

Constellation Microwave

Course Length 3 Days

Overview: The course will develop a working understanding of Harris Constellation® Microwave Radio and associated interface equipment. The course is designed to provide employees with tools for understanding and maintaining digital radio.

Course instruction includes Constellation® radio and network testing. More than 50% of the class will be hands-on exercises with written results. This course can be customized or combined to meet specific system requirements.

COURSE OUTLINE

Introduction to Constellation Microwave Radio

- Analog vs. Digital Radio - Overview
- Constellation - Overview
- Radio Configurations - Overview
- Terminal vs. Repeater Operation
- Bandwidth and Noise in Digital Radio
- Regulation of Digital in the US

Constellation Detailed Overview

- Types of Baseband - SE
 - DS1
 - DS3
 - SONET
- DS3 Overview and M13 Mux -SE
- Wayside and Overhead Channels
- Power Supplies – Shelf Fuse Panel
- Alarm Connections – External Alarms

Detailed Module Operation

- RF Modules - SE
- Tributary Configurations – SE
- HLM and Modem Cards
- Antenna Coupling Unit –ACU
- The Signal Processing Unit (SPU)

Radio Management

- Keypad – SE
- VT-100 Emulation – SE
- Alarm Menus – SE
- Status Menus – SE
- Performance Menus – SE
- Measurement Menu – Hidden Menu
- Control Menu – SE
- Configuration Menu – SE
- Radio Software

FARSCAN – Optional

- Farscan Overview
- Installing Farscan – SE
- Master Polling – Remote Polling
- Setting up Databases – Customer Specific
- Connections and Polling the Radio
- Sending Commands
- Logging Events and Reports

NOTE: *The Farscan module is designed as overview material only. The length is ½ day and is customer specific. This is good introductory information. This module can be included in the 3 day class.*

SE = Student Exercise

For more information or a custom quote