

DCA13MR002
Conrail - Shared Assets
Derailment/Hazardous Material Release
Paulsboro, New Jersey
November 30, 2012

Conrail
Dispatcher and Operator
Rules Training Lesson Plan

Conrail

2012

Dispatcher & Operator

Book of Rules Training

Lesson Plan

Outline

1. Welcome & Introductions
2. Format of Class
3. Administrative Issues
 - a. Job Safety Briefings
 - b. Security
 - c. Rest & Hours of Service
 - d. Drug & Alcohol Policy
 - e. EEO & Harassment
4. Special Topics
 - a. Cell Phones
5. NORAC Rules
6. Safety
7. Hazmat
8. Roadway Worker Protection
9. Air Brake
10. The Test

Handout Materials

- Conrail Drug & Alcohol Policy
- DARS Pamphlets
- EEO Equal Employment Opportunity Policy
- COPY OF RULE 716 PROHIBITED CELL PHONE USE
- Safety & Operations Performance

Support Materials

- Sign In Sheet for Class
- Security Video
 - Sign In Sheet
 - Quiz (5 Copies)
 - Answer Sheets (10 Copies)
- Examination – Student Version (5 Copies)
- Examination – Instructor’s Version (1 Copy)
- Answer Sheets for Examination (10 Copies)
- Answer Key (1 Copy)

Lesson Details

1. Welcome & Introduction

Introduce yourself and give brief history of your background, particularly as it applies to the railroad. (e.g. Years of Service, craft(s) and area(s) where employed) Then ask each employee to introduce himself and tell about himself.

2. Safety Briefing

Deliver Job Safety Briefing for the facility.

- Then reference Timetable page I for the outline and 5 steps.
- Mention that Conrail has long been an advocate of job briefings, and that FRA emphasizes Job Briefings in SOFA and with every special order they issue. (Example EO-24)

3. **Format of Class & Administrative Items**

- We are back to annual training for everyone, at least for now. The 3-Year Format was attempted in 2005, but it has since been decided to train everyone. This is due to realization that the savings were not there and because of pressures from outside.
- The format of this class will be informal. I am looking for give & take between us to help me learn about you and what you do.
- Handle Sign in Sheet
- Picture IDs
Check for replacements needed and arrange.
Reference TTSI A-4 – EMPLOYEE IDENTIFICATION

Review of Manuals, Latest Editions in Effect

Follow order of Operating Manual tabs.

<u>Manual</u>	<u>Effective Date</u>
• Operating Rules = NORAC 10 th Edition	January 1, 2012
• Air Brake Rules = NS-1	January 1, 2012
• Hazardous Materials = HM-1	January 1, 2012
• Safety Rules	June 1, 2001
• Timetable No. 9	June 20, 2012
• Restricted Equipment Rules	Rev. May 1, 1999
• On Track Safety Manual	June 2001
• Emergency Response Guide (ERG)	2012

Safety, Regulatory & Company Policy Topics

Security

- Show video “
- Rest & Hours of Service
- Review NORAC Rule Q and TTSI Q-1. Q Dispatchers and Operators work in 9 hour offices. That generally means that you can work 9 hours in 24, with 15 hours rest.

Drug & Alcohol Policy

- As 'covered service' (Hours of Service (HOS)) employees Dispatchers & Operators are subject to Federal Regulations, NORAC Rules (Rule G) and Conrail Company Policy.
 - Review NORAC Rule G and TTSI G-1. Distribute Company Policy (effective January 1, 2000).
 - Conrail has a Zero Tolerance Policy with regard to Drugs and Alcohol. This is in spite of any thresholds set by FRA.
 - It is all about impairment and being a safety hazard to yourself, other employees and the surrounding public.
 - Cite Chase, Maryland incident
Many of you will remember an event that took place on January 4, 1987. A Conrail engineer caused a catastrophe. He pulled his locomotives in front of and collided with an Amtrak passenger train that was traveling 128 MPH.
 - *16 people died*
 - *184 people were injured*
- In the investigation of this disaster, the man was found to have been under the influence of marijuana. As a result, the Federal Government stepped in and mandated rules and regulations on Drug and Alcohol in the railroad industry.*

Out of that have come the following

- Testing Programs
 - At any and all Physicals.
 - Pre-employment
 - Periodic
 - Return to Service
 - Any specially ordered physicals
- Federal Random Testing
 1. All HOS employees are eligible.
 2. Random Computer Generated Selection
 3. Based on job symbol, not name
- Federal Reasonable Suspicion Testing
 - If employee shows signs and symptoms a supervisor is required by Federal Law to remove that person from service and have him tested.
- Federal Reasonable Cause Testing
 - When an employee commits a violation of certain rules and the supervisor feels that some type of impairment may have contributed to the incident or its severity.
- Federal Major Accident Testing (219 Subpart C) - A major event

- Where an on duty employee is killed or
- Track & Equipment damages exceed \$9,500.00 and one or more of the following occurs:
 - Fatality to anyone
 - \$1 Million damage to RR property
 - Hazardous materials release & evacuation
 - Injury to any person in an accident involving a passenger train.
 - Impact accident where there is
 - Reportable injury and/or
 - \$150,000 damage to RR property

In any of these Major Accident qualifiers (219 Subpart C) instances, a supervisor will take crew members of all trains involved **and** the Train Dispatcher and/or Operator for testing. Testing involves breath alcohol, and collection of urine and blood samples at a medical facility.

(FRA's wants to know if you, in your role, may have had an influence in the incident.)

DARS

- Distribute Pamphlets
- Discuss Benefits of DARS
 - It is a benefit provided by Conrail & Norfolk Southern
 - For employees and their families who have substance abuse problems
 - DARS Staff is composed of trained & certified counselors, who have a lot of experience in helping fellow employees and who are recovering folks themselves.
 - Participation Options
 - Self Referral – Strictly Confidential
 - Co-Worker/Union Referral
 - Supervisor's Referral
 - DARS is the also avenue for returning to our workplace if an individual has been found in violation of the Drug & Alcohol Policy and/or Rule G.

EEO & Harassment Policies

- Distribute policies and reference copies of Conrail's Policies, Guidelines and Programs pamphlet that has been sent to each employee at his last known address.
 1. Equal Employment Opportunity
 2. Threats or Acts of Violence in The Workplace
 3. Discuss each policy, focusing on
 - For EEO: Items that constitute 'harassing conduct' and prohibited conduct.
 - For Threats: Definitions and the Zero Tolerance article.
 - Other comments:
 - This is not your father's railroad.
 - Women continue to be in the workplace. We must be respectful of them.
 - But not just women may be offended. We must be respectful of everyone.

Safety & Operations Performance

- Handout for Safety Performance – Year to Date
- Review slides

Special Topics

EO-24 – Emergency Order on Position of Main Track Switches in Dark Territory

- Distribute Copies of EO-24 “ SPAF Form “
- Also reference TTSI 405-1 (page 142-144)
 - FRA Safety Advisory followed Graniteville, SC on NS; but actually this was about the 10th such incident involving a main track switch left open in an 18 month span. Fortunately, only Graniteville was this serious (Chlorine release & 9 fatalities).
 - But, there have been 5 more incidents since the Safety Advisory was issued.
- Review key points of TTSI 405-1 and Dispatcher/Operator responsibilities from handout. (Page 142-144)
 - Trains, Engines & Track Cars must
 - Report that all switches are locked and lined normal for main track when reporting Clear
 - Report all switches operated by name
 - Report that Engineer & Conductor have initialed the SPAF
 - Train Dispatchers & Operators must
 1. Not consider block “Clear” until this information is reported
 2. Ask for this information if crew does not provide

NORAC Operating Rules & Timetable Special Instructions
(NORAC Rule Book & Timetable No. 6)

Note to Instructor:

*For each of the NORAC Rules listed, review the content of the rule, reading it aloud if you feel it necessary, then highlight or discuss the material noted below for that rule. Feel free to add your own comments, observations or relate your own experience.
Most of these rules are covered by the test questions.*

70. Inspection Before Departure

This rule tells T&E crew employees that they must make sure that cars and engines have been inspected and that proper brakes tests have been performed. If not already done and if a Car Inspector is not available, then members of the train crew must do the inspections and tests. Rule 70 gives a laundry list of mechanical items for them to inspect. Air Brake Rules, to be covered later, spell out the required tests.

This is being highlighted for dispatchers and operators for their use in planning, to allow time for these inspections.

Also, if the crew encounters a problem during the inspections and tests, they will likely come to you for guidance.

71. Flat Spots

Here we review the rules to be followed if a flat spot on a wheel of a car or engine develops en route.

Generally you will be advised when a train is stopped for an inspection like this. Once the crew member completes the inspection, he will report his findings to you. He'll probably then ask for direction from you on what to do next.

The movement criteria are:

Proceed at Normal Speed if

- Flat spot is less than 2½ inches in length. OR
- If there are 2 adjoining spots, each is less than 2 inches in length.

Proceed at 10 MPH if:

- If a flat spot is greater than either of the above dimensions, but less than 4 inches
- A report must be made promptly to the Dispatcher or Operator.

Remain Stopped if:

- If a flat spot of 4 inches or greater is found
- A report must be made to the Dispatcher or Operator.
- Dispatcher (or Operator) will report to MTO who will likely call out the Car Department to make a determination.

- Then, Dispatcher (or Operator when authorized by the Dispatcher) will order the car or engine to be set out at the first available siding or terminal.

72. Inspection of Moving Trains

Similar to Rule 70, this rule requires employees to observe passing trains for defects, and the display of headlights, markers and auxiliary lights. The improper display of headlights, markers and auxiliary lights must be reported to the train and the Dispatcher. Trains must be notified and stopped if anything on the list of defects is observed.

Again the Dispatcher becomes a central figure since the rule requires the Dispatcher to be notified if an inspection must be made and also be given a report of what was found.

133. Removing a Track from Service

Requires Form D, Line 4

d. Operation Within Out-of-Service Limits

ABS, DCS, CSS and Interlocking rules not in effect

Employee named on Form D, Line 4 is in charge of movements on this track. (Also referred to as Employee in Charge, or EIC)

Interlockings within the out of service area must not be operated without permission of employee in charge

Where the track that is out of service is normally in DCS territory, employee in charge may authorize trains to operate up to 30 MPH under conditions 1 through 5 of the rule (133 d.)

You can also discuss requirements of 133 e and 133 f. In South Jersey we recently had a mix up regarding this rule. The foreman, who was the EIC, had given his track supervisor a photocopy of the Form D taking a portion of track out of service. The track supervisor used this as his authority to hi-rail a portion of the out of service area. The foreman later had his out of service limits reduced by the train dispatcher so he could run a couple of trains. (The dispatcher cancelled the first Form D and then issued a new one for a shorter distance.) BUT, the foreman never considered the track supervisor or where he was. The supervisor was left on the portion of railroad that was now back under control of the train dispatcher. Not only was the supervisor vulnerable to any train that was to be run on that track, to make matters worse, the supervisor had two FRA inspectors in the vehicle with him for a tour.

135. Protection by Stop Signs When an In-Service Track is Obstructed for Maintenance

Focus = sections 135 c and 135 d.

138. Highway Crossing Warning

Focus = 138 c – how we handle situations when automatic warning devices malfunction

140 Foul Time

Focus = 140 b and 140 c

Also TTSI 140-1 (timetable page 138)

Note also that FRA regulation 214.323 covering Foul Time has the following requirement:

“(c) The train dispatcher or control operator shall not permit the movement of trains or other on-track equipment onto the working limits protected by foul time until the roadway worker who obtained the foul time has reported clear of the track.”

What this says is that a train or track car driver must NOT try to get the roadway worker's permission to enter the foul time area. Also the roadway worker MUST NOT let anyone on his permission. He must release his foul time to the dispatcher to let someone through, then obtain a new foul time (with sequence number) to again foul the track.

160 Form D

Simply read the rule.

161 Completing Form D Properly

Focus = without erasure or alteration and only authorized abbreviations may be used. Authorized abbreviations are found pages 3 – 9 of NORAC Rule Book

162 Addresses

Part 'a' – Comment that we need to use locomotive initials on all Form Ds Conrail has no locomotives of its own. We get ours from NS & CSX. Also we handle many trains from other roads, such as CN, CP, D&H, NYS&W as well as NS & CSX trains. Many of these trains come with run-through power.

Part 'b' – Simply read this portion of the rule.

165 Form D Delivery

Part 'b' – Dictation by Radio, Telephone or in Person

- Only to those qualified on Operating Rules; not to employee at controls of train or track car
- Read aloud and pronounce all pre-printed and written portion
- Numerals pronounced digit by digit
- Time Effective must not be given until repeated correctly

Part 'c' – FAX machine delivery is acceptable (electronic transmission)
Employee receiving must verify with Dispatcher or Operator

TTSI 165-1 Requires Train Dispatcher to underscore each word and numeral at the time Form D is being repeated.

- 168 Errors Discovered**
Simply read this rule
- 175 Speed Restrictions**
Simply read this rule

Note: The following rules are reviewed together.

- 176 Effective Period of a Form D**
- 403 Operating in Both Directions**
- 808 Clearing a Track Specified on Form D Line 2**
Read all 3 rules and note the following:
1. Rule 176 states that "Form D's are in effect until fulfilled or until canceled."
 2. Form D Line 2 to operate in both directions remains in effect until canceled.
 3. When a Track Car (Rule 808) clears the track specified on his Form D Line 2, it has fulfilled its authority, regardless whether the authority is specified for one or both directions.

- 241 Passing a Stop Signal**
Focus = Train or track car must be stopped at signal before permission given
- Part 'a' – Review this entire section
 - Part 'c' – Simply read this section
 - Part 'd' – a qualified employee can be a trainman, if he'll take the responsibility. If crewmember determines that rails or locks do not align, then call trouble desk.
 - Part 'e' – Simply read this section

- 242 Absent or Imperfectly Displayed Signals**
Review rule, particularly the requirement for report to be given to Dispatcher or Operator. Next step would be to advise Trouble Desk.

Imperfectly displayed signals might also be signals out of focus or natural obstructions, such as brush or tree branches. Granted the latter is a somewhat remote possibility owing to our maintenance practices. But again, the next step is to advise the Trouble Desk.

- 251 Track Signaled in One Direction**
Simply read the rule
- 261 Track Signaled in Both Directions**
Simply read the rule

400 Occupying DCS Territory

Review entire rule

Note – The 3 exceptions to Form D. Line 2 requirement listed in part ‘a’
Also note requirement of designating limits of authority by station names, whole mileposts and on occasion hand-operated switch by its name.

402 Operation in Specified Direction

Part ‘a’ – Review the 4 methods of making a reverse move in DCS territory

Part ‘b’ – Review 2 methods of making reverse movements in ABS territory

Part ‘c’ – **Clearing DCS Territory** – Re-emphasize Dispatcher/Operator requirements of EO24 and TTSI 405

Note that the movement must always be protected by an employee at the leading end

501 Reverse Movement within the Limits of the Same Block

Review 2 methods of making reverse movements in ABS territory

Note that the movement must always be protected by an employee at the leading end

505 Clearing a Block, Switches Restored to Normal Position

Review entire rule.

Emphasize Part ‘b’ – once any switches are restored, train must have permission to re-enter the block, even if not already reported clear.

602 Interlocking or Controlled Point Signals: Rerouting Trains

Simply read this rule

603 Interlocking Appliances: Control Mechanisms

Simply read this rule

604 Interlocking Appliances: Locking

Simply read this rule

708 Radio Messages: Content and Code Words

Review this rule, speaking to need to maintain proper identification and clear communication procedures. Occasionally we have confusion when the wrong crew takes an order or any crew misunderstands what it has been told.

712 Signal Indications

Read this entire rule. Remind everyone that Dispatchers and Operators are prohibited from telling a train crew or track car the name or indication of a fixed signal.

803 Placing or Operating Track Cars on Tracks

Simply read the rule.

805 Track Car Following Other Movements

Review entire rule. Question 4 in the test relates to the inverse of the requirements of this rule, namely that any track car must have Form D, Line 2 authority to enter the limits specified in the Form D.

This is not the same as taking a track out of service for maintenance using Form D, Line 4, then allowing other equipment into the working limits by showing, reading the EIC's Form D. NORAC Rule 133 e

808 Clearing a Track Specified on Form D Line 2

Read entire rule. Note that there is a different distinction made between trains and track cars for this rule. Question 45 in the test highlights the fact that a Form D, Line 2 given to a track car, whether for one direction or both directions, is fulfilled when the TC leaves the track. A train must have a 'both direction' Form D cancelled when it clears.

902 Responsibilities (Dispatchers)

Review this rule, highlighting the requirements for black ink/red ink and the 6-hour weather and unusual occurrence reporting. The weather frequency is required by FRA.

903 Transfer Record (Dispatchers)

Simply read this rule, noting that this in effect is a job briefing.

920 Receiving Instructions

Simply read this rule.

922 Responsibilities (Operators)

Review this rule, highlighting the same items as done with Rule 902.

923 Reporting Weather Conditions and Unusual Conditions

Simply read this rule, repeating the statement made earlier that 6-hour weather reporting is an FRA requirement.

926 Presence on Duty; Relief

Simply read this rule

927 Transfer Record

Simply read this rule, noting, as in Rule 903 above, that this in effect is a job briefing.

928 Verification of Instructions

Simply read this rule.

The following rules pertaining to engine service employees are reviewed in order to give dispatchers and operators guidance whenever an engineer notifies them that he must perform a daily inspection on his locomotives.

952 Qualification: Checking Inspection Forms

Simply read the rule. – Note last sentence:

“... they will check the prescribed form in the cab to be sure that the unit or units of the engine consist have been inspected within the previous calendar day.”

953 Engine Unit(s) not within Date: Inspection

Again, simply read the rule. It requires that Engine Service Employees will make inspections and do the proper reporting.

Federal regulations require that any locomotive(s) must be inspected during the calendar day that they are being used. As additional information, TTSI 953-1 spells out Conrail reporting requirements for engineers.

Other Issues

TTSI 25-1 Two-Way End-of-Train Telemetry Device

Question on the test primarily relates to road or through freight trains. Therefore, review the rule and specifically note item B – “Failure En Route” requirements.

Also mention item C – “Inoperative or Missing at Initial Terminal” statement. On occasion, we need to dispatch trains without EOTs. 30 MPH speed limit comes into play.

Hazardous Materials
(HM-1 Manual)

Section 2 – Required Documentation

Rule 1 – Page 6

Review following sections

1. General Requirements
Train crew must have –
 - a. Acceptable shipping papers
 - b. Emergency response information
 - c. Position in train documentation (CT-168)
2. Acceptable Shipping Papers
 - a. Railroad produced documents
 - b. Customer produced documents
 - c. Connecting carrier's documents
 - d. Hand printed document
 - e. Hazardous materials manifest
3. Acceptable Emergency Response Information
 - a. Emergency response information printed on train consist
 - b. Emergency Response Guidebook (ERG)
 - c. Customer provided information
For example Material Safety Data Sheets (MSDS)
4. Document Indicating Position in Train
Very Important – crews must keep up to date throughout trip

Section 2 – Required Documentation

Rule 5-9 – Pages 7-14

Review this section, noting that a Dispatcher or Operator will obtain radio waybill information from Customer Service Group in Mount Laurel. Manager is in charge of both train dispatcher office and Customer Service on 2nd & 3rd shifts. Information will be then passed on to the train crew.

Section 4 – Placards & Markings

Rule 1 – Page 19

Simply read statement under General Requirement.

Section 6 – Train Placement

Rule 1 – Page 36

Simply read this section, noting last paragraph pertaining to conductor's inspection of 1st six cars.

Then point out the Position-In-Train Chart (Figure 11). Note buffer car requirements for placing hazardous cars next to engine, occupied caboose, shoving platform (We call them push cars.) or passenger car. Note also, that since we no longer have cabooses on trains, we generally do not need to worry about buffer cars at the rear of trains.

Section 7 – Key Trains

Rule 2 – Key Train Definition

Rule 3 – Identifying Key Trains

Rule 4 – Instructions for Operating Key Trains

Review all sections

Air Brake Rules
(NS-1 Manual)

Air Brake Rules are being reviewed in order to give Dispatchers and Operators guidance on air brake inspection and test requirements. This so they can know what to expect and can plan for the time it takes trainmen to do this work.

A-6 Class I Brake Test - Initial Terminal Inspection
Page 12

Key Points

- Each train & each car in train must be inspected
- At Initial Terminal
- Or if 'off-air' for more than 4 hours
- & if car or block has not been previously inspected
- Air brake system must be charged (90 PSI)
 - Pressure at rear within 15 PSI of 90 (or 75)
- Engineer (or Car Inspector) makes a 20 PSI brake pipe reduction
- Brakes on each car must apply & remain applied until release initiated from locomotive (or yard test plant)
- Brakes on each car must release – “Roll-by” is permissible
- Leakage must be less than 5 PSI per minute (A-6-2 Brake Pipe Leakage Test)
 - OR
- Air Flow must be less than 60 CFM (A-6-1 Air Flow Method Test - AFM)

A-11-2 Transfer Train Brake Tests
Page 21

Key Points

- Used on trains that do not exceed 20 miles
- Air brake system must be charged to at least 60 PSI at rear
- Execute 15 PSI brake pipe reduction
- Brakes on each car must apply & remain applied until release initiated from locomotive
- Brakes on each car must release – “Roll-by” is permissible
- Each train & each car in train must be inspected

Note: Train movement exceeding 20 miles must have Initial Terminal Test (ITT). Any cars added to that train movement, even if they will travel less than 20 miles, must have an ITT

TTSI 109-3 Securing Cars and Locomotives – Hand Brake
Page 102

Simply read the entire Special Instruction

The following NS-1 Air Brake Rules are used in conjunction with TTSI 109-3.

NS-1

Page 46

C-102 Securing a Car or Cut of Cars

Reference as information the procedure detailed in this instruction.

and

Pages 84 & 86

L-236 Securing Locomotives

Reference as information the procedure detailed in this instruction.

Safety Rules
(Conrail Safety Manual S-7)

Pages 2-13 & 14

2.10.2 Crossing Tracks

Introduce as necessary information when coming to and leaving work, as well as being “on the ground” whether directly involved in train movement (e.g. handing up a Form D) or going somewhere on a road trip to be qualified or re-qualified.

Important points:

- Look both ways before crossing or fouling tracks
- Must be able to reach other side of ‘live’ track at least 15 seconds before train arrives
- Keep at least 25 feet from ends of standing equipment
- Do not pass between standing cars less than 50 feet apart

Conrail “General Practice” Issues

1. Referencing Question #14:
Discuss following or similar scenario:
A passing train has reported a badly shifted load approximately 30 cars deep in a standing train. After the crew of the standing train examines the first 30 cars they report no defects. What should you instruct the crew to do at this point?

Under this scenario, the Answer is Examine the entire train.

2. Referencing Question #44:
Discuss the following or similar scenario:
A radio alarm hot box detector is activated and the train inspection has been completed. What information must the dispatcher record?

Under this scenario, the Answer is ALL of the following:

- Car initials, number
- Location in the train.
- Exact axle location identification, such as R-4.
- Results of the inspection.

3. Referencing Questions 27 & 29 regarding applications of blocking devices discuss the following or similar scenarios (Answers in bold):

1. You have applied blocking devices between “A” and “B” to protect a local traveling south to “B”. Track Inspector Smith is calling from “A” for Form D authority to patrol south to “B” behind the local. How will you protect the track car before you issue a Form D?

- A. No blocking protection is required since BDAs are applied for the local.
- B. You will apply blocking into the computer over the block already on for the local.**
- C. You must wait until the local clears, remove the block for the local, and then reapply the block for the track car.
- D. You can not allow a track car to occupy between “A” and “B” under these circumstances.

2. During the course of the day you have 14 different blocks applied protecting trains and track equipment. At 1:30 PM Foreman Roberts reports clear at his location. You must always exercise caution in which of the following circumstances?

- A. Putting an “X” on the Form D.
- B. Putting the final entry on the Train Sheet.
- C. Removing the proper blocking device.
- D. All of the above.**

The Test

Instructions on administering test are found at the front of each booklet. These are the same instructions as have been used over a number of the past years.

NOTE:

As each employee completes (and passes) the test, be sure to sign a completed Form CT-1515. This form is found in Timetable No. 9 on page 8.