FEDERAL RAILROAD ADMINISTRATION

OFFICE OF SAFETY



FY 2008 Technical Training Course Catalog and Calendar

SAFETY IMPROVEMENT &

DEVELOPMENT TEAM

Foreword

The SIDT course catalog is provided as a service to our internal Office of Safety customers, including participating state inspectors and program managers. The catalog includes course descriptions for 21 different courses SIDT will deliver this year. The catalog is preceded by the FY 2008 Training Calendar as of 10/24/2007, which consists of 51 classes in the 21 courses. Calendar updates will be provided if changes occur. We also offer a correspondence course for Federal Inspector Trainees hired at the GS-05 and GS-07 grade level.

- 1. Technical training is based on organizational needs, and therefore considered mandatory. SIDT performs various types of analyses to assess the organizational needs, including feedback from Headquarters, the regions, and the inspectors.
- 2. The training is for internal Office of Safety customers. Although we may invite people from the NTSB, Transport Canada, etc., to attend on occasion, we do not provide training for external customers from other governmental or civilian organizations. We simply do not have the resources to do so.
- 3. Normally, we do not honor requests to attend particular courses or classes. We use a specific methodology to select Federal and State Inspectors and Specialists in a resource responsible and equitable manner. The SIDT Management Analyst manages the selection process.
- 4. The SIDT Program Assistant prepares training travel orders for participating state employees, but they may be required to use the GovTrip program sometime this Fiscal Year. If so, a process will be developed and guidance issued.
- 5. Federal employees are required to use the GovTrip program. SIDT does not fund training travel for Federal employees. FRA Headquarters adds funding to the regional and HQ budgets to accommodate this travel.
- 6. Staff Directors, Regional Administrators, Deputy Regional Administrators, and State Program Managers are invited to attend in-house classes if they wish. SIDT will not fund travel for State Program Managers who wish to attend training courses unless they also actively perform inspections. They may attend courses, but must travel at state expense.
- 7. When we schedule contractor training, we cannot take the groups mentioned above into account. If someone from this group wishes to attend a contractor course, they must receive prior approval from the SIDT Coordinator. We cannot use slots allotted for Inspectors and Specialists to accommodate people from this group.
- 8. Current policy is to schedule Chief Inspectors only for courses that relate to their previous discipline of expertise, general courses, or for courses developed specifically for them.
- 9. GS-05 and GS-07 level trainees do **not** attend formal training classes developed for journey level inspectors. We have a specific program of training for trainees at these grade levels. The program consists primarily of self-study and one-on-one tutelage with experienced inspectors. The same standard generally applies to participating state inspector trainees. GS-09 level trainees and state equivalent inspectors are scheduled for journey level classroom and on-the-job training.

		FRA FY 2008 Technical Training Calend Revised Date: 12/19/2007	ar			
CI ID	C ID			D 4	G:4	G4 4
	Course ID	Course Name	Arrive	•	City	State
0801	MP&E 201	MP&E Fundamentals - Phase One	01/06/08		San Antonio	TX
0802	OP 213	Operational Testing & Human Performance Science	01/13/08		Las Vegas	NV
0803	OP 201A	OP Fundamentals - Phase One	02/10/08		Las Vegas	NV
0804	GN 208	FRA Report Writing Principles for Federal Employees	02/11/08		Redondo Beach	CA
0805	MP&E 205	MP&E Fundamentals - Phase Two	02/11/08		San Antonio	TX
0806	Track 209	Track Civil Penalty Review	02/11/08		Las Vegas	NV
0807	OP 216	OP Recurrency 2008	02/25/08		San Antonio	TX TX
0808	HM 201	HM Fundamentals - Phase One	03/10/08		San Antonio	
0809	S&TC 201	S&TC Fundamentals - Phase One	03/10/08		Nashville	TN
0810	Track 209	Track Civil Penalty Review	03/10/08		San Antonio	TX
0811	GN 202	Investigative Skills Fundamentals	03/24/08		Louisville	KY
0812	MP&E 209	Freight Car Air Brakes	03/24/08		Las Vegas	NV
0813	GN 208	FRA Report Writing Principles for Federal Employees	03/31/08		San Antonio	TX
0814	HM 208	HM Fundamentals - Phase Two	03/31/08		San Antonio	TX
0815	OP 216	OP Recurrency 2008	03/31/08		Las Vegas	NV
0816	S&TC 215	S&TC Recurrency 2008	03/31/08		Redondo Beach	CA
0817	Track 209	Track Civil Penalty Review	04/07/08		Nashville	TN
0818	S&TC 206	S&TC Fundamentals - Phase Two	04/14/08		Louisville	KY
0820	MP&E 209	Freight Car Air Brakes	04/21/08		Columbus	OH
0821	Track 209	Track Civil Penalty Review	04/21/08		Louisville	KY
0822	GN 207	Accident Investigation Fundamentals	04/27/08		Las Vegas	NV
0819	HM 214	HM Recurrency 2008	04/28/08		Las Vegas	NV
0823	OP 216	OP Recurrency 2008	04/28/08	05/02/08		NE
0824	MP&E 301C	Steam Locomotive 2008	05/04/08		Strasburg	PA
0825	OP 207A	OP Fundamentals - Phase Two	05/05/08			NE
0826	S&TC 215	S&TC Recurrency 2008	05/05/08		Las Vegas	NV
0827	Track 209	Track Civil Penalty Review	05/05/08		Columbus	OH
0828	MP&E 209	Freight Car Air Brakes	05/12/08		San Antonio	TX
0829	HM 214	HM Recurrency 2008	05/19/08			NE
0830	GN 208	FRA Report Writing Principles for Federal Employees	06/02/08		Louisville	KY
0831	HM 214	HM Recurrency 2008	06/02/08		Columbus	OH
0832	MP&E 209	Freight Car Air Brakes			Louisville	KY
0833	OP 216	OP Recurrency 2008	06/09/08			CA
0834	S&TC 215	S&TC Recurrency 2008	06/09/08		Columbus	OH
0835	Track 209	Track Civil Penalty Review	06/09/08			NE
0836	GN 207	Accident Investigation Fundamentals	06/22/08			NE
0837	MP&E 209	Freight Car Air Brakes	06/23/08			NE
0838	OP 216	OP Recurrency 2008	06/23/08		Nashville	TN
0839	S&TC 215	S&TC Recurrency 2008	06/23/08		Louisville	KY
0840	S&TC 215	S&TC Recurrency 2008	07/07/08		Nashville	TN
0841	Track 201	Track Fundamentals - Phase One	07/13/08		Louisville	KY
0842	HM 214	HM Recurrency 2008	07/14/08		Nashville	TN
0843	OP 216	OP Recurrency 2008	07/14/08		Columbus	OH
0844	OP 216	OP Recurrency 2008	07/21/08		Louisville	KY
0845	HM 214	HM Recurrency 2008	08/04/08		San Antonio	TX
0846	MP&E 209	Freight Car Air Brakes	08/04/08		Nashville	TN
0847	Track 209	Track Civil Penalty Review	08/04/08		Louisville	KY
0848	GN 207	Accident Investigation Fundamentals	08/10/08		Louisville	KY
0849	GN 202	Investigative Skills Fundamentals	08/18/08		Nashville	TN
0850	MP&E 209	Freight Car Air Brakes	08/18/08		Columbus	OH
0851	Track 205	Track Fundamentals - Phase Two	08/18/08	08/22/08	Louisville	KY

Course_IDHoursPrerequisiteSourceGN 101N/ANoneContractor

Course Name

The Railroad - What It Is, What It Does

Description and Objectives

Description: This is a correspondence course from The Railway Educational Bureau (REB) that will be completed by all grade level GS-5 or GS-7 FRA inspector trainees. This course explores the railroad industry from A to Z, with illustrations and diagrams helping explain the evolution of the railroad industry, changes in signal and communication technology, maintenance, and design engineering. The ever-changing face of rail passenger service is described, as is intermodal traffic. The course book also examines the administration, law, accounting, and deregulation of the railroad, making it a valuable single volume of railroad information.

The objective of this course is to provide a basic understanding of what a railroad is. The course includes the following eight modules:

- 1. Railroad Technology, The Route System.
- 2. The Track: Alignment and Structure.
- 3. The Locomotive.
- 4. The Railroad Car and the Train.
- 5. Signals and Communication, Railroad Operation.
- 6. Car Types, Terminal Operations, Classification and Blocking.
- 7. Shipping, Unit-Trains, Intermodal Traffic, Rail Passenger Services.
- 8. Railroad Organization.

Regional managers should notify Barbara Hall, SIDT Management Analyst, via e-mail when a person is employed as a GS-05 or GS-07 level inspector trainee. Ms. Hall will arrange to send the course to the appropriate region for assignment. The Railway Educational Bureau will grade the lessons and send the results to the FRA Supervisor for review.

Course_IDHoursPrerequisiteSourceGN 20224NoneContractor and FRA

Course Name

Investigative Skills Fundamentals

Description and Objectives

Description: This course is for those who are expected to perform an FRA investigation. The course focuses on developing interviewing, photography, and note taking skills; and includes interactive lectures and a field trip. Practical exercises are built around a grade crossing accident scenario. Each class will be monitored by a FRA training specialist to ensure field trip safety and to answer questions about FRA's witness interviewing policies.

- 1. Use their FRA provided cameras to photograph an accident site.
- 2. Prepare notes including a photo log.
- 3. Conduct an interview.

Course_IDHoursPrerequisiteSourceGN 20730GN 202FRA

Course Name

Accident Investigation Fundamentals

Description and Objectives

Description: This course is intended for anyone who may be assigned to perform an FRA accident investigation. There are 10 learning modules covering FRA's statutory and regulatory authority to conduct investigations, communication guidelines, fatigue and crew resource management techniques for listing and prioritizing information gathering objectives, note taking and interviewing skills reinforcement, alcohol & drug involvement, locomotive event recorders, hazardous materials involvement, and FRA accident reporting requirements.

The course consists of a series of short interactive lectures using slide presentations and participant guides, followed by practical exercises for each of the modules. A building block concept is used for the practical exercises so that the learning lessons are reinforced throughout the course. There is a 25 question pre and post test designed to evaluate participant knowledge levels at the beginning and ending of the course.

- 1. Recognize their statutory and regulatory authority to investigate accidents.
- 2. Analyze accident reports submitted by railroads to FRA.
- 3. Explain circumstances where fatigue may be a causal factor.
- 4. Understand the Threat and Error Management Model.
- 5. Use recognized investigative techniques to list and prioritize objectives.
- 6. Identify note taking and interview requirements, policies, and techniques.
- 7. Recognize when locomotive event recorder data, alcohol and drug involvement, and hazardous materials involvement must be included in reports.
- 8. Prepare an FRA F6180.39 Factual Railroad Accident Investigation Report.

Course_ID Hours Prerequisite Source

GN 208 22 None Contractor and FRA

Course Name

FRA Report Writing Principles for Federal Employees

Description and Objectives

Description: This three-day course is intended for Federal Office of Safety Field Employees who are required to write and edit reports. The first day is a grammar refresher workshop delivered by a contractor with a minimum of a Master's Degree in English and adult teaching credentials. The second day includes modules on editing, general writing principles, and planning and organizing FRA reports. Students practice writing and editing sections of accident and complaint investigative reports on the third and final day.

- 1. Use grammar rules more effectively.
- 2. Write sentences and paragraphs following the principles of clear and concise government writing.
- 3. Apply editing techniques to their own writing.
- 4. Plan and organize FRA reports.
- 5. Write reports that will be clear to the reader at the first reading.
- 6. Revise and edit reports using automated word processing program features.

Course_IDHoursPrerequisiteSourceHM 20124NoneFRA

Course Name

Hazardous Materials Fundamentals - Phase One

Description and Objectives

Description: This course provides recently hired journey level Federal and State Hazardous Materials Inspectors, and GS-9 level HM Trainees with the knowledge, skills and abilities necessary to perform inspections at their grade level. The course is an overview of the following: Hazmat Compliance Manual, FRA Field Orientation and Training Guide, AAR Specification for Tank Cars - M1002, and 49 CFR Parts 171, 172, 173, 174, 178, 179 and 180.

This course consists of a series of short interactive lectures using a slide presentation and participant guides, followed by practical team exercises for each learning module. Practice exercises will consist of situational scenarios and group discussions. There is a multiple choice pre and post test designed to evaluate participant knowledge levels at the beginning and end of the course.

- 1. Apply appropriate FRA Hazmat regulations when performing site inspections.
- 2. Recognize deviations from the regulations.
- 3. Prepare an F6180.96 inspection report based on a given scenario.
- 4. Identify railroad and/or shipper responsibility for achieving compliance.
- 5. Understand inspector discretion when considering civil penalty recommendations.
- 6. Recall appropriate reference source documents for guidance.
- 7. Calculate the filling limits/density requirements for loading tank cars.

Course_IDHoursPrerequisiteSourceHM 20824NoneFRA

Course Name

Hazardous Materials Fundamentals - Phase Two

Description and Objectives

Description: This course provides recently hired journey level Federal and State Hazardous Materials Inspectors, and GS-9 level HM Trainees with the knowledge, skills and abilities necessary to perform inspections at their grade level. The course provides an overview of the FRA requirements for using civil penalties as a compliance tool, gathering applicable documents to support the claim, and the steps necessary to properly prepare the report.

The course consists of a series of short interactive lectures, using a slide presentation and participant guides, followed by practical exercises involving realistic scenarios for each learning module. A building block concept is used and incorporated into practical exercises of each module, so that learning lessons are reinforced throughout the course. There is a multiple choice pre and post test designed to evaluate participant knowledge levels at the beginning and ending of the course.

Objectives: At the conclusion of the training, participants will be able to:

- 1. List the enforcement actions available to effectively handle non-compliant hazmat issues.
- 2. Gather the documents needed to support the violation report.
- 3. Determine if individual civil penalty actions are appropriate.
- 4. Prepare a F6180.110 violation report.

Course_ID Hours Prerequisite Source

HM 214 24 None Contractor & FRA

Course Name

HM Recurrency 2008

Description and Objectives

Description: This course is intended for all Federal and State hazmat inspectors and specialists. It provides an overview of recent hazmat regulatory changes, including newly established routing requirements for certain hazardous commodities shipped by rail. The training module will include a synopsis of the National Incident Management System (NIMS), a comprehensive national approach to incident management. The use of data analysis, with emphasis of multi-modal operations, will be introduced. A portion of the curriculum is focused on the standards for tank car construction, qualification and maintenance.

The course includes a series of interactive lectures using PowerPoint presentations, guest lectures, hazmat database analysis, and participant guides. Each training module will be followed by practical exercises. A building block concept is used for the practical exercises, so that the learning lessons are reinforced throughout the course. There is a pre and post course test that is designed to evaluate participant knowledge levels at the beginning and end of the course. Participants will also acquire NIMS awareness certification.

- 1. Apply recent regulatory changes to hazmat regulations.
- 2. Cite the hazmat regulations pertinent to tank car construction, qualification, and maintenance.
- 3. Be aware of the National Incident Management System (NIMS).
- 4. Individually prepare a database using PHMSA's Intermodal Hazmat Intelligence Portal integration system.

Course_IDHoursPrerequisiteSourceMP&E 20132NoneFRA

Course Name

MP&E Fundamentals - Phase One

Description and Objectives

Description: This course provides recently hired MP&E Inspectors with the knowledge, skills and abilities necessary to perform inspections at their grade level. The course includes instruction on the MP&E Compliance Manual, Code of Federal Regulations (49 CFR), and the Single Car Air Brake Test (SCT) Manual. New inspectors learn the specific methodologies related to Locomotives (229), Safety Appliances, (231) Power Brakes and Drawbar Heights (232), Freight Car Safety Standards (215), Locomotive and Car Glazing Standards (223), Blue Signals (218), Rear of Train Markers (221).

- 1. Apply appropriate MP&E regulations when performing site inspections.
- 2. Recognize deviations from the regulations.
- 3. Prepare an F6180.96 inspection report based on a given scenario.
- 4. Understand an individual employee's compliance responsibilities.
- 5. Assess whether railroads use proper sequential steps when performing single car tests.

Course_IDHoursPrerequisiteSourceMP&E 20524NoneFRA

Course Name

MP&E Fundamentals - Phase Two

Description and Objectives

Description: This course provides recently hired MP&E Inspectors with the knowledge, skills and abilities necessary to perform inspections at their grade level. There is an overview of various MP&E activities in connection with inspection reports, violation reports, special notice for repair reports, activity codes, defect/non-defect codes, and the MP&E Compliance Manual. The course consists of a series of short interactive lectures using a slide presentation, participant guides, and job aids, followed by practical team exercises for each learning module.

- 1. Prepare a MP&E Violation Report (F6180.109), based on a given scenario.
- 2. Prepare a Special Notice for Repair Report (F6180.8), based on a given scenario.
- 3. Recall appropriate MP&E activity codes.
- 4. Use appropriate MP&E defect/non-defect codes.
- 5. Use the MP&E Compliance Manual.

Course_IDHoursPrerequisiteSourceMP&E 20924NoneFRA

Course Name

Freight Car Air Brakes

Description and Objectives

Description: This course is intended for all Federal and State MP&E Specialists and Inspectors. The course is a review of FRA's federal regulations covered under 49 CFR Part 232 - Brake System Safety Standards, guidelines provided by Headquarters when inspecting various freight car air brake systems, and protocols that should be followed when observing a Single Car Air Brake Test. There are a series of short interactive lectures using a slide presentation, participant guides, and job aids, followed by practical exercises addressing specific sections of 49 CFR Part 232.

- 1. Accept basic brake operating principles.
- 2. Identify the components of various air brake systems.
- 3. Understand inspection requirements associated with the various air brake systems.
- 4. Recall the different types of air brake tests specified in 49 CFR Part 232.
- 5. Be aware of all technical bulletins related to 49 CFR Part 232.
- 6. Recall test procedures of the single car air brake test.

Course_IDHoursPrerequisiteSourceMP&E 301C32NoneFRA/Contractor

Course Name

Steam Locomotive Inspection Fundamentals

Description and Objectives

Description: This course is intended for Federal GS-12 or GS-13 Motive Power & Equipment Inspectors, Specialists, and Chief Inspectors assigned to perform steam locomotive inspections. This course will provide individuals with the knowledge, skills, and abilities necessary to perform steam locomotive inspections to determine compliance with Federal Regulations.

Participants will receive classroom lecture in conjunction with a slide presentation and participant guide. Lectures will focus on steam locomotive design, operation, maintenance, repair, feedwater systems, valve gear, and running gear. Participants will also engage in a series of practical exercises emphasizing maintenance, repair and/or alteration procedure, and inspection methodologies on both exterior and interior portions of the boiler proper, firebox, smokebox, tender, and running gear. Although there are no prerequisites for attending other courses prior to attending this training, those selected must:

- Be willing and able to perform inspections inside confined spaces that are likely to be foul with dirt.

- 1. Apply FRA Inspection and Maintenance Standards when inspecting steam locomotives.
- 2. Recognize FRA policies and/or directives when inspecting steam locomotives.
- 3. Identify deviations from the standards.
- 4. Understand steam locomotive construction, classification, operation, and boiler configuration.
- 5. Identify Non-destructive Examination (NDE) processes and procedure.
- 6. Differentiate between an accepted national standard and an established railroad practice for repairs and alterations to boilers.
- 7. Apply the logic path associated with objectives 1, 5 and 6.

Course_IDHoursPrerequisiteSourceOP 201A32NoneFRA

Course Name

OP Fundamentals - Phase One

Description and Objectives

Description: This course is intended for recently hired Operating Practices Inspectors. The course introduces the participants to 49 CFR parts 217, 218, 220, 221, 228, 232, and 240. The course will include a review of the OP Compliance Manual with emphasis on the Focused Inspection approach and the Switching Operations Fatality Analysis initiative. There is a pre and post multiple choice test that is designed to evaluate each participant's knowledge levels at the beginning and end of the course. The course mixes classroom lectures with practical exercises to achieve an application level of learning of the topics covered.

- 1. Select the appropriate methods for addressing safety issues identified during inspections.
- 2. Understand the philosophy of operations testing.
- 3. Prepare to conduct onboard train inspections and yard inspections.
- 4. Apply blue signal protection and utility employee provisions of Part 218 within a railroad yard.
- 5. Apply 49 CFR Part 220 and associated railroad operating rules.
- 6. Apply 49 CFR Part 221.
- 7. Understand the components of SOFA and Railroad Operating Rules.
- 8. Recognize OP involvement in securing railroad equipment.
- 9. Explain the requirements of the Hours of Service Law.
- 10. Recognize the procedures for field enforcement of Part 240.

Course_IDHoursPrerequisiteSourceOP 207A24NoneFRA

Course Name

OP Fundamentals - Phase Two

Description and Objectives

Description: This course is intended for recently hired Operating Practices Inspectors. There are seven learning modules covering waiver petitions, enforcement actions against railroads, inspection reports, complaint investigation, individual liability and violation reports. The course consists of a series of lectures using PowerPoint presentations and participant guides, followed by practical exercises for each of the modules. The participants, using a given practical exercise, write a complaint investigation memorandum, inspection report, violation report and a regional warning letter. A building block concept is used for the practical exercises so that the learning lessons are reinforced throughout the course. There is a pre and post test designed to evaluate participant knowledge levels at the beginning and end of the course.

- 1. List the procedures for issuance of a permanent or temporary waiver petition.
- 2. Prepare an inspection report (6180.96) based on a given practical exercise.
- 3. Use cameras and witness statements to strengthen violations and reports.
- 3. Perform complaint investigations in accordance with FRA policy.
- 4. Prepare a complaint investigation memorandum based on a given scenario.
- 5. Identify the six types of enforcement tools available against railroads, and the seven factors that should be analyzed in determining whether or not to recommend civil penalties.
- 6. Prepare violation reports.
- 7. Identify the types of individual liability tools available for use by FRA.
- 8. Write a Regional Warning Letter for Individual Liability based on a given scenario.

Course_IDHoursPrerequisiteSourceOP 21330NoneFRA

Course Name

Operational Testing & Human Performance Science

Description and Objectives

Description: This course is intended for all OP Inspectors and Specialists. It will provide an overview of 49 CFR Part 217 (Railroad Operating Rules), with special emphasis on 217.9 (Program of Operational Tests and Inspections), and the Science of Human Performance. There are learning modules covering FRA's authority under Part 217, with a focus on comparing OP inspector records, railroad operational testing records, and field monitoring of operational testing sessions. The course also teaches inspectors to apply the Science of Human Performance when accompanying railroad officers during testing sessions and discussing safety with employees.

- 1. Categorize operating rules for review.
- 2. Analyze a railroad's operational testing records.
- 3. Monitor a railroad's operational testing sessions.
- 4. Compare data from railroad records with FRA inspection data and operational testing sessions.
- 5. Assess a railroad's program of instruction on operating rules.
- 6. Resolve Part 217 compliance problems.
- 7. Use knowledge of Human Performance Science when discussing safety with railroad employees and officers.

Course_IDHoursPrerequisiteSourceOP 21624NoneFRA

Course Name

OP Recurrency 2008

Description and Objectives

Description: This course is intended for all Federal and State OP Inspectors and Specialists, and Chief Inspectors with an OP background. It provides an overview of the new 49 CFR Part 217 and Part 218 Regulations and their application. The course will also emphasize securing equipment and air tests (CFR Part 232), and describe agency expectations for inspector involvement in 49 CFR Part 240. There are learning modules covering FRA's authority to determine the railroad's adherence with their own program, the duties of OP Inspectors to monitor Operational Testing Reviews by the railroads in their territory, and how that information should be normalized and presented to Railroad Managers.

The course consists of a series of short interactive lectures using a slide presentation and participant guides, followed by practical exercises or group discussions for each of the modules. There is a pre and post test designed to evaluate participant knowledge levels at the beginning and ending of the course.

Objectives: After successfully completing the course each participant will be able to:

- 1. Participate in reviewing and analyzing railroad Operational Testing Reviews.
- 2. Analyze a railroad's operational testing records.
- 3. Resolve problems noted with a railroads compliance with Part 217.
- 4. Apply the new Part 217 and Part 218 requirements.
- 5. Apply the regulations of Part 232 that affect the Operational Practices Discipline.
- 6. Explain the expectations of Part 240.

Course_IDHoursPrerequisiteSourceS&TC 20124NoneFRA

Course Name

S&TC Fundamentals - Phase One

Description and Objectives

Description: This course is intended for recently hired Federal and State S&TC inspectors who may be assigned to perform FRA inspections, complaint investigations, and other general duties associated with an FRA S&TC Inspector's position.

The course consists of a series of short interactive lectures using PowerPoint presentations and participant guides, followed by practical team exercises. The participants, using practical exercises, prepare inspection reports, list inspection priorities, practice how they would approach certain inspections and investigations of signal systems, and learn signal system terminology and definitions. A building block concept is used for the practical exercises so that the learning lessons are reinforced throughout the course. There is a multiple choice, pre and post test designed to evaluate participant knowledge levels at the beginning and end of the course.

- 1. List the proper sequence of events involved in performing a signal system inspection.
- 2. List the various inspection and enforcement tools available while inspecting railroads.
- 3. Write a brief memorandum report detailing defective conditions to various signal system scenarios.
- 4. Write a brief technical summary report using industry standard terminology and FRA definitions.
- 5. Identify various signal systems, including related operating rules and methods of operation utilized in the railroad industry.
- 6. Identify various highway grade crossing signal systems, including the review of special grade crossing operating rules and special instructions.
- 7. List the proper regulation to be used when citing defective railroad S&TC conditions.
- 8. Recognize appropriate inspection procedures and how to establish good rapport with industry customers.

Course_IDHoursPrerequisiteSourceS&TC 20624NoneFRA

Course Name

S&TC Fundamentals - Phase Two

Description and Objectives

Description: This course is intended for recently hired Federal S&TC Inspectors, State S&TC Inspectors, S&TC Specialists, and Chief Inspectors with a S&TC background, who may be assigned to perform an FRA inspection, complaint investigation, block signal application or waiver investigation, false proceed signal investigation, violation report, or individual liability action. There are 7 learning modules covering the objectives listed below.

The course consists of a series of short interactive lectures using PowerPoint presentations and participant guides, followed by practical team exercises. The participants using the given practical exercise write a complaint investigation memo, inspection report, violation report, signal application report and a regional warning letter. A building block concept is used for the practical exercises so that the learning lessons are reinforced throughout the course. There is a multiple choice, pre and post test designed to evaluate participant knowledge levels at the beginning and end of the course.

- 1. List the procedures and requirements necessary for investigating block signal application, RS&I waiver investigations and false proceed signal investigations.
- 2. List the enforcement actions available against railroads.
- 3. Explain the proper procedures for handling complaints from start to finish.
- 4. Write a complaint report based on the given scenario.
- 5. Write a signal inspection report using FRA's computer-based RISPC system.
- 6. Write a violation report using a Form FRA F6180.112 violation report.
- 7. Explain if individual civil penalty actions are necessary because the conduct is willful.
- 8. Write a regional individual liability warning letter.

Course_IDHoursPrerequisiteSourceS&TC 21524NoneFRA

Course Name

S&TC Recurrency 2008

Description and Objectives

Description: This course is intended for all Federal and State S&TC inspectors who may be assigned to perform Part 234 and 236 inspections, investigations and other duties associated with railroad and highway grade crossing signal systems.

The course consists of a series of short interactive lectures using PowerPoint presentations and participant guides, followed by practical exercises. The participants will understand the inspection of, signal and train control systems, signalized movable bridge systems, power-operated switches, hand-operated switches, and highway grade crossing warning devices. A building block concept is used for the practical exercises and learning lessons are reinforced throughout the course. There are multiple choice, pre and post tests designed to evaluate participant knowledge levels at the beginning and end of the course.

- 1. Understand the inspection of signal and train control systems subject to Part 236.
- 2. Understand the inspection of highway grade crossing warning devices subject to Part 234.
- 3. Apply FRA investigative procedures regarding crossing signal activation failures.
- 4. Explain the inspection of signalized movable bridge systems and subsystems.
- 5. Understand the new technical bulletin and defect codes regarding 236.18.
- 6. Write an S&TC inspection report using new defect codes.
- 7. Write a discipline specific S&TC investigative report.

Course_ID	Hours	Prerequisite	Source
Track 201	32	None	FRA

Course Name

Track Fundamentals - Phase One

Description and Objectives

Description: This course introduces recently hired Track Inspectors to 49 CFR Part 213 Subparts A-F Track Safety Standards, general railroad industry safety requirements, and personal safety requirements, when inspectors are on or about the railroads' tracks or property. The course combines classroom learning examples with practical field exercises to gain hands-on experience about the rail industry.

- 1. Use personal safety equipment when conducting a track inspection.
- 2. Relate commonly used track terms to actual components in the track structure.
- 3. Interpret a typical railroad timetable and track chart/profile.
- 4. Use the inspection tools that are necessary to conduct a track inspection.
- 5. Interpret and analyze data generated by the Automated Track Inspection Program.
- 6. Clarify the minimum requirements for each subpart of 49 CFR Part 213.
- 7. Apply the Track Safety Standards and the Track Compliance Manual guidelines during inspections.

Course_IDHoursPrerequisiteSourceTrack 20524NoneFRA

Course Name

Track Fundamentals - Phase Two

Description and Objectives

Description: This course is intended for recently hired Track Inspectors. There are six learning modules covering waiver petitions, enforcement actions against railroads, complaint investigations, inspection reports, individual liability, and violation reports.

The course consists of a series of short interactive lectures using PowerPoint presentations and participant guides, followed by practical team exercises. A building block concept is used for the practical exercises so that the learning lessons are reinforced throughout the course. There is a pre and post test designed to evaluate participant knowledge levels at the beginning and ending of the course.

- 1. List the procedures for issuance of a permanent or temporary waiver petition.
- 2. List the enforcement actions available against railroads.
- 3. Write a narrative complaint investigation report.
- 4. Complete a track inspection report.
- 5. Write a violation report using Form FRA F6180.111 or FRA F6180.119.
- 6. Determine if individual civil penalty actions are advisable for willful conduct.
- 7. Write a regional individual liability warning letter.

Course_IDHoursPrerequisiteSourceTrack 20924NoneFRA

Course Name

Track Civil Penalty Review

Description and Objectives

Description: This course is intended for all Federal and State Track Inspectors and Specialists. The course is a review of FRA's civil penalty protocols and guidelines provided by the Office of Chief Counsel and published in the Track Compliance Manual, including associated inspection reports, violation reports, regional warning letters, activity codes, and defect codes. The course consists of a series of short interactive lectures using a slide presentation and participant guides, followed by practical individual exercises addressing specific sections of 49 CFR Parts 213 and 214.

- 1. Recognize the seven factors to be considered in making enforcement decisions.
- 2. Accept specific guidelines provided by the Office of Chief Counsel when considering civil penalty actions.
- 3. Be aware of guidelines provided by the Office of Chief Counsel when developing specific items in the Track Violation Report (F6180.111).
- 4. Use appropriate defect codes from specific sections of 49 CFR Parts 213 and 214.
- 5. Write a Track Violation Report (F6180.111), based on given scenarios.
- 6. Write a regional individual liability warning letter.