

Principles of Servicing

Siemens Symbia Nuclear Medicine Systems



RADIOLOGICAL SERVICE TRAINING INSTITUTE

Introduction

The Principles of Servicing Siemens Symbia Nuclear Medicine Systems course is a hands-on course for service professionals with fundamental experience or training on the Nuclear Medicine systems. It is designed to teach the skills necessary to service to the subsystem level.

Prerequisites

Attendees must have attended RSTI's Principle of Servicing Nuclear Medicine Systems training course or possess equivalent field experience.

Objectives

At the conclusion of this course, participants will be able to:

- Demonstrate their understanding of the operation of the Siemens Symbia system.
- Verify system operation.
- Verify system specifications.
- Troubleshoot system problems.
- Perform first and second level preventive maintenance procedures.

Course Outline

Day 1 (1/2-Day, afternoon)

- Introduction to the Siemens Symbia
 - Radiation safety
 - Licensing
 - RAM & ICCAL

- System basic operation
 - Front panel controls
 - System specifications
 - Study Terminology
- Syngo Software
- **Lab Activities**
 - System operation
 - Component Location/ID

Day 2

- Theory of Operation
 - Gantry Motion
 - PHS - (Table)
 - Camera/Head
 - Image Creation/Processing
 - Software
 - Syngo Service Software
- Collimators
 - Collimator changing systems
 - Manual/Automatic
- QC operations
 - Manual QC
 - Auto QC
- Flood Calibrations
 - Daily
 - Weekly
 - Monthly
- Image Quality
 - Image quality Calibrations/troubleshooting
 - Pedestals
 - Tuning
- Quality assurance checks
- Uniformity correction methods
- **Lab Activities**
 - Motion operations
 - Manual mode
 - Motion Calibrations/Diagnostics
 - Motion troubleshooting
 - Drop the head/crystal

Day 3

- Tuning Calibrations
- Troubleshooting/Diagnostics
 - Common Failures
 - System diagnostics
- PM
 - Mechanical Checks
 - Safety Checks
- **Lab Activities**
 - Flood Calibrations
 - Quality assurance checks
 - Tuning Calibrations
 - Troubleshooting/Diagnostics
 - Camera
 - System
- Course evaluation