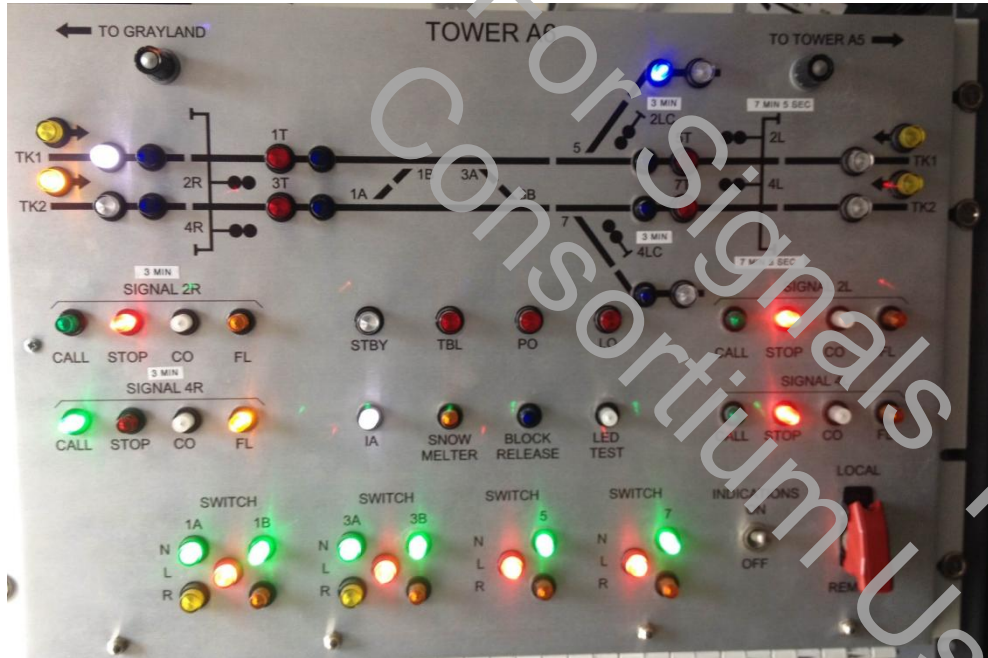


Instructor Guide



208: Inspection & Maintenance of Control Panels



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For Signals Training Consortium Use Only

Inspection and Maintenance of Control Panels

Instructor's Guide



Icons Used In This Guide



REVIEW slides



ASK



CLASSROOM ACTIVITY



SMALL GROUP ACTIVITY



INDIVIDUAL ACTIVITY



WRITE



Multimedia



REFER participants to

Agenda

Topic #	Topic Title	Duration
1	Overview	10 minutes
2	Tools and Materials	20 minutes
3	General Inspection Procedures	15 minutes
4	Testing Interlockings	25 minutes
5	Documentation	10 Minutes
6	Field Trip	60 Minutes
7	Summary	20 Minutes
Total Time:		160 Minutes

Inspection and Maintenance of Control Panels

Instructor's Guide



Overview

Purpose The purpose of this module is to:
provide a review of the inspection, testing and maintenance of control panels to verify they are operating as designed.

Objectives

- At the end of this lesson, the signal maintainer trainee will be able to:
- List tools and materials used in the inspection, testing and maintenance of control panels
 - Describe inspection and maintenance procedures as per location and regulating authority of non-vital components of the control panel
 - Describe basic inspection and maintenance procedures as per industry standards
 - Describe control panel functions when testing specific type of interlockings
 - Identify agency specific schedules, if applicable, for control panel inspection and maintenance
 - Describe inspection, maintenance and testing documentation for reporting as per agency regulations

Materials

- Mandatory** Make sure you have the following
- PowerPoint Presentation
 - Coursebook
 - Quizzes
 - Pencils
 - White board/ Flip chart and markers
 - Pointer
 - Lab or time in the field
- Optional** You may also want the following for optional activities:
- Internet connection
 - Microprocessor interlocking control panel
 - Site specific:
 - Maintenance Schedule/PM Sheet(s)
 - Local Control Panel
 - Documentation Procedures/Forms

Introduction and Overview of Control Panels

Instructor's Guide

Module Length: 160min Time remaining: 160min This section: 10min (6 slides) Section start time: _____ Section End Time: _____






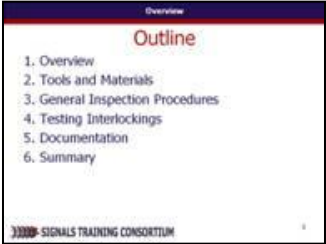
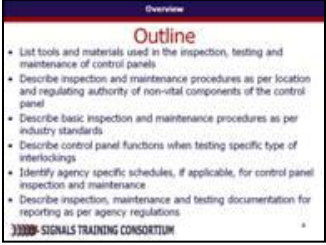
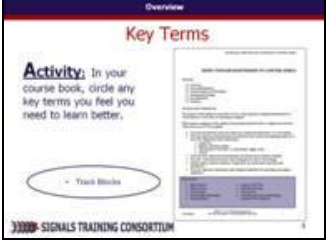
DO	SAY	Materials Needed
<div data-bbox="54 464 158 564"></div> <div data-bbox="189 492 405 521">REVIEW slides</div> <div data-bbox="19 792 608 1242"><h3>Instructor's Notes</h3><hr/><hr/><hr/><hr/><hr/><hr/></div>	<p>In your own words:</p> <p>You were introduced to control panels and their basic functions in <i>Course 108</i> and in earlier interlockings courses. These courses emphasized the interconnection between control panels and interlockings. This course on the inspection and maintenance of control panels will reference these earlier courses often and where appropriate will closely review concepts covered therein, since the control panel is a required tool used in the testing, inspection and maintenance of interlockings. Advance slide.</p> <p>Without functioning control panels, rail employees would not be able to remotely operate components, equipment or set up routes. This would mean having to go into the field, etc. to do these things which is an unneeded waste of time. This inefficiency could slow down the entire system. It is your job as signal maintainers to properly perform inspection and maintenance procedures to help avoid these situations.</p> <p>Advance Slide.</p>	<div data-bbox="1503 471 1825 506">✓ PPT slides 1, 2</div> <div data-bbox="1541 528 1879 782"></div> <div data-bbox="1541 803 1879 1058"></div>

Introduction and Overview of Control Panels

Instructor's Guide

Module Length: 160min Time remaining: 160min This section: 10min (6 slides) Section start time: _____ Section End Time: _____



DO	SAY	Materials Needed
<div>REFER participants to Coursebook</div> <div>ASK</div> <div>INDIVIDUAL ACTIVITY</div> <div>Instructor's Notes <hr/><hr/><hr/><hr/><hr/><hr/></div>	<p>In your own words:</p> <p>Today, we will start with a brief overview. We will then talk about the tools and materials needed for inspection and maintenance of control panels, discuss general procedures for I&M, testing and documentation and end with a summary. Advance Slide</p> <p>At the end of this class, you should be able to do all of the following.... Ask the class: could I have a volunteer to read our learning objectives for this module? Select a volunteer or read Learning Objectives and Advance Slide.</p> <p>Refer participants to the coursebook. Before we start, circle in your course book any key terms you feel you need to learn better. Ask participants to share. By the end of this module, you'll be much more familiar with all of these terms. Advance slide.</p>	<p>✓ PPT slides 3 - 5</p> <div></div> <div></div> <div></div> <p>✓ Coursebook</p>