

# ETA Competency Requirements

## MCC 5500 Dispatch Console Technician

The following is a listing of each topic considered necessary to be included in a course of study towards the education of technicians performing installation, maintenance and repair of an MCC 5500 Dispatch Console. There are 2 categories of training. This COMPETENCY listing is the syllabus, or identification of each individual subject, in which the technician must be knowledgeable and skilled.

Technician seeking the ETA MCC 5500 Dispatch Console Technician specialty are required to also have a basic education in fundamental electronics. That basic knowledge is assessed in the Associate CET examination.

## MCC5500 Competencies

### Communication Systems Concepts

- Two-Way Radio System Concepts, including Antennas, Towers, and Transmission Lines, Frequency and Spectrum, Range and Coverage, Radio Systems, System Enhancements
- Motorola Model Numbering System
- Requirements for Setting Up a "Basic Communications System"
- Communication System Fundamentals
  - Basic Simplex System Operation
  - Half-Duplex (Repeater Systems)
  - Simulcast Operation
  - Voting Systems
  - Compare the operation of conventional communication systems and trunking systems
  - Smartnet Trunking
  - Trunked Simulcast Systems
  - SmartZone Systems
  - Frequency Modulation, Securenet, and ASTRO systems
- Radio Frequency Path Fundamentals
  - Decibel concepts
  - Transmission line concepts
  - Antenna System
  - RF Propagation
  - Radio Frequency Interference

### MCC 5500 Dispatch Console

- Capabilities of the Console
- Console System Layout
- System Components
- Configuration
- Hardware Installation
- Console System Database Manager
- Software
- Display, Toolbar, and Icons

## ETA International

- Troubleshooting
- Support
- Alias Database
- Audio Calibration
- Power Supply Maintenance