if at all? Web-based training provides a mechanism to effectively deliver refresher training for radio users, dispatchers, supervisors, and system administrators on the operation of radio and dispatch console equipment used in the system. Additionally, it can be used to augment training for new personnel due to turnover and facilitate the transition to new radios due to rebanding.

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.

E/C	Model No.	List Price \$	Description
BC	MAYT-BSN6G	CALL	WEB-BASED TRAINING L3Harris offers asynchronous training packages on P25 System Management, P25 System Maintenance, Radio Operation, Console Operation, Radio Programming, and BeOn operation. Each package includes unlimited access to the training modules for one year. Additional modules are added to the training packages as they are developed and are available at no additional cost if you have an active account. Contact the Training Manager at 1-434-455-9454 for more information.

ENGINEERING SERVICES

E/C	Model No.	List Price \$	Description
V	YVSN1S	1,210.00	SERVICE, RF INTEGRITY Daily rate for Engineering services to predict RF coverage from designated transmission site.
V	YVSN3C	605.00	SERVICE, COVERAGE MAP
V	YASP1C	1,590.00	SERVICE, L3H PROG DESIGN ENGR Daily rate for Program Design Engineering Services.
V	MAYA-NSN6L	2,400.00	SERVICE, L3H IMPL CHIEF ENGR Daily rate for Implementation Chief Engineering Services.
V	YBSP1M	1,590.00	SERVICE, L3H PROJECT MANAGEMENT Daily rate for Project Management to assist implementing customer projects.
V	MAYB-NSN6M	2,400.00	SERVICE, L3H SR PROJECT MANAGEMENT Daily rate for Senior Project Management to assist implementing customer projects.
V	YVSN3A	1,500.00	SERVICE, DATA SYSTEM ENGINEER Daily rate for Data System Engineer.
V	YVSN1X	7,850.00	SERVICE, DATA LAB VERIFICATION, 1 WEEK Weekly rate for access and support to verify applications on L3Harris' Radio systems.
V	YVSN1Y	605.00	SERVICE, DATA LAB SETUP Mandatory fee to prepare the Data Lab for verification testing.
V	YVSN1Z	1,200.00	SERVICE, DATA LAB RETURN VISIT, PER DAY Daily fee for return visits to Data Lab when additional verification testing is required.
V	YVSN3B	1,000.00	SERVICE, DATA SYSTEM ENGINEER T & L Necessary System Engineering travel and living expense to support site visits.
V	YSSN1T	1,440.00	SERVICE, SENIOR SYSTEM TECHNICIAN, DAILY RATE Daily rate for Senior Technicians to perform installation, testing, system alignment or evaluate special applications. Travel and living will be billed in addition to this fee.
V	YSSN1U	1,200.00	SERVICE, SYSTEM TECHNICIAN, DAILY RATE Daily rate for Technicians to perform installation, testing, system alignment or evaluate special applications. Travel and living will be billed in addition to this daily rate.
BC	YCSP3G	TBD	SERVICE, FREQUENCY COORDINATION Service provided by vendors. Vendor fees to be reviewed with customer.

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