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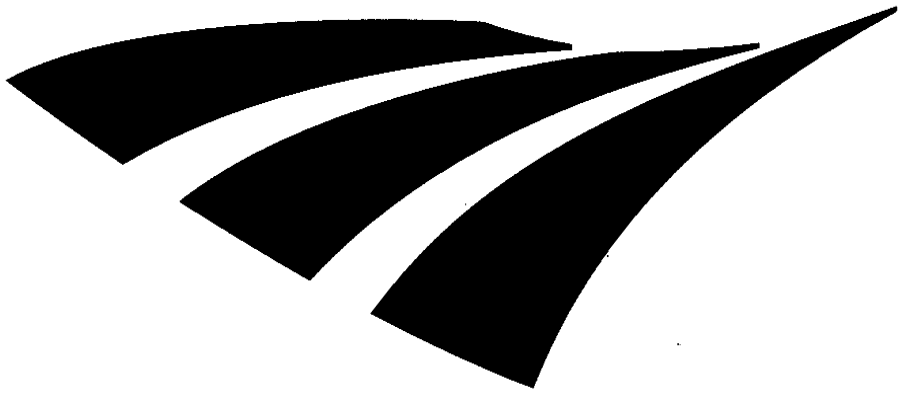

A SUPERVISOR'S GUIDE TO

T.E.S.T.S.

TOTAL
EFFICIENCY and
SAFETY
TESTS
SYSTEM

Distributed by AMTRAK System Rules Department
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1. INTRODUCTION

T.E.S.T.S is an acronym for Total Efficiency and Safety Tests System, Amtrak's program for conducting and recording operational tests and inspections. An operational test or inspection is a supervisor's observation of an employee's ability and willingness to correctly apply the rules pertaining to train operations. Supervisors may perform operational tests and inspections (herein simply referred to as TESTS) on any applicable ***Operating Rule***, ***Special Instruction***, or ***Air Brake and Train Handling Instruction***, or on one of the ***RWP or SOFA Safety Rules***, ***Emergency Preparedness procedures***, or ***Mechanical Department Procedures*** referenced in this manual.

Strict compliance with the rules is essential to the safe and efficient operation of the railroad. The purpose of tests is to achieve the highest level of rule compliance possible. Properly conducted tests will:

1. Reduce the risk of accidents caused by human error.
2. Improve and maintain employee alertness.
3. Provide supervisors with an immediate evaluation of an employee's application, understanding and compliance with the rules.
4. Assist supervisors in educating employees on the correct way to apply the rules in actual operating situations.
5. Enable the company to measure general and specific areas of rules compliance, so that overall rules compliance can be maintained or improved.

Tests must be conducted in a fair and impartial manner, keeping in mind that one of the greatest benefits is the educational value. Rules must be enforced in a firm, fair and consistent manner, without regard to personalities or emotions.

Employees who are observed complying with the rules should be commended for their attention to their duties. When the test does not permit immediate face-to-face meeting with the employees being tested, every effort should be made to provide positive feedback in a timely manner by letter or personal contact.

Employees who are observed failing to comply with the rules must be verbally instructed or counseled on the correct manner in which to apply the procedures. If the employee has been previously counseled for the same infraction, the second counseling session should be followed up with a letter to the employee. Formal disciplinary action must be taken when a violation is serious, or is a repetitive action on the part of the employee.

For tests to be successful, supervisors must make tests a regular part of their supervisory activities. Employees who know that their supervisor is taking an active interest in ensuring that they are performing their duties correctly are much more likely to comply with applicable rules. Regular testing of employees also gives supervisors the opportunity to give employees additional guidance when needed.

2. OVERVIEW OF AMTRAK'S TESTING PROGRAM

The Amtrak testing program has developed different standardized test categories for four distinct groups of employees: T&E, Train Dispatchers/Train Directors, MoW, and Mechanical. A three-digit number has been assigned to each category, and each of the four groups above has its own number series (100 for T&E. 200 for Train Dispatchers, 300 for MoW, 400 for Mechanical).

Each test category is fully explained in this "Supervisor's Guide to T.E.S.T.S." A section on each test category gives detailed direction to a supervisor on how to conduct the test, what rules the test should cover, and what constitutes a failure of that test. This will give system-wide consistency as well as provide newer supervisors with clear guidelines for conducting tests.

This system allows testing on any rule or instruction. However, tests will be identified using numbering that will group rules into standardized categories. Individual rules can still be identified, but the primary sorting will be by the assigned category (TEST) number.

For example, a test on a T&E employee, regardless of railroad or governing rule book, that involves switches or switching will be shown as TEST 117. The supervisor's guide for TEST 117 lists all of the applicable rules that comprise this test. This reduces the number of entries that a supervisor has to make while at the same time ensuring that a wide variety of rules are observed. However, if compliance with a specific rule is observed but it is not listed under this TEST, it may be noted in the comments field. A failure would always require a specific rule reference in the comments field.

Any rule or instruction that does not seem to fall into one of the standard test categories may be shown in the "all other tests or observations" category that is included in the test numbers of all four employee groups, noting the rule number in the comments field. However, this category should be used sparingly and only for safety critical rules that cannot be located in any other TEST category.

3. METHODS FOR CONDUCTING TESTS

Various methods may used to conduct tests. These methods include, but are not limited to, visual observation, monitoring of live and previously recorded radio and telephone transmissions, scrutiny of locomotive event recorder data, and use of radar or other approved wayside speed monitoring devices. Also see the following section on "Controlled Communication Testing".

Approved shunting device and/or C&S assistance may be used in conjunction with signal compliance checks. Prior to conducting signal checks, signal aspects must be verified.

Whenever possible, tests must be conducted without the knowledge of the employees being tested.

4. INSTRUCTIONS FOR RECORDING TESTS

A. FORMS 1872, 1873 and 1875

There are two forms for recording operational tests and inspections, and one form for recording Engineer Evaluations:

- Form 1872, "Employee Efficiency and Safety Tests Report," is used when one supervisor performs one or more tests on the same employee.
- Form 1873, "Multi-Use Efficiency and Safety Test Report," is used to perform the same test on more than one employee. *Transportation Department supervisors are prohibited from using this form to allow more than one supervisor to take credit for the same test.*
- Form 1875, "Amtrak Locomotive Engineer Evaluation Form", is used to record a supervisor's evaluation of an Engineer or Engine Certified Supervisor's performance in operating a train or engine. Evaluations for Engineers in road service must last for at least ½ of the assigned trip. Evaluations for Engineers in yard service must last for at least 4 hours. When the evaluation has been completed, a copy of the evaluation form must be given to the Engineer.

B. Completing and Entering TESTS and Engineer Evaluations

Forms 1872, 1873 and 1875 must be completed during or immediately following testing. Instructions are printed on the back of the forms. Once completed, the forms must be keyed into the TESTS mainframe computer system as soon as practical, but no later than 5 days following the month in which the test occurred. Questions regarding the completion of test forms, or their input into the mainframe computer system, should be directed to a Rules Department Representative.

Forms 1872, 1873 and 1875 will not be accepted by the TESTS mainframe computer program unless all involved employees and supervisors are in the TESTS system employee/supervisor database. Employees and supervisors may be added to the TESTS system employee/supervisor database through use of Form 1874, "Employee Identification and Qualification Data."

Transportation Department supervisors who are equipped and trained to do so may enter tests directly into a specially designed laptop computer program. Test records entered in this manner must be uploaded to the mainframe TESTS system as soon as practical.

C. Listing employees tested for a Barricade or Set Up TEST, and all other tests:

Although the entire crew may be listed under the TEST number when a "Barricade" (Method "B") or "Set Up" (Method "C") test is performed on a train, *show a "B" or "C" in the method field only one time*. This should normally be for the employee who was controlling the movement at the time of the test, if known.

In other words, you can show each employee in the crew as tested under TEST 101, but put a "B" in the method field only for one employee (usually the employee who was controlling the movement). The same applies for any "set up" test – show only one "C" per testing event, even if you show a TEST 102 (for example) for each crew member.

The reason for this is to count barricade and set up tests only once per event (train tested), so that the quota per supervisor can be accurately determined. The quota for "B" and "C" type tests is only per supervisor; there is no quota for employees.

For all other tests, only the employee(s) directly responsible for compliance with a rule may be listed as being tested under that rule. Many TESTS, however, include observation of the entire crew and in those cases it is appropriate to list all employees as tested.

Only the engineer (but all engineers on the head end, regardless of who was actually operating at the time) may be listed for a "Radar" or "Event Recorder" test.

D. Controlled Communication Testing:

Compliance with the rules that require specific communication between crew members is a safety-critical component of many procedures, but is especially important during back up and shoving movements. Since observations of employees may not always detect unsafe practices, supervisors should use controlled "set up" type tests as part of their testing program. The following description of "Controlled Communication Testing" reflects a test procedure that several of the divisions are already performing. All divisions should include this type of testing in their program.

In order to realistically test for compliance with a rule that requires communication with another employee, a supervisor may instruct an employee to withhold such communication, or to provide incomplete information. Such tests should be performed only when the supervisor has determined that no unsafe condition will result.

Examples of such tests are:

- TEST 118: Instruct the employee who is directing a shoving move not to give the required information prior to starting the movement.
  Expected response - Engineer should not start move.
- TEST 118: Instruct the employee who is directing a shoving move to stop giving the required distance.
  Expected response - Engineer should stop within half of the last distance given.
- TEST 119 (or other applicable TEST): Instruct an employee who is required to provide any other type of communication not to give such communication.
  Expected response - Other crew members should notice and question the omission.

Employees are expected to cooperate with the supervisor's instructions under these test conditions, and will not be considered in violation of the rule being tested. The supervisor who conducts such a test will be considered in charge of the movement and must be qualified on the operating rules and physical characteristics of the territory. The supervisor in charge must ensure that ample safety margins are established.

The primary purpose of such tests is educational and the supervisor will initially handle any exceptions verbally.

<u>Recording Controlled Communication TESTS</u>:

- Use the applicable TEST No.
- Enter "C" in the Method field (for credit for a "set-up" test)
- Enter "**CCT**" (for **<u>C</u>**ontrolled **<u>C</u>**ommunication **<u>T</u>**est) in the Comments field.

E. Event Recorder Tests (Check Method T):

The event recorders that are in use on most Amtrak locomotives are sophisticated devices that record much more than simply the speed of the train. Downloading these event recorders will usually provide information on not only the speed, but also the throttle position, brake application, load (amperage), sounding of the horn, and several other parameters.

Supervisors should do the following when conducting event recorder tests:

1. Review the portion of the event recorder download that covers at least half of the entire trip of the engineer(s). You may print only the pages that contain the events on which you entered a test. In other words, instead of printing the entire download or portion of the trip, you may print only the applicable pages that contain the air test, speed restriction, etc. that you used to enter the "T" method TEST.
2. Verify engine number, train number, date and operating crew (use CMS and/or Train Register records). Record this information on the printout (or disk label, if applicable).
3. Verify actual arrival/departure times at identifiable locations (usually stations - use Arrow and Conductor Delay Reports).
4. Obtain information on temporary speed restrictions and other instructions in effect for the specific trip.
5. Make notations directly on the printout that identify the time, location and event (see below) that is being checked.
6. File (for 1 year) the annotated printout with the train, date and engineer(s) name.

Downloads may be reviewed and retained electronically, subject to the following conditions:

- Approval by the Division, and
- Provided that the individual supervisor has demonstrated his or her ability to print and annotate these event recorder downloads as instructed. The quarterly Operational Safety Review (OSR) will be used to determine if a supervisor meets this requirement. Therefore, all supervisors should print and retain copies of their event recorder until their OSR indicates that they have demonstrated compliance with this requirement. You would then be required to retain an electronic copy of the download (on your computer or on a floppy disk) and have it available for audit for one year.

To get the maximum benefit from spending the time to download and then analyze the data from an event recorder, multiple events must be reviewed. Each event recorder review must include **FIVE** different TESTS. Examples of acceptable TESTS are:

1. temporary speed restrictions – must include at least one such test, if applicable (Enter as TEST 108 SPEED).
2. permanent speed restrictions (TEST 108 SPEED).
3. maximum auth. speed - no more than one such test per trip (TEST 108 SPEED).
4. restricted speed (TEST 108 SPEED, or other applicable TEST).
5. speeds required by known signal indication (TESTS 102 – 105)
6. speed required by known delayed in block situation (TEST 107)

7. required running brake test or standing brake test (TEST 110)
8. use of horn or bell - no more than one such test per trip (TEST 122)

Other events that are identifiable can also be used when possible. If more than one engineer is assigned to the train, event recorder tests are applicable to both engineers. Enter each TEST in the normal manner but follow these specific instructions:

TEST DATE: Use the actual date when each event being observed occurred.

TIME: Use the actual time as indicated on the event recorder (corrected as necessary) at the location where the event being observed occurred.

NEAREST: Name of nearest station where the event being observed occurred.

SPEED: Use the actual speed observed.

CHECK METHOD: Use "T". This is the only way to ensure proper credit for this test.

COMMENTS: Enter specific information on event, for example – "30 MPH temp. S/R".

F. Joint Tests:

When tests are performed jointly with officers of another railroad, put the word "joint" in this ("Comments") field. This ensures credit for joint tests on specific railroads, when the applicable Railroad Code where the test took place is used in the Test No./RR Code field. (Example: A joint test on the Union Pacific would be properly credited when "UPO102" is used as the RR Code/Book Code/Test No. and the word "joint" is placed in the Comments field). Although several employees may be tested, and more than one TEST performed and entered in the TESTS system, use the word "joint" for only one test entry per train.

G. Crew Resource Management (CRM) Element in TESTS:

A key element in Amtrak's Crew Resource Management program is the assessment of employee performance in CRM. Many of the TESTS contained in this Supervisor's Guide include strong CRM components and following the testing guidelines will automatically provide criteria for observing compliance with CRM procedures. Many tests have a reminder to "Check for good CRM procedures"**,** especially where crew communication is required. However, testing officers should take advantage of the opportunity to observe employee performance in CRM during all tests.

Show the applicable CRM "Tool" in the Comments field (Tool No.1 Technical Proficiency, Tool No.2 Situational Awareness, or Tool No.3 Teamwork/Communications)

Obviously, the CRM component of a test failure should be handled as part of the counseling process. However, even when the criteria for a test failure has not been met, there may be opportunities to reinforce positive CRM behavior or to provide instruction to employees whose CRM performance is in need of improvement.

For example, a crew member who goes beyond the minimum communication required to ensure that all employees involved fully understand the moves to be made or the rules involved should receive positive feedback. On the other hand, an employee who does not fully share information with other crew members, even if the test is otherwise passed, should receive counseling. This is an important part of the ongoing reinforcement of CRM principles that is critical in developing a CRM culture at Amtrak.

5. SAMPLE FORM 1872 AND LINE-BY-LINE INSTRUCTIONS

The following example depicts the screen in the mainframe T.E.S.T.S. system for entering the information from Form 1872. The lap top system screen is slightly different and provides various pull-down menus for some fields, but otherwise requires the same information.

AMTRAK T. E. S. T. S. SYSTEM
FORM 1872 - ADD

TEST DATE: **(1)**

SUPERVISOR ID: **(1)** DIV: *
NAME: *

EMPLOYEE CO: **(1)** ID: **(1)** ASSIGN TRAIN: **(1)**
NAME: * OCCUPATION / CREW BASE: *

TIME: **(2)** TEST NO: **(3)** RESULT: **(4)**
MP/SG: (Opt. **A**) NO: (Opt. **B**) NEAREST: **(5)**

DIV PROP: **(6)** STATE: **(7)**
SPEED (Opt. **C**) CHECK METHOD: (Opt. **D**)

COMMENTS: (Opt. **E**)

The fields shown with a number (**1**) indicate that an entry MUST be made. Fields shown with a letter (Opt. **A**) indicate optional fields that need be completed only if information is available or necessary for the specific test.

Mandatory Fields:

(1) HEADER: Enter the required information in each of these fields. When done, press *Enter*. The fields marked with an asterisk (*) will then automatically appear, based on data already entered in the T.E.S.T.S. system.

(2) TIME: Use 24 hour clock ("230" for 2:30AM, "1430" for 2:30PM)

(3) TEST NO:

- The first two spaces must be used for the **railroad code** - the railroad on which the test occurred - (see list, below),
- The next space is used for the **book code** (use only "O")
- The next three spaces are used for the **TEST number** as found is this Guide, or for the letters "**FRA**", followed by the **TEST number** (only for certain TESTS 123 and 125)

EXAMPLE: A test on Amtrak employees while they were operating over the Norfolk Southern and making a back up or shoving movement would be entered as "**NSO118**". Use no spaces. NOTE: The lap top system uses separate fields for railroad code (enter "**NS**"), book code (enter "**O**"), and rule number (enter "**118**").

RAILROAD AND BOOK CODES

RAILROAD	Alpha Code	Numeric Code
AMTRAK	AM	01
ACE (Altamont Com. Exp.)	AC	26
BAY COLONY	BC	18
BNSF	BN	11
CDOT	CD	23
CHICAGO TERM	CH	
CN/IC (Inc. GTW)	CN	12
CONN. SOUTHERN	CO	19
CANADIAN PAC.	CP	09
CONRAIL	CR	03
CSX	CS	02
FORE RIVER	FR	14
GUILFORD	GI	04
KANSAS CITY SO.	KC	
LONG ISLAND	LI	15
LOUISVILLE & INDIANA	LO	13
MARC	MA	21
MBTA	MB	22
METRA (Chicago)	ME	16
METRO NORTH	MN	
METROLINK (LA)	MT	10
NEW ENGLAND CEN.	NE	20
NEW JERSEY TRANSIT	NJ	07
NEW ORLEANS TERM.	NO	
NORFOLK SOUTHERN	NS	05
PROV. & WORCESTER	PW	06
SAN DIEGO NORTHERN	SD	25
SEPTA	SE	08
TERM. RR ASSOC. (STL)	TR	
UNION PACIFIC	UP	17
VRE (DC)	VR	24

RULE BOOK	Book Code
Operating Rules	**O**
The use of Book Codes other than "O" is discontinued since the actual book used is now indicated by the TEST.	

NOTE:

Alpha Code is used to indicate the railroad where the test occurred.

Numeric Code is used only in the employee/supervisor database to indicate the railroad for which they work. It would only be entered when the database is first created.

(4) RESULT: Enter one of the following:

- **C** – compliance
- **1** – failure, verbal counseling
- **2** – failure, written counseling
- **3** – failure, formal hearing/discipline

(5) NEAREST: Enter the location of the test – use the nearest station name as shown in the operating timetable.

(6) DIV. PROP: Enter the three-digit code for the Amtrak division in which the test was performed. The division codes are:

100 - Pacific	**300** - Southern	**400** - Mid-Atlantic	**600** - New England
200 - Central	**350** - Southwest	**500** - New York	

(7) STATE: Enter the two-letter code for the State in which the test was performed. Use the standard post office abbreviation.

Optional Fields:

(Opt. **A**): MP/SG: If a milepost location is used to help identify the test location, enter "MP" in this field. If a signal number is used (to identify a particular signal used in a test), enter "SG" in this field.

(Opt. **B**): NO: If you entered either "MP" or "SG" in the previous field, you MUST enter the number of the milepost or signal in this field.

(Opt. **C**): SPEED: If checking speed by radar or event recorder, put the observed speed in this field. You can also show a speed here if checked by watch or speedometer. This field is required whenever the "CHECK METHOD" field is used – use "0" (zero) when test required train to stop (such as a barricade test).

(Opt. **D**): CHECK METHOD: See the specific TEST in this guide for information on what to enter in this field when appropriate. If you entered a speed in the previous field, you MUST enter a check method in this field. The one-letter codes that may be entered:

- B – for barricade test. See "Description of Test" under TEST 101 for a description of what constitutes a barricade test.
- C – (note – this appears as "cab signal" in the lap top) for "set up" test.
  There are two basic requirements for a TEST to be shown as a "set up" TEST:
  (1) The employee being tested is unaware of the testing officer's presence until after the test is completed.
  (2) The testing condition was created by the testing officer (or, in certain cases a pre-existing condition, such as a Stop signal, may be used as long as the first requirement is met).
- R – for radar test.
- T – for event recorder ("speed tape") test.
- S – for speed check using speedometer.
- W – for speed check using watch (to time speed).

(Opt. **E**): COMMENTS (also shown as FAILURE): MUST be used to provide specific rule reference any time that RESULT code is 1, 2 or 3 (for failure). However, this field may also be used to record a specific rule reference when desired, or when required by instructions in the specific TEST found in this guide. When a rule number is entered in this field, enter the rule number first, followed by a brief explanation. Otherwise, use this field to record any comments that help to define the test, if necessary.

6. MAINTAINING THE QUALITY OF OPERATIONAL TESTING

The following guidelines will help supervisors maintain the quality of Amtrak's testing program:

1. Tests should be spread out over all days of the week and include weekends and nights in approximate proportion to the hours of train operation on any territory. Tests should not be "bunched" into only a few days per month.
2. Tests should include all trains operating over the territory, including trains operated by foreign line crews operating over Amtrak property.
3. Unless a supervisor is assigned full time to a terminal, at least half of each supervisor's tests should be done away from their crew base or terminal.
4. Avoid a pattern of repeating a limited number of tests. Strive to test on a variety of safety critical rules.

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7. INSTRUCTIONS FOR USE OF A SHUNT OR SHUNTING TRACK BARRICADE

Supervisors must take the following actions when placing a shunting track barricade in signaled territory <u>not equipped</u> with cab signals:

1. Contact the Dispatcher before erecting the barricade to advise him of the nature of the test, and to ensure that no trains will approach the test site until the track has been shunted.
2. Place a shunting track barricade in the block where the test will take place.
3. Verify that the signal governing the entrance to the block is displaying Stop Signal, Stop and Proceed, or Restricting, by observing the signal aspect, or asking the Dispatcher or Operator if there is a track occupancy light (TOL) on the model board in the appropriate location.

Supervisors must take the following actions when placing a shunting track barricade in signaled territory <u>equipped with</u> cab signals (NEC):

1. Contact the Dispatcher to advise him of the nature of the test, and to ensure that no trains will approach the test site until the track circuit has been de-energized.
2. Have a C&S representative de-energize the appropriate track circuit.
3. Verify that the signal governing the entrance to the block is displaying Stop Signal, Stop and Proceed, Restricting, or Restricted Proceed, by observing the signal aspect, or asking the Dispatcher or Operator if there is a track occupancy light (TOL) on the model board in the appropriate location.
4. Place a standard track barricade in the block that has been de-energized.

To comply with the test, trains must stop before striking the barricade. If a train strikes the barricade, the engine crew must immediately be removed from service, D&A tested, and charged with violation of the appropriate signal rule.

8. RETENTION OF RECORDS

Records entered directly into the TESTS mainframe system, or uploaded to the mainframe from the Transportation Department's specially designed laptop computer program, are copied nightly into the mainframe FOCUS system, which is used to create regular and ad hoc reports. At least 3 years worth of records are kept in this system.
Regular reports are run at the end of each quota period by the Amtrak System Rules Department, to determine whether each quota has been met. Quota deficiencies are reported to the applicable department head for handling. Ad hoc reports are run on the request of upper management or the Federal Road Administration, when more specific test data analysis is required.

9. ANNUAL REPORT

In accordance with 49 CFR 217.9, Amtrak must run a report at the end of each year, which shows the number, type and result of each test conducted on Amtrak during the year. This report is available on the FOCUS system report menu, and must be run on or before March 1.

A copy of each annual report must be retained at Amtrak System Rules Department headquarters and at the system service center for 3 years following the end of the year in which the tests were conducted. The reports must be made available to representatives of the Federal Railroad Administration for inspection and copying during regular business hours.

10. TEST QUOTAS

A. Transportation Department Test Quotas

(1.) EACH QUARTER:

a. Each **supervisor**:

1. Minimum of 100 TESTS, which includes the following:
2. Minimum of 1 train/crew* barricade test (Method "B")
3. Minimum of 3 trains/crews* "setup" tests (Method "C")
4. Periodic tests on SOFA rules (TEST 115) and Emergency Preparedness (TEST 124). No quota, but required on a regular basis.
5. Division or system rules managers may prescribe other tests in areas that are indicated by rule violation experience.

*Regardless of the number of crew members, each train will count as only one "test" for the purposes of this quota, and only one "B" or "C" should be entered in the "Check Method" field per train or crew (For more information, see page x, item #x, "Listing employees tested for a Barricade or Set Up TEST, and all other tests").

Additional barricade tests will also count as "setup" tests for the purpose of meeting that quota. For example, 4 barricade tests will count as fulfilling the barricade test quota (1) as well as the setup test quota (3). However, no amount of setup tests will substitute for a barricade test.

b. Each **engineer, conductor, assistant conductor, train dispatcher or block operator** must receive at least one test on a safety critical rule.

NOTE: The following TESTS are **not** counted toward this quota:

- TEST FRA 123
- TEST 125 Required Tests
- TEST 198 Employee Instruction

c. Each **engineer** must receive a minimum of one event recorder test (method "T"), as prescribed in "Event Recorder Tests" in the Supervisor's Guide. Engineers on yard engines that are not equipped with event recorders may be tested instead by radar (Method "R").

d. **Foreign railroad employees** who operate over Amtrak controlled territory must be regularly tested. The minimum tests per Division are as follows:

Pacific	50
Central	100
Southern	N/A
Southwest	100
Mid-Atlantic	300
New York	300
New England	150

(Transportation Department Test Quotas, continued)

(2.) EACH HALF-YEAR:

Each **engineer**:

a. Minimum of one Engineer Evaluation by a DSLE.
b. For engineers in push-pull service (in signaled territory without cab signals), minimum of:
   - one TEST 119 Calling Signals/Restrictions ,and
   - one TEST 107 Delayed in Block.

NOTE: "Push-pull" service means that a cab car is at one end of the train, or the train consists of multiple units of self-propelled cars. The FRA has indicated that an engine at each end of a consist, or a NPCU is **not** defined as push-pull service.

(3.) EACH CALENDAR YEAR:

Each **engineer** and **supervisor** who has a Locomotive Engineer's Certificate must have a minimum of one test that is entered under any of the following TESTS:

- 101 through 108 (101, 102, 103, 104, 105, 106, 107 or 108).

This requirement replaces the engineer certification tests that had been previously recorded under rule number "FRA303C".

B. Mechanical Department Test Quotas

(1.) EACH MONTH:

Each Mechanical Department **supervisor** who directly supervisors mechanical employees who move engines, provide blue signal protection, test cab signals, test air brakes, or use radio or hand signals to direct train or engine movements, must test at least 10 different mechanical department employees per month. If there are fewer than 10 employees under supervision, test all employees with a minimum of 10 tests.

(2.) EACH CALENDAR YEAR:

a. Each **engineer** and **supervisor** who has a Locomotive Engineer's Certificate (e.g. Class 4 Certificate) must have a minimum of one test that is recorded under TEST numbers 101, 102, 103, 104, 105 or 108. This requirement replaces the former tests that had been previously recorded under rule number "FRA303C".
b. Each **engineer** and **supervisor** who has a Locomotive Engineer's Certificate must receive at least one Engineer Evaluation by a Designated Supervisor of Locomotive Engineers (DSLE).

C. Engineering Department Test Quotas

(1.) EACH MONTH:

Each Engineering Department supervisor who directly supervisors engineering employees who are governed by the operating rules, must test at least 5 different engineering department employees per month on an operating rule. If there are fewer than 5 employees under supervision, test all employees with a minimum of 5 tests.

(2.) EACH QUARTER:

a. Each Engineering Department employee who is qualified on the operating rules must receive at least one test on an operating rule.
b. Each Foreman and Lone Worker must receive at least one test on an operating rule or safety rule that is directly related to Roadway Worker Protection.

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11. TESTS on Train and Engine Service Employees and Other Employees as Indicated

Certain of these TESTS may be performed on other employees, as indicated in the heading of each TEST. Only those TESTS so identified may be used for employees from the specified department.

Abbreviations

TD – Train Dispatchers, Train Directors, Block Operators
MW – Engineering Department (Maintenance of Way)
ME – Mechanical Department (Maintenance of Equipment)

Similarly, The following M of W TESTS may also be used on T&E employees who are working as conductor flagmen protecting contractors:

- **321 Exclusive Track Occupancy**
- **323 Foul Time**

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TESTS on T&E Employees

TEST 101 - BARRICADE TEST

CHECK METHOD: B (for all tests in this category)

A. Description of Test

This test checks compliance with the requirement to stop short of a train or "stop signal" while a train or engine is required to operate at restricted (or similar) speed, or while operating on other than main track. A stop banner, track barricade sign, red flag, fusee, hand or lantern signal, or other readily visible signal to stop may be used. If using track flags that normally protect track workers, use TEST 116 instead.

B. Conditions for Test

This test requires that the train be operating prepared to stop short of a train or "stop signal" and such a condition must be known to be in effect. If relying on a signal indication to require such a speed, the signal indication must be confirmed by actual visual verification by one of the officers participating in the test. Also refer to the previous section on using a shunting track barricade, or any time when a shunt is used.

C. Testing Guidelines

A sufficient number of testing officers must be utilized to verify test conditions and observe all aspects of compliance. Locations should be chosen with care with attention to the safety of the testing officers and the train crew. The test must be set up well in advance of train's arrival so that all involved are properly briefed on their role and in their assigned positions.

In addition, the following specific guidelines should be reviewed:

1. Coordination with the train dispatcher is almost always required. In many cases the train dispatcher should be instructed on what to reply to the train crew if questioned about certain conditions of the test (reason for red signal, etc.). At the very least, contact with the train dispatcher is usually required to verify the location of the train and if there are any other trains that may be in the area.
2. For an effective test, a location should be chosen that would conclusively demonstrate that the train was being operated in accordance with the rule. Performing this test on tangent track when visibility is otherwise unlimited is discouraged. On the other hand, the barricade, stop banner, or other signal to stop must be in position, and remain in position, prior to the arrival of the train at a point where the signal would normally become visible to that train.
3. If using an unattended fusee, verify that the railroad's operating rules require that a train stop for the fusee (the operating rules on some properties may not require a stop – however, a fusee could be used to set up the requirement to be prepared to stop at another location). Also ascertain the correct placement of the fusee to ensure that it applies to the track on which the train is operating, and consider if it could affect other trains on other tracks.
4. When setting up this test using a signal displaying Stop or Stop and Proceed, verify compliance with all rules shown in section C in TESTS 102 or 104.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Communication with crew member in body of train (over radio) of all signal aspects, where required. Check for good CRM procedures.
2. Speed associated with restricted speed, or other rule (by radar or event recorder download)
3. Acknowledgement of signal to stop, when required (by whistle or, where allowed by rule, radio)
4. After stopping, further movement in accordance with applicable rules (previous signal indication, delayed in block, etc.)
5. (Optional, if time allows) During stop, check timetables, rule books, engineer certificate and other required documents, including locomotive inspection cards, etc. Document as a separate TEST 121. Document any Rule "G" observations as a separate TEST 128.

E. Failure Defined

The test is a failure if:

1. Train or engine fails to stop short of track barricade, stop banner or signal to stop.

   Failure requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Operating a locomotive or train past a signal indication that requires a complete stop before passing it. EXCEPTION – Failure to stop at a hand signal, radio signal indication or improperly lined switch does NOT require certificate suspension.

In the case of a two person engine crew, for any failure that requires the suspension of locomotive engineer certificate, the second engineer's certification will also be suspended using NRPC Form 2943. Check box "Failure to take appropriate action to prevent a violation per 49 CFR part 240."

Placing the train in emergency to stop short of the banner or stop signal will not be considered a failure of this test, but would be considered as failing to comply with train handling rules.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on T&E Employees

TEST 102 - STOP SIGNAL

CHECK METHOD: C (only if "setup" test)

A. Description of Test

This test checks compliance by train and engine crews with rules that require that a stop be made before any part of train or engines passes a block or interlocking signal displaying Stop. This includes compliance with other signal indications in advance of the Stop signal.

B. Conditions for Test

This test requires that a block or interlocking signal is displaying a Stop indication, requiring that a train or engine come to a full stop and not proceed until a more favorable indication, or authority to pass the Stop signal, is received.

C. Testing Guidelines

This test can be performed while the testing officer is riding the train, either in the operating cab or the body of the train. In this case, however, it is only an "observation" type test. To be credited as a "setup" type test the testing officer must be in a position to be unobserved by the crew members of the train or engine as they approach and stop for a signal displaying Stop. The key to designating this test as a "setup" test is that the employees are unaware that they are being observed – the signal could be displaying Stop for any reason. For example, the dispatcher could have been asked to hold the signal at Stop, a shunt was used, or the signal could have been at Stop due to any other reason.

Also refer to "Instructions for Use of a Shunt or Shunting Track Barricade" any time a shunt is used.

This test should always include the following:

1. Compliance with the signal governing the approach to the Stop signal. When the rules require compliance with a speed after passing the previous signal, verify by radar when possible, or by later analysis of event recorder download.
2. Prompt attempt to contact the train dispatcher/control operator after stopping, if no conflicting movement is evident.
3. If permission to pass the Stop signal is received, verify that proper format is followed. Verify that movement is made at restricted speed by radar when possible, or by later analysis of event recorder download. (If a barricade/banner is used to test the requirement to stop while moving at restricted speed, record the entire test as a TEST 101 BARRICADE TEST).
4. Verify that movement remains at restricted speed until leading wheels have passed the next signal, or end of block signal territory, as per applicable railroad rules.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Communication from the engineer with crew member in body of train (over radio) of signal indications, as required by rule or Amtrak special instructions. Check for good CRM procedures.
2. Proper radio procedure.
3. (Optional, if time allows) During stop, check timetables, rule books, engineer certificate and other required documents, including locomotive inspection cards, etc. Document as a separate TEST 121 REQUIRED DOCUMENTS. Document any Rule "G" observations as a separate TEST 128 DRUG & ALCOHOL.

E. Failure Defined

The test is a failure if:

1. Train or engine fails to stop short of Stop signal.

   Failure requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Operating a locomotive or train past a signal indication that requires a complete stop before passing it."

2. Train passes Stop signal, after stopping, but without proper authority.

   Failure requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Occupying main track or a segment of main track without proper authority or permission."

In the case of a two person engine crew, for any failure that requires the suspension of locomotive engineer certificate, the second engineer's certification will also be suspended using NRPC Form 2943. Check box "Failure to take appropriate action to prevent a violation per 49 CFR part 240."

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on T&E Employees

TEST 103 - DARK SIGNAL

CHECK METHOD: C (only if "setup" test)

A. Description of Test

This test checks compliance by train and engine crews with rules that require that a signal that is imperfectly displayed or absent from the place where it is usually shown must be governed as if the most restrictive indication that can be given by that signal is displayed.

B. Conditions for Test

This test requires that a block or interlocking signal is imperfectly displayed. Most often this means that one or more lights are not illuminated (dark) and the resulting aspect is not shown as an acceptable aspect in the railroad's operating rules. Alternatively, a combination of lights can be displayed that are also not shown as an acceptable aspect.

C. Testing Guidelines

This test can be performed while the testing officer is riding the train, either in the operating cab or the body of the train. In this case, however, it is only an "observation" type test. To be credited as a "setup" type test the testing officer must be in a position to be unobserved by the crew members of the train or engine as they approach an imperfectly displayed signal.

Coordination with the dispatcher is almost always required for a "setup" test to avoid signal maintainers being called out unnecessarily. In addition, the assistance of signal maintainers is almost always necessary to ensure that the safety of the signal system is not compromised.

The preferred method for this test would ensure that the preceding signal was displaying an indication that required a train to be prepared to stop at the next signal. This signal indication must be confirmed by actual visual verification by one of the officers participating in the test

In that case, this test should always include the following:

1. Compliance with the signal governing the approach to the dark/imperfectly displayed signal. When the rules require compliance with a speed after passing the previous signal, verify by radar when possible, or by later analysis of event recorder download.
2. Prompt attempt to contact the train dispatcher/control operator.
3. If permission to pass the dark/imperfectly displayed signal is received, verify that proper format is followed. If the most restrictive indication of the signal is Stop and Proceed, ensure that a full stop is made. Verify that further movement is made at restricted speed by radar when possible, or by later analysis of event recorder download.
4. Verify that movement remains at restricted speed until leading wheels have passed the next signal, or end of block signal territory, as per applicable railroad rules.

If the dark/imperfectly displayed signal is not preceded by a signal displaying an indication that required a train to be prepared to stop at the next signal, then the test should include the following:

1. Train is brought to a safe stop, consistent with good train handling, as soon as dark/imperfectly displayed signal is observed.

2. Prompt attempt to contact the train dispatcher/control operator.
3. If permission to pass the dark/imperfectly displayed signal is received, verify that proper format is followed. If the most restrictive indication of the signal is Stop and Proceed, ensure that a full stop is made. If train was unable to stop before passing the dark/imperfectly displayed signal, ensure that these same procedures are followed. Verify that further movement is made at restricted speed by radar when possible, or by later analysis of event recorder download.
4. Verify that movement remains at restricted speed until leading wheels have passed the next signal, or end of block signal territory, as per applicable railroad rules.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Communication from the engineer with crew member in body of train (over radio) of signal indications, as required by rule or Amtrak special instructions. Check for good CRM procedures.
2. Proper radio procedure.
3. (Optional, if time allows) During stop, check timetables, rule books, engineer certificate and other required documents, including locomotive inspection cards, etc. Document as a separate test (121 REQUIRED DOCUMENTS). Document any Rule "G" observations as a separate test (128 DRUG & ALCOHOL).

E. Failure Defined

The test is a failure if:

1. Train fails to stop before passing dark/imperfectly displayed signal (when preceding signal required that a train to be prepared to stop at the next signal); otherwise if train fails to stop, consistent with good train handling, as soon as dark/imperfectly displayed signal is observed.

   Failure requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Operating a locomotive or train past a signal indication that requires a complete stop before passing it."
2. Train proceeds, after stopping for a dark/imperfectly displayed signal whose most restrictive indication is Stop, but without proper authority.

   Failure requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Occupying main track or a segment of main track without proper authority or permission."
3. Train exceeds speed required by 5 MPH or more, after stopping for a dark/imperfectly displayed signal whose most restrictive indication is Stop and Proceed.

   Failure by exceeding speed by 10 MPH or more requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Operating a locomotive or train at a speed that exceeds the maximum authorized by at least 10 miles per hour."

In the case of a two person engine crew, for any failure that requires the suspension of locomotive engineer certificate, the second engineer's certification will also be suspended using NRPC Form 2943. Check box "Failure to take appropriate action to prevent a violation per 49 CFR part 240."

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on T&E Employees

TEST 104 - STOP AND PROCEED SIGNAL

CHECK METHOD: C (only if "setup" test)

A. Description of Test

This test checks compliance by train and engine crews with rules that require that a stop be made before any part of train or engines passes a block signal displaying Stop and Proceed. This includes compliance with other signal indications in advance of the Stop and Proceed signal.

B. Conditions for Test

This test requires that a block signal is displaying a Stop and Proceed indication, requiring that a train or engine come to a full stop before proceeding at restricted speed.

C. Testing Guidelines

This test can be performed while the testing officer is riding the train, either in the operating cab or the body of the train. In this case, however, it is only an "observation" type test.

To be credited as a "setup" type test the testing officer must be in a position to be unobserved by the crew members of the train or engine as they approach and stop for a signal displaying Stop and Proceed. The key to designating this test as a "setup" test is that the employees are unaware that they are being observed – the signal could be displaying Stop and Proceed for any reason. Most tests will require that a shunt be used, but the signal could have been displaying Stop and Proceed due to any other reason.

Also refer to "Instructions for Use of a Shunt or Shunting Track Barricade" any time a shunt is used.

This test should always include the following:

1. Compliance with the signal governing the approach to the Stop and Proceed signal. When the rules require compliance with a speed after passing the previous signal, verify by radar when possible, or by later analysis of event recorder download.
2. A full stop is made before passing the signal displaying Stop and Proceed.
3. Verify that further movement is made at restricted speed by radar when possible, or by later analysis of event recorder download.
4. Verify that movement remains at restricted speed until leading wheels have passed the next signal, or end of block signal territory, as per applicable railroad rules.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Communication from the engineer with crew member in body of train (over radio) of signal indications, as required by rule or Amtrak special instructions. Look for good CRM procedures.
2. Proper radio procedure

E. Failure Defined

The test is a failure if:

1. Train or engine fails to stop short of Stop and Proceed signal.

   Failure requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Operating a locomotive or train past a signal indication that requires a complete stop before passing it."

2. Train exceeds restricted speed by 5 MPH or more, after stopping for Stop and Proceed signal.

   Failure by exceeding speed by 10 MPH or more requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Operating a locomotive or train at a speed that exceeds the maximum authorized by at least 10 miles per hour."

In the case of a two person engine crew, for any failure that requires the suspension of locomotive engineer certificate, the second engineer's certification will also be suspended using NRPC Form 2943. Check box "Failure to take appropriate action to prevent a violation per 49 CFR part 240."

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on T&E Employees

TEST 105 - OTHER SIGNAL INDICATIONS

CHECK METHOD: R (if radar is used to verify compliance)
T (if event recorder is used to verify compliance)
C (if "set up" test in yard limits)

A. Description of Test

This test checks compliance by train and engine crews with any signal other than Stop, Stop and Proceed, or a Dark/Imperfectly displayed signal (see Tests 102, 103, 104).

B. Conditions for Test

This test requires that a train has encountered a signal that requires an observable and measurable action on the part of the engineer. This usually means that a specified speed, or an action to immediately reduce to a specified speed, is required.

C. Testing Guidelines

This test can be performed while:

a. The testing officer is riding the train.

b. Observing a train from trackside and verifying by radar or subsequent review of event recorder data that the appropriate speed or action was in compliance. When radar is used to verify compliance, use Check Method "R".

c. Reviewing event recorder data when signal location can be identified and signal indication is known. When event recorder data is used to verify compliance, use Check Method "T".

Use Check Method "C" for a "setup" test only when this test specifically checks for compliance with yard limit rules that require restricted speed whenever operating under a signal indication that is not more favorable than Approach.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Communication from the engineer with crew member in body of train (over radio) of signal indications, as required by rule or Amtrak special instructions. Check for good CRM procedures.

2. Proper radio procedure.

E. Failure Defined

The test is a failure if:

1. Train exceeds the speed required by the signal indication by 5 MPH or more. *Failure by exceeding speed by 10 MPH or more requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Operating a locomotive or train at a speed that exceeds the maximum authorized by at least 10 miles per hour."*

In the case of a two person engine crew, for any failure that requires the suspension of locomotive engineer certificate, the second engineer's certification will also be suspended using NRPC Form 2943. Check box "Failure to take appropriate action to prevent a violation per 49 CFR part 240."

2. Engineer fails to take "immediate" action to reduce speed when required.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on T&E Employees

TEST 106 - MAIN TRACK AUTHORITY

CHECK METHOD: N/A

A. Description of Test

This test checks compliance by train and engine crews with rules for occupying a main track.

B. Conditions for Test

This test requires that a train is either entering a main track or continuing on a main track into territory that requires additional or different form of authority.

C. Testing Guidelines

This test covers any rule for occupying a main track and includes receiving the proper authority, not fouling until switch is lined, operation of electric locks, and any prescribed waiting period after lining switch.

This test also covers, but is not necessarily limited to, the following rules:

1. CTC, TCS, Rule 251 or 261 territory (where signal indication is authority to operate on a main track). This test will check for authority to enter at a location other than at a signal – if at a signal, use TEST102 STOP SIGNAL, instead.
2. DCS, TWC, or DTC territory (where written authority in the prescribed form is required to occupy a main track).
3. Movement against the current of traffic.
4. Yard Limits.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Proper format of authority received is observed.
2. Proper radio procedures.
3. Conductor reminds engineer of limits of authority, if necessary, according to rules or Amtrak special instructions. Check for good CRM procedures.

E. Failure Defined

The test is a failure if:

1. Train enters a main track, or continues movement without proper authority.

   Failure requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Occupying main track or a segment of main track without proper authority or permission."

   In the case of a two person engine crew, for any failure that requires the suspension of locomotive engineer certificate, the second engineer's certification will also be suspended using NRPC Form 2943. Check box "Failure to take appropriate action to prevent a violation per 49 CFR part 240."

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule. If employee fails to comply with all rules governing the requesting, issuing, repeating, completing, voiding or canceling a Written Authority, but the testing officers determine that the authority to occupy a main track is otherwise valid, record such failures under TEST 112 WRITTEN DIRECTIVES.

TESTS on T&E Employees

TEST 107 - DELAYED IN BLOCK

CHECK METHOD: B (if test includes train stopping at stop sign/red flag)
R (if radar is used to check speed when required)
T (if event recorder is used to check speed when required)
C (if "set up" test using stop signal)

A. Description of Test

This test checks compliance by train and engine crews with rules that govern further movement after a train stops in a signal block.

B. Conditions for Test

This test requires that a train has made a stop in a signal block at a location where the next signal (and/or the track to the next signal) is not clearly visible, and an applicable "delayed in block" rule requires that the train proceed prepared to stop either to or before passing the next signal. Because the "delayed in block" rules vary significantly and are dependent on the specific rule book, type of signal territory or type of train, it is extremely important that the testing officers fully understand the conditions and the rules that apply for the territory and train being tested.

C. Testing Guidelines

This test can be performed while the testing officer is riding the train, either in the operating cab or the body of the train. In this case, however, it is only an "observation" type test. To be credited as a "setup" type test the testing officer must be in a position to be unobserved by the crew members of the train or engine as they are being governed by a "delayed in block" rule.

"Delayed in Block" rules generally require that a train must approach the next signal prepared to stop until it is clearly visible. Therefore, it is important that testing officers choose a location where they can readily identify the point at which the next signal is visible to the approaching train.

"Setup" tests on this rule can generally be performed by one of three different methods:

1. Where the rule requires that a train proceed at a specified speed after stopping in a block, radar can be used to determine compliance with that speed (enter "R" as check method).
2. Where the rule requires that a train proceed to the next signal prepared to stop at any point prior to reaching that signal (or prior to the signal becoming clearly visible) – such as restricted or controlled speed – a barricade (stop sign, red flag, etc.) can be used to test compliance (enter "B" as check method).
3. Whereas most if not all "delayed in block" rules require that a train be prepared to stop at the nest signal until it becomes clearly visible, this signal can be set to display Stop or Stop and Proceed after the train has stopped in a block. This type of test requires close coordination and attention to safety. Care should be taken to verify that the train has already passed the previous signal and is stopped in the block before the next signal is changed to display Stop or Stop and Proceed.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Communication from the engineer with crew member in body of train (over radio) of signal indications, as required by rule or Amtrak special instructions. Check for good CRM procedures.
2. Proper radio procedure.
3. (Optional, if time allows) During stop, check timetables, rule books, engineer certificate and other required documents, including locomotive inspection cards, etc. Document as a separate TEST 121 REQUIRED DOCUMENTS. Document any Rule "G" observations as a separate TEST 128 DRUG & ALCOHOL.

E. Failure Defined

The test is a failure if:

1. Train fails to stop short of Stop signal, or barricade.

   Failure requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Operating a locomotive or train past a signal indication that requires a complete stop before passing it". EXCEPTION – Failure to stop at a hand signal, radio signal indication or improperly lined switch does NOT require certificate suspension.

2. Train exceeds speed required by "delayed in block" rule, where applicable, by 5 MPH or more.

   Failure by exceeding speed by 10 MPH or more requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Operating a locomotive or train at a speed that exceeds the maximum authorized by at least 10 miles per hour."

In the case of a two person engine crew, for any failure that requires the suspension of locomotive engineer certificate, the second engineer's certification will also be suspended using NRPC Form 2943. Check box "Failure to take appropriate action to prevent a violation per 49 CFR part 240."

Failure in any other rules, above, should be entered as failures separately under the appropriate rule.

TESTS on T&E Employees (Also ME Employees)

TEST 108 - SPEED

CHECK METHOD: T (if event recorder data is used to verify compliance)
R (if radar is used to verify compliance)

A. Description of Test

This test checks compliance of employees operating trains or engines with the authorized speed at a given location.

B. Conditions for Test

This test may be performed at any location, but preference should be shown for locations where speed is being restricted below maximum authorized speed for any reason.

C. Testing Guidelines

This test can be performed using radar or while reviewing event recorder data. Use Check Method "R" for radar, Check Method "T" for event recorder data.

Since a supervisor should always be monitoring train speed while riding trains, this test should not be recorded during on-board observations unless a failure is encountered. In that case, use Check Method "S" if speed was monitored using the speedometer, or "W" is a watch was used to time the speed of the train.

Use this test as a "stand-alone" test. When included in any other test (as required in sections "C" and "D" of each test), there is no need to record speed compliance as a separate test. However, record failures under this TEST (108) and include specific rule number in the "Comments" field.

a. Event Recorder Tests (Check Method "T'). Read the "Event Recorder Tests section at the beginning of this Guide for more details. To summarize, to count as an Event Recorder Test the following conditions must be met:

1. Event Recorder download is printed

2. Printed copy is marked with at least 5 events that were checked

3. Printed copy is filed for one year

b. Radar Test (Check Method "R"). When radar is used in conjunction with any other TEST (for example, TEST 107 DELAYED IN BLOCK or any test for compliance with signal indications), use "R" as Check Method under that TEST number. However, use this TEST (108) when radar is used as a "stand alone" test for one of the following:

1. A permanent speed restriction.

2. A temporary speed restriction, or restricted speed.

3. A turnout speed not required by signal indication.

4. A speed required by any rule not covered in another test.

D. Additional Rules to be Tested

During a radar type test, all applicable rules concerning headlights, markers, whistle and bell should be observed.

E. Failure Defined

The test is a failure if speed is exceeded by 5 MPH or more. A failure could also be shown if excursions above the speed limit occur consistently but are less than 5 MPH, but are deemed to warrant verbal or written counseling.

Failure by exceeding speed by 10 MPH or more requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Operating a locomotive or train at a speed that exceeds the maximum authorized by at least 10 miles per hour."

In the case of a two person engine crew, for any failure that requires the suspension of locomotive engineer certificate, the second engineer's certification will also be suspended using NRPC Form 2943. Check box "Failure to take appropriate action to prevent a violation per 49 CFR part 240."

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on T&E Employees (Also MW and ME Employees – when observing blue signal protection. Use TEST 401 for ME Employees when applying blue signal protection)

TEST 109 - BLUE SIGNAL/UTILITY EMPLOYEE

CHECK METHOD: N/A

A. Description of Test

This test checks compliance by train and engine crews with rules that require that equipment under blue signal protection is not coupled to or moved, and blue signals are not passed by trains or engines or removed by other than an employee of the same craft that placed them. This test also checks for compliance with the rules that allow a utility employee to perform certain tasks without blue signal protection.

B. Conditions for Test

This test requires that blue signal protection is in place, emergency repair work is necessary at a location where blue signals are not available, or a utility employee is working, or about to work, with a train crew.

C. Testing Guidelines

1. Blue Signal Protection: This test can be performed whenever blue signal protection is already being provided, or blue signal protection can be placed specifically for the purposes of this test. If the latter is done at a location where employees who normally work under blue signal protection are present, it is advisable to utilize a member of the craft that usually places blue signals to ensure that employees of that craft are protected during and after the test.

This test would include any or all of the following:

a. Employees not from the craft or group of workmen who placed the blue signal must not remove them or the locking devices. T&E crews must not have keys to the locks that are used to secure switches or derails that are providing blue signal protection.

b. Equipment is not allowed to pass a blue signal or enter track protected by a blue signal. Note: where rules require that switch be lined away from track being protected and secured with an effective locking device, or a derail placed in derailing position and similarly secured, these conditions should be met.

c. Equipment protected by a blue signal is not coupled to or moved and other equipment must not be placed so as to obstruct the view of the blue signal.

d. When emergency repair work at a location where blue signals are not available is necessary, verify that engineer is notified and appropriate measures taken to provide protection.

2. Utility Employee: This test can be performed whenever a utility employee is or will be working as a temporary member of a train or yard crew.

This test would include any or all of the following:

a. The engineer, or another employee if engine is stationary, is in the cab of the assigned controlling locomotive.

b. The utility employee works with only one train or yard crew at a time and not more than three utility employees work with the one train or yard crew at the same time.

c. The utility employee communicates with the designated employee before starting work with the crew and again when the work is completed. In addition, while working with the crew, communication among crew members must be maintained to understand the work to be done. Check for good CRM procedures**.**

d. The designated member of the crew must notify, and receive acknowledgement, of all crew members before the utility employee may commence work and before being released.

An effective way to perform this test is to question crew members on the identity and role of a utility employee who is working with their crew.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. All applicable rules concerning headlights, markers, whistle and bell should be observed.

2. Proper radio procedures.

E. Failure Defined

The test is a failure if:

1. Any of the rules/procedures listed in section C, above, are not followed.

Failure to stop for a blue signal requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Operating a locomotive or train past a signal indication that requires a complete stop before passing it."

In the case of a two person engine crew, for any failure that requires the suspension of locomotive engineer certificate, the second engineer's certification will also be suspended using NRPC Form 2943. Check box "Failure to take appropriate action to prevent a violation per 49 CFR part 240."

Failure in any of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on T&E Employees (Also ME Employees)

TEST 110 - AIR BRAKE TESTS

CHECK METHOD: T (if event recorder data is used to verify compliance)

A. Description of Test

This test checks compliance with rules found in Amtrak's Air Brake and Train Handling Instructions (AMT-3), section 4.0, that govern air brake tests and inspections.

B. Conditions for Test

This test requires a situation where a train has less than 100% operative brakes or when a Class I, IA, II or Running Brake Test is required.

C. Testing Guidelines

This test verifies that T&E crews or Mechanical Department employees comply with rules concerning the required percentage of operative brakes, and/or the type of brake test required under specific conditions. The rules to be tested are the following:

1. Condition of Brakes (AMT-3 Rule 4.1.3): Employee complies with the percentage of operative brakes required for their train.
2. Required Air Brake Tests (AMT-3 Rule 4.2): Employee performs the required air brake test or has knowledge that test was performed in the prescribed manner (by MAP 1173 or contacting CNOC, where required). This test also includes determining the condition of brakes after change of crew, as per AMT-3 Rule 4.1.5.

Confirmation that the required air brake test has been performed may be determined by reviewing event recorder data. When this is done, use Check Method "T".

D. Additional Rules to be Tested

When possible, compliance with the following additional rules should be observed:

1. MAP 1173 and MAP 10C Summary present in cab and properly filled out. This includes inbound engineer's notation on MAP 1173 of the condition of brakes and the "Condition En Route" section lists whether any brakes are cut out.

E. Failure Defined

The test is a failure if:

1. Train proceeds with less than the required percentage of operative brakes, or without receiving instructions from a QMP, when required.
2. A required air brake test is not performed or is not performed correctly.

Failure to perform an initial terminal, intermediate terminal or transfer train and yard test, failure to perform a Class 1, Class IA or Class II brake test, or failure to perform a Running brake test after performing a required Class I, Class IA or Class II brake test requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Operating a locomotive or train without adhering to procedures for the safe use of train or engine brakes."

In the case of a two person engine crew, for any failure that requires the suspension of locomotive engineer certificate, the second engineer's certification will also be suspended using NRPC Form 2943. Check box "Failure to take appropriate action to prevent a violation per 49 CFR part 240."

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on T&E Employees

TEST 111 - HIGHWAY CROSSING WARNING

CHECK METHOD: N/A

A. Description of Test

This test checks compliance by train and engine crews with rules that govern movement over a highway crossing when notified that automatic warning devices are not functioning properly.

B. Conditions for Test

This test requires that a train has been notified that automatic warning devices are not functioning properly.

C. Testing Guidelines

This test can be performed when a train has been notified of an actual warning devices malfunction, or this test can be setup by having the train dispatcher issue such a notification when the warning devices are not malfunctioning. Since this rule may differ from railroad to railroad, review the appropriate rule book/special instructions for the required actions.

Check for the following:

1. Train does not occupy the crossing unless the required on-ground warning is being provided, or the appropriate rule allows a train to proceed if crossing devices are seen to be working and/or train was informed of a false activation.
2. Train proceeds at 15 MPH, when required, until the head end occupies the crossing. (The 15 MPH may be waived if a properly equipped flagger is present for each direction of highway traffic or, in some rules, a police officer is providing warning).
3. Engine whistle must be sounded.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. All applicable rules concerning headlights and markers should be observed.
2. When possible, procedures for copying and repeating radio instructions.

E. Failure Defined

The test is a failure if:

1. Train occupies crossing without on-ground warning, when required.
   Failure requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Occupying main track or a segment of main track without proper authority or permission."
2. Train exceeds required speed by 5 MPH or more.
   Failure by exceeding speed by 10 MPH or more requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Operating a locomotive or train at a speed that exceeds the maximum authorized by at least 10 miles per hour."
3. Train fails to sound whistle as required.

   In the case of a two person engine crew, for any failure that requires the suspension of locomotive engineer certificate, the second engineer's certification will also be suspended using NRPC Form 2943. Check box "Failure to take appropriate action to prevent a violation per 49 CFR part 240."

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate.

TESTS on T&E Employees (Also MW Employees)

TEST 112 - WRITTEN DIRECTIVES

CHECK METHOD: N/A

A. Description of Test

This test checks compliance by train and engine crews with rules governing the requesting, issuing, repeating, completing, voiding and canceling a written directive.

B. Conditions for Test

This test can be performed at locations where crews request or receive a written directive. This includes receiving documents by printer or fax, or when required to copy written directives over the radio, phone or other means of communication.

C. Testing Guidelines

Employees can be observed while they are receiving written directives, the written directives can be checked later to ensure that they have been competed correctly, or radio transmissions can be monitored to ensure compliance with proper format and repeating of instructions. These are shown in more detail, below:

1. Employees are observed receiving written directives. If received from a fax machine or printer, ensure that employees check for completeness. On railroads that require that message time be within a specified number of hours of the time crew went to work, check for compliance. If employee is required to copy the written directive, check that all required information is recorded and that rules for repeating and receiving confirmation are followed (OK time, dispatcher's initials, "that is correct", etc.). If on a moving train, ensure that mandatory directives are not copied by the employee at the controls.
2. Written directives are checked sometime after being received. Ensure that proper format and all required information have been copied correctly. Where required, check that both engineer and conductor have their own copies. Where rules require that documents be kept until end of trip or longer, check that they are retained for the required period.
3. Radio is monitored to check for compliance. Check for compliance with rules for repeating and receiving confirmation (OK time, dispatcher's initials, "that is correct", etc.). Pay particular attention to accuracy in repeating, even if the dispatcher OK's the repeat (for Amtrak Train Dispatchers, enter separate test). Where available, radio recording tapes may be also used for this test.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Proper radio procedures

E. Failure Defined

The test is a failure if:

1. Any of the rules/procedures listed in section C, above, are not followed.

NOTE: If failure results in occupying a main track without proper authority, report this test as a failure of TEST 106 MAIN TRACK AUTHORITY

TESTS on T&E Employees

TEST 113 - INTERLOCKING/CONTROL POINTS

CHECK METHOD: N/A

A. Description of Test

This test checks compliance by train and engine crews with rules that are specific to interlockings or control points.

B. Conditions for Test

This test requires that a rule that applies only at interlockings or control points affects a train or engine entering or moving within or through the interlocking or control point.

C. Testing Guidelines

Tests that are performed using interlocking or control point signals (such as Stop Signal tests) or the observation of rules requiring calling out signals, and similar tests that are not specific to interlocking or control points should be entered under the appropriate test number, not as a TEST 113 INTERLOCKING/CONTROL POINTS.

However, when a rule that is specific only to interlockings or control points and has no other appropriate test category to use, enter it under TEST 113. Refer to the governing rule book for the appropriate rules, and show the rule book and rule number in the "Comments" field of the TESTS system.

Some examples of specific rules may include, but are not limited to the following:

1. Initial movements.
2. Movements not governed by fixed signal.
3. Reverse movements or change of direction.
4. Movements delayed, or stopped by the control operator.
5. Movements through an Automatic Interlocking past a Stop signal.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. All applicable rules concerning headlights and markers should be observed.
2. Proper radio procedures.

E. Failure Defined

The test is a failure if:

1. Failure to comply with any rule specific to interlockings or control points.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on T&E Employees (Also ME Employees)

TEST 114 - CAB SIGNALS

CHECK METHOD: N/A

A. Description of Test

This test checks compliance with rules that are specific to cab signals. These include ATS, ACSES, CSS, and ITCS rules.

B. Conditions for Test

This test requires that a train or engine is in cab signal territory or is subject to cab signal rules concerning testing, or being equipped with, cab signal apparatus.

C. Testing Guidelines

Refer to the governing rule book for the appropriate rules, and show the rule book and rule number in the "Comments" field of the TESTS system.

Some examples of specific rules may include, but are not limited to the following:

1. Movement of train not equipped with cab signals:
   - **a.** receiving proper authority
   - **b.** proceeding at required speed.
2. Testing of the Cab Signal apparatus:
   - **a.** valid documentation checked by engineer
   - **b.** self-testing procedures followed.
   - **c.** Mechanical Dept. – daily or departure test performed properly
3. Cab signal does not conform to fixed signal:
   - **a.** more restrictive signal governs.
4. Cab signal changes between fixed signal:
   - **a.** possible requirement to take immediate action to reduce speed, or
   - **b.** run train length before increasing speed, or such other action as required by the specific rule.
5. Movement with inoperative Cab Signals, Speed Control or Automatic Train Stop:
   - **a.** recognizing when failure criteria have occurred
   - **b.** compliance with fixed signal indication, reduction to required speed
   - **c.** notification of dispatcher and conductor as required
   - **d.** compliance with speed and other requirements after dispatcher authorization
   - **e.** considering the failed apparatus as inoperative until repaired and tested

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Proper radio procedures

E. Failure Defined

The test is a failure if:

1. Failure to comply with any rule specific to cab signals.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on T&E Employees

TEST 115 - SOFA

CHECK METHOD: N/A

A. Description of Test

This test checks compliance by train and engine crews with rules that cover any of the *Five Life Saver* recommendations developed by the **S**witching **O**perations **F**atality **A**nalysis (**SOFA**) working group.

B. Conditions for Test

This test may be performed during the tour of duty of any crew assigned to switching duties, whether they are a yard, "pinup", or a road crew setting out or picking up cars. It could also be applicable to any crew entering a yard or other switching environment for any reason, such as picking up or putting away their train.

C. Testing Guidelines

The SOFA rules are incorporated in Amtrak's Safety Rules (AMT-5. A summary of the SOFA *Five Life Saver* recommendations is found in Amtrak safety Rule 5800. In addition, the following list references additional specific Amtrak Safety Rules, and you should also refer to the appropriate operating rule when necessary to ensure full compliance. Include the rule number in the "Comments" field.

1. Discuss safety at the beginning of a job and when work changes (5010). Verify that a quality job briefing is done not only at the beginning of the assignment, but whenever conditions change. Check for compliance by questioning crew members about the work that is being or will be done. Check for good CRM procedures.
2. Communicate before action is taken (5010, radio and hand signal rules). During the course of the job, additional job briefings can be done over the radio when crew members are in different locations. Verify that crew members are kept informed of changing conditions. Radio communications must be clear, concise and follow all rules for identification, repeating and confirmation before being acting upon.
3. Protect against moving equipment (5204). Observe that employees look in both directions before fouling a track, keep clear of standing equipment and move to a safe location when moving equipment is approaching or passing.
4. Secure equipment before action is taken (5316). Verify that crew members contact the engineer and receive assurance of protection before fouling equipment. This is commonly referred to "Three-Step Protection".
5. Mentor less experienced employees to perform service safely (5001). Search out employees with less than one year service and verify that their crews are providing guidance and instruction. Check for good CRM procedures. Check for orange arm band (5801).

D. Additional Rules to be Tested - N/A

E. Failure Defined

The test is a failure if:

1. There is any failure to comply with any of the specific SOFA rules.

TESTS on T&E Employees

TEST 116 - ROADWAY WORKER PROTECTION

CHECK METHOD: B (only if test includes train stopping at stop sign/red flag)
R (only if radar is used to check speed when required)

A. Description of Test

This test checks compliance by train and engine crews with rules that protect roadway workers. This includes whistle and bell requirements and compliance with approaching and entering working limits, and complying with instructions from the employee in charge

B. Conditions for Test

This test requires that the train be approaching or passing identifiable roadway workers on or near the tracks, or when working limits are established that require trains and engines to receive permission from the employee in charge before entering the limits. It could also include switches or derails secured and/or tagged to provide protection for roadway workers, requiring T&E crews not to operate or remove securing devices.

C. Testing Guidelines

In addition to frequent observation type tests in this category, efforts should be made to conduct regular "set-up" type tests. Examples of each type of test are shown below:

1. Observation Tests:
   - **a.** Whistle/Bell rules. Did engineer sound the prescribed whistle signal as required? This test can be done either while riding the train or from a location in proximity to roadway workers (or properly equipped supervisors performing the test).
   - **b.** Approaching/Entering working limits. Were all rules governing procedure for obtaining permission to enter limits followed (proper identification of foreman, gang or written directive number; permission received, repeated and confirmed before entering limits)? Were instructions of employee in charge followed (compliance with instructions as to speed verified)? This test can be done while riding the train or from another location where visual and/or radio monitoring allows the supervisor to determine compliance.
   - **c.** Switches/Derails secured/tagged. Did employees recognize and comply with requirement that switches found secured and/or tagged for RWP purposes (inaccessible track) not be operated or securing devices removed. This test can be done by observing employees going to operate a switch that had been secured and/or tagged.
2. Set up Tests:
   - **a.** "Surprise" track flags. In this test, place the appropriate flags/signs that require a train to approach a specific point prepared to stop, unless permission is received from the employee in charge (on most railroads), or from the dispatcher (for example, on the CNIC). Ensure that signs are accurately placed and clearly visible. Coordination with the train dispatcher will be necessary to ensure that the appropriate response to the train is given. This test can require that the train stop short of the red flag/sign (use Check Method "B" for this type of test) or test for compliance with the requirements for movement beyond the point where the red flag/sign should have been displayed.

b. Existing working limits – withholding permission to enter. This test requires coordination with the employee in charge who should be instructed not to reply to an approaching train until the train has stopped at the entrance to the limits. Use Check Method "B" for this type of test.

c. Switches/Derails secured/tagged. Secure and properly tag a switch to indicate that the switch is out of service for RWP protection. From a location where the switch can be observed, check to ensure that employees do not attempt to operate the switch or remove securing device.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Reminder to the engineer (over radio) of approaching restriction by crew member in the body of the train.
2. Communication from the engineer with crew member in body of train (over radio) of flags/signs, where required.
3. Proper radio procedure.
4. (Optional, if time allows) During stop, check timetables, rule books, engineer certificate and other required documents, including locomotive inspection cards, etc. Document as a separate test (121 REQUIRED DOCUMENTS). Document any Rule "G" observations as a separate test (128 DRUG & ALCOHOL).

E. Failure Defined

The test is a failure if:

1. Train or engine fails to stop short of flag/sign.
   Failure requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Operating a locomotive or train past a signal indication that requires a complete stop before passing it." EXCEPTION – Failure to stop at a hand signal, radio signal indication or improperly lined switch does NOT require certificate suspension.
2. Train enters working limits without permission.
   Failure requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Occupying main track or a segment of main track without proper authority or permission."
3. Train exceeds the speed authorized by the employee in charge by 5 MPH or more.
   Failure by exceeding speed by 10 MPH or more requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Operating a locomotive or train at a speed that exceeds the maximum authorized by at least 10 miles per hour."
4. Train resumes normal speed prematurely.
5. Employee removes tag or securing device on a switch.

In the case of a two person engine crew, for any failure that requires the suspension of locomotive engineer certificate, the second engineer's certification will also be suspended using NRPC Form 2943. Check box "Failure to take appropriate action to prevent a violation per 49 CFR part 240."

Failure in any of the additional rules listed in section D should be entered as failures separately under the appropriate rule.

TESTS on T&E Employees ((Also MW & ME Employees)

TEST 117 - SWITCHES & SWITCHING

CHECK METHOD: N/A

A. Description of Test

This test checks compliance by train and engine crews with rules that govern the handling of switches or derails as well as rules that govern switching and securing equipment. This test may also be performed on employees of other departments when their duties involve handling switches or moving rail equipment.

B. Conditions for Test

This test requires that employees are handling switches and/or switching cars. This could be as simple as a road crew coupling up their engines to their train.

C. Testing Guidelines

This test requires the testing officer to observe all of the actions of the crew member(s) involved to ensure that *all* applicable rules are being followed.

This test should include as many of the following as applicable:

1. Checking switch points to ensure points fit correctly and switch is lined for intended route.
2. Securing switches, as required, with hasp, keeper or lock.
3. Movement over, and testing of, spring switches, when required.
4. Movement over Variable or Semi-Automatic ("rubber") switches, if allowed: an entire car or engine has passed over the switch before changing direction.
5. Hand operation of main track switches:
   - **a.** Stopping before fouling
   - **b.** Locking, including testing lock
   - **c.** Position of employee to switch stand when train is passing over switch, as required by applicable operating rules.
   - **d.** Lining switch back after clearing main track – train clear of fouling point.
6. Handling dual control switches.
   - **a.** Obtaining permission to place in hand
   - **b.** Operating hand throw lever as required even if switch was in desired position
   - **c.** Restoring switch to power (some rules require movement to be clear of switch)
7. Coupling to and moving equipment:
   - **a.** Safety stop, regardless of type of equipment (see AMT-3 rule 3.1.1)
   - **b.** Proper coupling speed
   - **c.** Equipment secured to prevent them from rolling, where required
   - **d.** All persons notified before coupling
   - **e.** Stretch is made after coupling (see AMT-3 rule 3.1.2)
   - **f.** Cars not moved until all chocks, skates, transfer plates or connections are removed and hand brakes released.

8. Securing equipment:
   a. Unattended equipment is secured by other than air brakes
   b. Proper number of hand brakes applied (see AMT-3 rule 3.7.2F)
   c. Chocks or skates are used where required

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Radio procedures
2. Hand signals
3. Headlight, bell & whistle
4. SOFA rules (due to the importance of these rules, enter as a separate test – TEST 116 - for both failure and compliance)

E. Failure Defined

The test is a failure if:

1. There is any failure to comply with any of the rules listed in section C, or any similar operating rule not listed that is specific to handling switches or switching.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on T&E Employees (Also MW & ME Employees)

TEST 118 - SHOVING & BACK-UP

CHECK METHOD: C (only if "set up" test, stopping in half remaining distance)

A. Description of Test

This test checks compliance by train and engine crews with rules governing back-up or shoving movements, or changing ends when required.

B. Conditions for Test

This test requires that a train or engine is making a back-up or shoving movement, either on a main track or on other than main track, including yards.

C. Testing Guidelines

This test can also include compliance with rules governing the use of back up hoses.

This test should always include the following:

1. Crew member is on the leading end of the movement, or preceding the movement when permitted. Engineer changes ends to operate from leading engine or control cab, where required. If using hand signals, crew member remains in sight of engineer.
2. Radio communication, if used, specifies distance to be traveled. Additional instructions are transmitted before movement has traveled half of the remaining distance. If no further instructions received, movement stops within half the remaining distance (if testing officer instructs employee giving signals not to issue further instructions, when safe to do so, in order to test engineer's compliance with this rule, count this as a "setup" test – Check Method "C").
3. Some railroad operating rules, as well as special instructions found in Amtrak Division General Orders, require the employee using the radio for back-up moves to give specific information as to position of switches and derails, their name or position, or other information: check for compliance with these rules.
4. Speed restrictions when backing, where applicable, are observed.
5. Where back-up hoses are required (AMT-3 rule 5.5):
   a. Back up hose tested by placing in emergency at location where back-up move will be made.
   b. Engineer controls air brakes during back-up move and makes Running Test after starting back-up move.
   c. Preliminary ("Safety") stop made 250 feet from bumping post or final stop.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Radio procedures
2. If on main track, rules for reverse movement.

E. Failure Defined

The test is a failure if:

1. Failure to comply with any rule specific to back-up or shoving movements.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on T&E Employees

TEST 119 - CALLING SIGNALS/RESTRICTIONS

CHECK METHOD: N/A

A. Description of Test

This test checks compliance by train and engine crews with rules that require the engineer to call out signals to other employees in the cab and/or over the radio, as well as rules that require the conductor or other crew members to remind the engineer of approaching restrictions.

B. Conditions for Test

This test usually requires only that a train is moving on a signaled track and/or approaching a location where it will be restricted.

C. Testing Guidelines

This test can be performed while the testing officer is riding the train, either in the operating cab or the body of the train. It can also be performed by monitoring radio transmissions from a trackside location. The Amtrak rules for this test are found in the System Special Instructions of the Division General Order. However, if a railroad operating rule is more restrictive or in conflict with the Amtrak rule, the railroad rule will apply.

This test should always include the following, when possible – all aspects require good CRM procedures:

1. Between crew members on the head end: All crew members in the engine control compartment must communicate clearly to each other all signals affecting their train. This includes “Clear” signal indications.
2. Between head end and body of train: A crew member on the head end must communicate by radio to a crew member in the body of the train when a train encounters a signal requiring a reduction in speed (including track flags), movement onto a diverging route, or to be prepared to stop at the next signal or pass it at restricted speed. This transmission must be acknowledged.
3. From conductor to engineer: The conductor must remind the engineer when the train is approaching an area where the train will be restricted. Unless otherwise required by a railroad operating rule, this must be done after passing the last station but not less than two miles from the restriction.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Radio procedures

E. Failure Defined

The test is a failure if:

1. Any crew member fails to comply with any requirement to communicate or to acknowledge a communication required by this test.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on T&E Employees (Also TD, MW & ME Employees)

TEST 120 - RADIO PROCEDURES

CHECK METHOD: N/A

A. Description of Test

This test checks compliance with rules governing use of the radio.

B. Conditions for Test

This test requires that employees are using the radio or are responsible to verify that a train or engine is equipped with a working radio and a redundant means of communication.

C. Testing Guidelines

Radio procedures can almost always stand improvement. It is one area where a supervisor can play a critical role in improving compliance by setting a standard that employees are expected to attain.

Checking for compliance with radio procedures is an important part of many different TESTS as listed in this guide. Use the following guidelines for checking for compliance, whether testing for radio rules alone or as an adjunct to other tests. However, record as a TEST 120 only when performing this test as a "stand-alone" test, or when a failure in radio procedures is observed during another test. This test should always include as many of the following as possible:

1. When dispatched from initial terminal, verify that trains have a working radio on the leading end of the controlling locomotive and a redundant means of communication. Maintenance of Way equipment operating without locomotive assistance between work locations must have a working radio on at least one unit in each multiple pieces of MoW equipment traveling together. In addition, each lone worker or lone unit of equipment must also be radio equipped.
2. Voice test is made by employees before starting work.
3. Proper identification, including railroad and unit ID is given.
4. Information received is repeated, when required.
5. Communication that is not fully understood or completed correctly is not acted upon until clarification is received. This is a key CRM procedure.
6. Transmissions are ended using "Over" or "Out", as required (Note: some railroad operating rules exempt yard switching from this requirement).
7. No prohibited transmissions are overheard. This includes irrelevant or unnecessary communication.

D. Additional Rules to be Tested – N/A

E. Failure Defined

The test is a failure if:

1. Failure to comply with any rule specific to radio procedures.

TESTS on T&E Employees (Also TD, MW and ME Employees)

TEST 121 - REQUIRED DOCUMENTS

CHECK METHOD: N/A

A. Description of Test

This test checks compliance by train and engine crews with rules that require that employees have in their possession or available for reference during their tour of duty certain books, instructions or documents.

B. Conditions for Test

This test may be performed at any time during an employee's tour of duty.

C. Testing Guidelines

This test can be performed during any other TEST where contact is made with an employee. Except for the engineer certificate, most documents and books are not required to be physically carried by the employee, but usually must be "with them", or "available for reference" while on duty.

Most rule books require that employees have the following with them while on duty:

1. Operating rules
2. Timetable/Special Instructions
3. Air Brake Instructions
4. Hazardous Materials Instructions, if they are involved in the shipment of hazardous materials.
5. Engineer Certificate

Check the specific operating rules for additional requirements. These could include general orders, bulletin orders, system bulletins and other documents. However, some rule books only require that employees "read and understand" these or other documents. The testing officer should know which documents the employee must have with them on the specific property on which they are performing this test.

D. Additional Rules to be Tested – N/A

NOTE: This test does not include written documents received en route or with documents that provide main track authority. Use TEST 106 MAIN TRACK AUTHORITY or TEST 112 WRITTEN DOCUMENTS.

E. Failure Defined

The test is a failure if:

1. Employee fails to have any of the required documents.
2. Any document is not up to date and/or properly maintained.

TESTS on T&E Employees

TEST 122 - WHISTLE/BELL/HEADLIGHT/MARKERS

CHECK METHOD: T (If event recorder is used to check compliance)

A. Description of Test

This test checks compliance by train and engine crews with rules that govern the display or use of the engine whistle, bell or headlight, including ditch lights, and the display of markers.

B. Conditions for Test

This test is included in many other TESTS and should not be entered as a separate TEST except to record a failure. However, if it becomes necessary to check compliance with any of these rules, supervisors may be directed to perform this TEST as a "stand alone" test. (NOTE: This TEST may also be performed on its own merits if the test includes compliance with rules governing further movement after the failure of any one of these devices).

C. Testing Guidelines

Refer to the specific rule book and special instructions of the property on which the test is being made. The following are general areas that this test should always include:

1. Headlight/Ditch Lights:
   - **(a)** Headlight on bright except when rules require dimming
   - **(b)** Headlight on bright and Ditch Lights on when approaching & passing over public grade crossings.
2. Whistle/Bell:
   - **(a)** Whistle/Bell sounded at the prescribed location when approaching & passing over public grade crossings.
   - **(b)** Whistle/bell sounded when approaching Roadway Workers.
   - **(c)** Whistle/bell sounded at all other locations where required.
3. Markers:
   - **(a)** Displayed at rear of train and illuminated when required.
   - **(b)** Confirmed at crew change locations.

D. Failure Defined

The test is a failure if:

1. Failure to comply with any rule specific to headlights, whistle, bell or markers.

TESTS on T&E Employees (Also ME Employees holding engineer certificates)

TEST 123 - ENGINEER CERTIFICATION

CHECK METHOD: N/A

A. Description of Test

This test checks compliance by with rules governing Engineer Certification. When TEST number is preceded by "FRA", this test indicates completion of the knowledge skills portion of the recertification process.

B. Conditions for Test

This test requires that an employee is required to be certified as a locomotive engineer under 49CFR Part 240.

C. Testing Guidelines

This test would check compliance with the following:

1. Employees required to be certified as locomotive engineers:

- **a.** Employees have current certificate in their possession.
- **b.** Employees are operating a locomotive within their certificate limitations.
- **c.** Certificate is legible and unaltered.
- **d.** Certificate shows date of last operational monitoring event (evaluation).

The TEST number for the above would be entered as "123".

2. Employees completing recertification process:

- **a.** Employee successfully passes knowledge skills test for recertification.

The TEST number for documenting successful completion of this portion of the recertification process would be entered as "**FRA**123".

D. Additional Rules to be Tested – N/A

E. Failure Defined

The test is a failure if:

1. Employee does not have certificate in their possession while operating a locomotive.

2. Employee is operating a locomotive outside of their certification limits.

NOTE: If certificate does not indicate date of last operational monitoring event (evaluation ride), take immediate action to determine that the date of the last evaluation ride is no later than the preceding calendar year. Enter this information, or have the appropriate supervisor enter it before the employee is allowed to operate under the certificate.

Illegible or altered certificates must be immediately replaced (if alteration is willful and for the purposes of falsifying the certificate, test should be shown as a failure, certificate lifted and discipline handled accordingly).

TESTS on T&E Employees (Also TD Employees)

TEST 124 - EMERGENCY PREPAREDNESS

CHECK METHOD: N/A

A. Description of Test

This test checks compliance by employees with their responsibilities regarding passenger safety announcements, emergency equipment, on-board emergency communications, and emergency communications with or by the control center.

B. Conditions for Test

Emergency preparedness tests may be conducted while an employee is required to actually perform an emergency preparedness plan requirement (an "**A**" test), they may be conducted as part of a question and answer session with a supervisor (A "**Q**" test), or they may be conducted as part of a full-scale passenger train emergency simulation (a "**S**" test).

C. Testing Guidelines

There are four categories of emergency preparedness tests:

1. Passenger Safety Announcements
   - **a.** Did conductor or his designee make the required announcement?
2. Emergency Equipment
   - **a.** Does each crew member have a working flashlight?
   - **b.** Does each car have the following equipment, or if not, was it noted on the appropriate form (MAP-21A): one type ABC fire extinguisher, one pry bar, one (only one required per train) standard Amtrak first aid kit?
3. On-board Emergency Communications
   - **a.** Does the conductor or his designee know what announcement to make in the event of an emergency situation?
   - **b.** Do other crew members and OBS employees know that they must promptly notify the conductor in the event of an emergency situation?
4. Emergency Communications with or by the Control Center
   - **a.** Does the conductor or his designee (including the engineer) know how to contact the appropriate control center in the event of an emergency?
   - **b.** Does the Control Center employee know whom to notify in the event of an emergency?

When recording this TEST, include in the "Comments" field the number of the test shown in this section (**1-4**), preceded by the letter that indicates the type of test, as shown in the section B, above ("**A**", "**Q**" or "**S**"). EXAMPLE: Conductor has made the required safety announcement. Show in the "Comments" field: "**A1**"

D. Additional Rules to be Tested – N/A

E. Failure Defined

The test is a failure if:

1. Any failure to comply with any rule specific to emergency preparedness.

TESTS on T&E Employees (Also TD, MW, ME Employees)

TEST 125 - REQUIRED EXAMS

CHECK METHOD: N/A

A. Description of Test

This test checks compliance with rules that require that employees pass the required examinations and be re-examined on the operating rules annually or as directed. When TEST number is preceded by "FRA", this test indicates successful completion of a closed-book examination on operating rules for purposes of engineer certification and for other requirements. NOTE: This test does not count as a test of an operating or safety critical rule toward the quota for any employee.

B. Conditions for Test

This test requires that an employee is subject to the requirement for passing an exam in the operating rules or on physical characteristics.

C. Testing Guidelines

1. This test is used primarily to record the date, examiner and type of a closed-book exam on operating rules that is taken by an employee. The "Comments" field should read, as an example: "GCOR exam Instructor Jones", or "Phys. Char. CHI-MKE Instructor Jones".

   The TEST number for documenting successful completion of a closed-book exam on operating rules exam would be entered as "**FRA**125".

2. This test is also used to record the date, examiner and type of an oral or written exam on physical characteristics or any other exam that is taken by an employee. The "Comments" field should read, as an example: "Phys. Char. CHI-MKE Instructor Jones".

   The TEST number for documenting successful completion of these exams would be entered as "125".

3. This test could also record the failure of an employee to take a required examination prior to the expiration of the time limit (date) allowed. In this case the "Comments" field should read, as an example: "Failed to take (or re-take) NORAC exam – disqualified".

   The TEST number for the above would be entered as "125".

D. Additional Rules to be Tested

Where required or instructed to bring rule book, timetable, or other instructions to class, check that all employees have the required documents and that they are properly maintained.

E. Failure Defined

The test is a failure if:

1. Employee fails to attain a passing grade on the examination.
2. Employee fails to take an examination, as required.

Failure to have a properly maintained document, as listed in section D, above, should be entered as a failure under TEST 121 REQUIRED DOCUMENTS.

TESTS on T&E Employees (Also TD or MW Employees)

TEST 126 - EQUIPMENT RESTRICTIONS/DETECTORS/INSPECTIONS

CHECK METHOD: N/A

A. Description of Test

This test checks compliance by train and engine crews with rules that impose a restriction on their train due to equipment in their consist, or for compliance with defect detector rules. It also may be used to check for compliance with rules that require employees to inspect passing trains.

B. Conditions for Test

This test requires that a train is subject to a restriction due to equipment in its consist, or a defect detector provides a message (or fails to provide a message) that requires crew members to take some kind of action, or when an employee is required to inspect a passing train.

C. Testing Guidelines

1. For equipment restrictions on Amtrak equipment, see Amtrak's Air Brake and Train Handling Instructions (AMT-3, Rule 1.4 Equipment Speeds), railroad timetable/special instructions, transportation notice or other instructions. Check that:
   - **a.** Conductor and engineer, and other crew members where required, are aware of any restricted equipment in their train and the exact nature of the restriction.
   - **b.** Train is handled in accordance with the restriction.
2. For action required by a message from a defect detector, or for action when required when a defect detector fails to provide a message, see rule book, railroad timetable/special instructions or other instructions. For Amtrak on-board bearing alarm system, see appropriate Amtrak instructions. Test should include:
   - **a.** Crew members respond properly to defect message. This usually includes checking additional axles ahead of and behind the indicated axle when no defect is found.
   - **b.** Crew members respond properly to the failure of a defect detector to provide a message. Depending on the railroad, and sometimes on the specific type of detector, this requires no action except notifying the dispatcher. In other cases it may require the train to stop and make an inspection of the entire train.
   - **c.** Crew member acknowledges detector message, even when defect is reported, when required.
   - **d.** Further movement after a defect detector requires an inspection is done in accordance with the applicable rules. This may include a speed restriction for a specified distance, additional inspections, and reporting requirements.
3. For inspection of passing trains see rule book, departmental instructions or other instructions applicable to the craft of the employee who is required to make an inspection of a passing train.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Radio procedures.
2. SOFA rules, especially Three Step Protection if necessary to foul equipment while making inspection.

E. Failure Defined

The test is a failure if:

1. Conductor, engineer or other crew member, where required, is not knowledgeable about restricted equipment in their train.
2. Train is not operated in compliance with the restricted equipment.

   Failure by exceeding speed by 10 MPH or more requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Operating a locomotive or train at a speed that exceeds the maximum authorized by at least 10 miles per hour."
3. A failure to comply with any rule that is specific to defect detectors, including on board hot bearing alarms.

In the case of a two person engine crew, for any failure that requires the suspension of locomotive engineer certificate, the second engineer's certification will also be suspended using NRPC Form 2943. Check box "Failure to take appropriate action to prevent a violation per 49 CFR part 240."

4. Employee fails to perform a required inspection of a passing train, or when inspection is not performed on-ground when required.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on T&E Employees (Also TD Employees)

TEST 127 - HAZARDOUS MATERIALS

CHECK METHOD: N/A

A. Description of Test

This test checks compliance by train and engine crews with rules that govern employees who are involved in the shipment of hazardous materials.

B. Conditions for Test

This test requires that employees are involved in the shipment of hazardous materials or that they are required to have information that confirms that no hazardous materials are being handled.

C. Testing Guidelines

Outside of the Amtrak Northeast Corridor, Amtrak's rules covering hazardous materials are found in the System Special Instructions of the Division General Order (Section F).

This test should always include the following:

1. Conductor must have information concerning the contents of each MHC, express car, roadrailer or other non-passenger carrying car on their train. Loaded cars carrying other than mail should have a statement included in the paper work (manifest, transportation notice) that states whether or not hazardous material is being carried.
2. If train includes cars carrying hazardous material, conductor must have the required shipping documents.
3. If train is carrying hazardous material, all crew members must have a copy of the Emergency Response Guide.
4. If train carrying hazardous materials is involved in an accident, the conductor must take the appropriate actions as required by the rules.

D. Additional Rules to be Tested – N/A

E. Failure Defined

The test is a failure if:

1. Failure to comply with any rule specific to hazardous materials

TESTS on T&E Employees (Also TD, MW & ME Employees)

TEST 128 - DRUGS & ALCOHOL

CHECK METHOD: N/A

A. Description of Test

This test checks compliance with rules that govern use or possession of drugs and alcohol.

B. Conditions for Test

This test generally requires that an employee be on duty or reporting for duty, or on company property.

C. Testing Guidelines

This Guide provides general information on some of the situations that can be recorded under this TEST. It does not take the place of the training and instructions that testing officers should have received on this topic. It is important that any testing be done strictly in accordance with Amtrak's D&A policy, as outlined in PERS 19.

Normally, this TEST will be used to record direct observations of employees which are conducted to verify that no prohibited behavior is occurring.

This test can be used to document the following:

1. Using or possessing alcoholic beverages while on duty or reporting for duty.
2. Using or being under the influence of any drug, medication, or controlled substance – including prescribed medication – that adversely affects the performance of their duties.
3. Illegally possessing or selling a drug, narcotic or other controlled substance.
4. Refusal to comply when required to take a breath test and/or provide a urine sample.

D. Additional Rules to be Tested -NA

E. Failure Defined

The test is a failure if:

1. Any of the prohibited behaviors listed under C, 1 – 3 are observed and ultimately confirmed by the appropriate test.
2. Refusal to comply with providing a sample, as listed under C 4.

Failure of alcoholic beverage portion of random drug test requires suspension of locomotive engineer certificate using NRPC Form 2943. Check box "Failure to comply with 49 CFR Part 219 (Drug and Alcohol Use). Failure of controlled substance portion of random drug test requires referral to EAP counselor. If active substance abuse disorder exists, certification will be revoked.

TESTS on T&E Employees (Also TD, MW & ME Employees)

TEST 129- SAFETY RULES

CHECK METHOD: N/A

A. Description of Test

This test checks compliance with safety rules and instructions (AMT-5, or any safety rule book) other than those covered in TEST115 SOFA RULES.

B. Conditions for Test

This test may be performed at any time.

C. Testing Guidelines

Testing officers must have a comprehensive knowledge of all safety rules and make a conscious decision to use all their powers of observation to spot unsafe acts before they lead to an injury. Before going out to observe employees, review the safety instructions that you expect to encounter. Put the number of the safety rule (and applicable safety book) in the "comments" field.

D. Additional Rules to be Tested -NA

E. Failure Defined

The test is a failure if:

1. Failure to comply with any safety rule or instruction.

TESTS on T&E Employees (Also TD & ME Employees)

TEST 130- JOB BRIEFING

CHECK METHOD: N/A

A. Description of Test

This test checks compliance with rules requiring job briefings.

B. Conditions for Test

This test may be performed when crews are reporting for duty or when conditions change, requiring additional job briefings.

C. Testing Guidelines

Testing officers must be prepared to make a judgment on the quality of the job briefing. This TEST can be used to provide employees with a learning experience on how to make job briefings substantive and relevant to their safety. If any deficiencies are noted, the testing officer must provide immediate direction.

Ensure that a job briefing checklist, if applicable, is utilized and all items are covered. Some railroads have specific items that are required to be included – check that the job briefing complies with the railroad's instructions.

D. Additional Rules to be Tested -NA

E. Failure Defined

The test is a failure if:

1. Failure to hold a required job briefing.
2. Job briefing is incomplete.
3. All members of a crew do not attend or participate in a job briefing.

TESTS on T&E Employees (Also ME Employees)

TEST 131 - EOT

CHECK METHOD: N/A

A. Description of Test

This test checks compliance by train and engine crews and MofE employees with rules governing **E**nd **O**f **T**rain telemetry devices.

B. Conditions for Test

This test requires that a train is required to have an EOT, based on consist size and the position of the rearmost car that is accessible to a member of the crew (See AMT-3, Rule 3.5)

C. Testing Guidelines

The most valid test of this type would be to check for compliance with the rules governing further movement after an EOT failure. Otherwise, testing officers should verify that trains that are required to have an EOT are so equipped and the EOT is properly armed and functioning.

This test would check compliance with the following:

1. Trains required to have an EOT:
   - **a.** Train is equipped with an EOT.
   - **b.** EOT is armed and functioning, as indicated by display in cab of controlling locomotive (if not, was failure reported and actions shown below taken?).
2. EOT fails en route:
   - **a.** Dispatcher notified.
   - **b.** Crew member with radio stationed in rearmost accessible car.
   - **c.** Periodic running brake tests performed.
   - **d.** Train must not descend a 2% grade that is 2 or more miles in length.

D. Additional Rules to be Tested – N/A

E. Failure Defined

The test is a failure if:

1. When a train that is required to have an EOT is not so equipped, and train has left the initial terminal or crew change point, unless otherwise instructed.
2. When a train that is required to have an EOT does not have a functioning EOT (including being turned off) and no attempt to notify dispatcher has been made.
3. If, after the en route failure of an EOT, the train continues without taking the required actions, or proceeds down a 2% grade.

TESTS on T&E Employees (Also TD, MW & ME Employees)

TEST 132- Electrical Operating Instructions (AMT-2)

CHECK METHOD: N/A

A. Description of Test

This test checks compliance with any Electrical Operating Instruction (AMT-2).

B. Conditions for Test

This test may be performed at any time on employees working in electrified territory.

C. Testing Guidelines

These tests are especially important for those employees who perform work on or near overhead wires or third rails, but are also important for all employees working in electrified territory. Note that there are numerous rules in the AMT-2 that require thorough job briefings and place additional responsibility on conductors, engineers, pilots and foremen to practice good CRM procedures to protect other employees. These are safety critical rules that warrant regular testing.

Put the number of the AMT-2 rule in the “comments” field.

D. Additional Rules to be Tested -NA

E. Failure Defined

The test is a failure if:

1. Failure to comply with the specified rule or instruction.

TESTS on T&E Employees (Also TD, MW & ME Employees)

TEST 198- EMPLOYEE INSTRUCTION

CHECK METHOD: N/A

A. Description of Test

This test serves to record specific instructions that are delivered to employees.

B. Conditions for Test

Use when you are directed to document that specific instructions have been conveyed to employees. This has formerly been known as a "briefing" or as a "blitz". You may also use this TEST number to record face-to-face conferences with, or instructions given, to an employee on any operating rule, safety rule, or other instruction.

C. Testing Guidelines

This TEST is only for oral reviews or to document receipt of written instructions. Use TEST 125 Required Exams for any written exam.

Any test that is entered as a TEST 198 EMPLOYEE INSTRUCTION must enter information in the "Comments" field. Enter either the prescribed information (letters and/or numbers used to identify the precise activity) that you have been provided or the specific rule book and the rule number, followed by a brief description.

This TEST is **not** counted toward any TESTS quota.

D. Additional Rules to be Tested -NA

E. Failure Defined

The test is a failure if:

1. When applicable, if employee fails to obtain a copy of written instructions when notified to do so, or otherwise refuses to accept the instruction given.

TESTS on T&E Employees (Also TD, MW & ME Employees)

TEST 199- ALL OTHER TESTS

CHECK METHOD: N/A

A. Description of Test

This test is for all other tests or observations not included in the previous list of tests for T & E, TD, MW or ME employees.

B. Conditions for Test

As applicable.

C. Testing Guidelines

Verify that the rule or instruction being tested here is not included in any other TEST as shown in this Guide. The preceding TESTS are broad categories that should encompass most activities.

Any test that is entered as a TEST 199 ALL OTHER TESTS must identify the specific rule in the "Comments" field. Enter the specific rule book and the rule number, followed by a brief description.

D. Additional Rules to be Tested -NA

E. Failure Defined

The test is a failure if:

1. Failure to comply with the specified rule or instruction.

12. TESTS on Train Dispatchers/Train Directors and Block Operators

The following T&E TESTS may also be used:

- **120 Radio Procedures**
- **121 Required Documents**
- **124 Emergency Preparedness**
- **125 Required Exams**
- **126 Equipment Restrictions/Defect Detectors**
- **127 Hazardous Materials Rules**
- **128 Drug & Alcohol**
- **129 Safety Rules**
- **130 Job Briefings**
- **132 Electrical Operating Instructions (AMT-2)**
- **198 Employee Instruction**
- **199 All Other Tests or Observations**

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TESTS on Train Dispatchers

TEST 201 - FORM D (WRITTEN DIRECTIVES)

A. Description of Test

This test checks compliance by train directors/train dispatchers/operators with the requirements of issuing, completing, addressing, delivering and canceling Form D's. Where other than NORAC rules are in effect, this test applies to other forms of written directives that are issued to restrict or authorize movements.

B. Conditions for Test

This test requires that a Form D (or other written directive) is being, or has been, issued.

C. Testing Guidelines

This test can be performed while the testing officer is riding a train, in the train dispatcher office, or while monitoring radio or taped transmissions.

A valid test could include, when appropriate safeguards are provided, instructing employees to repeat information incorrectly to determine other employee's compliance with the rules. This should only be done on foreign railroads when accompanied, or authorized by, the appropriate officers of the host railroad.

This test should always include the following:

1. Form D is properly numbered and addressed.
2. Additional written copies are repeated correctly and initialed.
3. Delivery procedures are followed.
4. Only prescribed additions are made to a Form D that has been given a "Time Effective".
5. Canceling a Form D is done in the prescribed manner and marked with an "X".

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Proper radio procedure.
2. Application of blocking devices, when required.
3. Records retained as required.

E. Failure Defined

The test is a failure if:

1. Form D is improperly numbered, addressed or canceled.
2. Errors in repeating are not corrected.
3. Failure to deliver a Form D, or to protect delivery where required.
4. Additions are made that are not prescribed by the rules.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on Train Dispatchers

TEST 202 - BLOCKING DEVICES

A. Description of Test

This test checks compliance by train directors/train dispatchers/operators with the requirements for placing, recording and removal of blocking devices.

B. Conditions for Test

This test requires that the use of blocking devices is required by rule at the time of the test. Examples of such rules include blue signal protection, RWP protection, additional restrictions issued to trains, reverse movements, and authorization to pass stop signal. If testing after the fact by checking the record of blocking devices, enter that type of test under TEST 213 RECORDS.

C. Testing Guidelines

This test looks for technical proficiency in compliance with the rules for the actual placement, recording and removal of blocking devices. It can be performed either as a "stand-alone" test or in conjunction with a test on the rule that requires the blocking devices (blue signal protection, RWP protection, etc.).

This test should always include the following:

1. Blocking devices are applied before protection is confirmed to the requesting employee.
2. Written record is made at once.
3. Proper blocking is used and remains applied until protection is no longer required.
4. Alternate blocking is used properly if necessary to route a train around the protected track.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Proper radio procedure.

E. Failure Defined

The test is a failure if:

1. Blocking devices are not applied before confirming protection to the employee requesting it.
2. Written record is not made at once.
3. Blocking applied was not sufficient to provide protection or it was removed prior to the time it was no longer required.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on Train Dispatchers

TEST 203 - BLUE SIGNAL PROTECTION

A. Description of Test

This test checks compliance by train directors/train dispatchers/operators with the requirements for providing blue signal protection by lining a remote control switch against movement to the track being protected.

B. Conditions for Test

This test requires that blue signal protection is being requested or released, or that it is in effect at the time of the test.

C. Testing Guidelines

This test looks for compliance with rules that are specific to providing blue signal protection. It can be performed either as a "stand-alone" test or in conjunction with TEST 202 BLOCKING DEVICES.

This test should always include the following:

1. The confirmation of protection to the employee requesting it must be in the proper format.
2. Protection is provided by a remote control switch lined against movement onto the track and blocking devices applied.
3. Ensure that the releasing employee has permission from the requesting employee, if not the same person.

Most of these tests will be done while the testing officer is directly observing the train director/train dispatcher. However, this test can be performed while reviewing tapes and/or computer records to verify the timing of the protection being applied and the proper position of switches. Another valid method for this test would be when the testing officer is in the field at the location of the protected track, when the position of the switch providing protection can be observed and communications between the train director/dispatcher and the employee requesting protection can be monitored. In this case the appropriate records should also be reviewed as soon as possible to confirm that all the requirements of this test had been met.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Proper radio procedure.

E. Failure Defined

The test is a failure if:

1. Protection is not provided by lining a remote control switch lined against movement onto the track and applying blocking devices. NOTE: A 'track block" or signal blocking alone is not in compliance with this rule.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

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TESTS on Train Dispatchers

TEST 204 - RWP PROTECTION

A. Description of Test

This test checks compliance by train directors/train dispatchers/operators with the requirements for RWP protection by Exclusive Track Occupancy, Foul Time or Inaccessible Track.

B. Conditions for Test

This test requires that RWP protection is being requested or released, or that it is in effect at the time of the test.

C. Testing Guidelines

This test looks compliance with rules that are specific to providing RWP protection. It can be performed either as a "stand-alone" test or in conjunction with TEST 202 BLOCKING DEVICES.

This test can cover any of the following three situations:

1. Exclusive Track Occupancy
   - **a.** Written authority is issued using proper procedure and in proper format.
   - **b.** Blocking devices applied when applicable
   - **c.** Trains and additional equipment admitted into limits only with permission of employee in charge.
   - **d.** Protection, when applicable, is not removed until released by employee in charge.
2. Foul Time
   - **a.** Foul Time authority is issued using proper procedure, identifying track and limits to be fouled.
   - **b.** Foul Time is not issued when the train dispatcher is aware that work will disturb the track structure or affect the proper operation of the signal system.
   - **c.** Protection, when applicable, is not removed until released by employee in charge
3. Inaccessible Track
   - **a.** Protection is provided by a remote control switch lined against movement onto the track and blocking devices applied.
   - **b.** Protection is not removed until released by employee in charge

Most of these tests will be done while the testing officer is directly observing the train director/train dispatcher. However, this test can be performed while reviewing tapes and/or computer records to verify the timing of the protection being applied and the proper position of switches. Another valid method for this test would be when the testing officer is in the field at the location of the protected track, when the position of the switch providing protection can be observed and communications between the train director/dispatcher and the employee requesting protection can be monitored. In this case the appropriate records should also be reviewed as soon as possible to confirm that all the requirements of this test had been met.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Proper radio procedure.

E. Failure Defined

The test is a failure if:

1. Failure to comply with any rule governing the issuance, protection, or releasing of RWP protection.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on Train Dispatchers

TEST 205 - TRACK CAR PROTECTION

A. Description of Test

This test checks compliance by train directors/train dispatchers/operators with the requirements for providing protection for the movement of track cars.

B. Conditions for Test

This test requires that the movement of track cars on a main track occurs for other than work that is covered by RWP rules.

C. Testing Guidelines

Protection for track cars and other on-track equipment performing work under the scope of RWP rules should be tested under TEST 204 RWP PROTECTION.

This test checks for compliance with the specific rules that govern the movement of track cars. Because track cars do not reliably activate track circuits, the train dispatcher or control operator must provide protection in signaled territory that is not normally required for train or engine movements. This test includes authorization and protection for track cars making movements at interlockings or control points.

This test should include the following, when applicable:

1. The authority for movement is provided in the proper format, either written or verbal as applicable.
2. No trains or other track cars have been authorized in the same limits except as provided for in the rules.
3. Signals governing opposing and following movements have been placed in Stop position and blocking devices applied.
4. The route is properly lined and blocking devices applied until movement over switch(es) has been completed.

Most of these tests will be done while the testing officer is directly observing the train director/train dispatcher. However, this test can be performed while reviewing tapes and/or computer records to verify that proper protection had been applied Another valid method for this test would be when the testing officer is in the field with the track car or observing its operation and communications between the train director/dispatcher and the employee in charge of the track car can be monitored.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Proper radio procedure.

E. Failure Defined

The test is a failure if:

1. Failure to comply with any rule governing the issuance, protection, or releasing of track car protection.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on Train Dispatchers

TEST 206 - AUTHORITY TO PASS STOP SIGNAL

A. Description of Test

This test checks compliance by train directors/train dispatchers/operators with the requirements for authorizing a movement to pass a Stop signal.

B. Conditions for Test

This test requires that a movement must be authorized to pass a signal displaying Stop.

C. Testing Guidelines

This test checks that the train dispatcher provides the required protection before authorizing a movement to pass a stop signal.

This test should always include the following:

1. Authorization to pass Stop signal is given only when the proper signal indication could not be displayed or when Stop signal was required by the rules.
2. The train dispatcher determines that there are no conflicting or opposing movements and none have been authorized.
3. The route is properly lined and blocking devices have been applied. If necessary to issue instructions to operate a dual control switch in hand, enter separate test under TEST 207 DUAL CONTROL SWITCHES.
4. If signal governs movement over a drawbridge, requirements for inspection by a qualified employee are followed, when applicable.
5. Authorization to pass stop signal is given in proper format, after verifying the train has come to a stop when required.
6. Blocking devices are not removed until the train clears the route or the next controlled location, as appropriate.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Proper radio procedure.

E. Failure Defined

The test is a failure if:

1. There is any failure to provide the required protection before, during or after movement.
2. Authorization to pass Stop signal is not given in the prescribed manner, or is given before train has stopped at the signal.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on Train Dispatchers

TEST 207 - DUAL CONTROL SWITCHES

A. Description of Test

This test checks compliance by train directors/train dispatchers/operators with the requirements for giving permission to operate dual control switches by hand.

B. Conditions for Test

This test requires that permission to operate dual control switches by hand is given.

C. Testing Guidelines

This test looks for compliance with rules that are specific to giving permission to operate dual control switches by hand. It can be performed either as a "stand-alone" test or in conjunction with TEST 202 BLOCKING DEVICES.

This test should always include the following:

1. If the position of a dual control switch cannot be determined by control machine indication, movement must not be authorized until an employee is instructed to place it in hand position.
2. Before giving permission, the train dispatcher determines that there are no conflicting or opposing movements and none have been authorized.
3. Signals governing movement over the switch are placed in Stop position and blocking devices applied.
4. Permission is given in the proper format and properly identifies the switch(es) that are to be placed in hand.

Most of these tests will be done while the testing officer is directly observing the train director/train dispatcher. However, this test can be performed while reviewing tapes and/or computer records to verify the timing of the protection being applied and the proper position of switches.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Proper radio procedure.

E. Failure Defined

The test is a failure if:

1. Movement over a dual control switch, when its position cannot be determined by control machine indication, is allowed without instructing an employee to place it in hand.
2. Failure to provide proper protection against other movements or to properly apply blocking devices.
3. Failure to use the proper format when giving permission to place switch in hand that could lead to an unsafe condition.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on Train Dispatchers

TEST 208 - REVERSE MOVEMENTS

A. Description of Test

This test checks compliance by train directors/train dispatchers/operators with the requirements for giving permission to make a reverse movement.

B. Conditions for Test

This test requires that permission to make a reverse movement is being given.

C. Testing Guidelines

This test looks for compliance with rules that are specific to giving permission to make a reverse movement. It can be performed either as a "stand-alone" test or in conjunction with TEST 202 BLOCKING DEVICES.

This test should always include the following:

1. Before giving permission, the train dispatcher determines that there are no conflicting or opposing movements and none have been authorized.
2. Signals governing opposing movements are set on Stop and blocking devices applied.
3. Blocking devices are applied on any switches on the affected route.
4. Permission is given in the proper format.

Most of these tests will be done while the testing officer is directly observing the train director/train dispatcher. However, this test can be performed while reviewing tapes and/or computer records to verify the timing of the protection being applied and the proper position of switches.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Proper radio procedure.

E. Failure Defined

The test is a failure if:

1. Failure to determine that track is clear of other movements.
2. Failure to provide proper protection against other movements or to properly apply blocking devices.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on Train Dispatchers

TEST 209 - CHANGING ESTABLISHED ROUTE

A. Description of Test

This test checks compliance by train directors/train dispatchers/operators with the requirements for taking safeguards before changing an established route.

B. Conditions for Test

This test requires that an interlocking or controlled point signal has been cleared for an approaching train and it is changed to Stop.

C. Testing Guidelines

This test should always include the following:

1. Signal is not changed to Stop, except in an emergency, until the train has stopped or the engineer advises that the train can stop before reaching the signal.
2. The route is not changed until the train has stopped.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Proper radio procedure.

E. Failure Defined

The test is a failure if:

1. Signal is changed to Stop, except in an emergency, before the train stops or before the engineer advises that the train can stop before reaching the signal.
2. Route is changed before train has stopped.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on Train Dispatchers

TEST 210 - INTERLOCKING/CONTROL POINTS

A. Description of Test

This test checks compliance by train directors/train dispatchers/operators with rules that govern the use of signals and appliances within interlockings and controlled points, dangerous conditions and the closing of interlocking stations.

B. Conditions for Test

This test requires that the employee charged with operating signals or appliances of an interlocking is observed performing one of the functions listed below.

C. Testing Guidelines

This test should always include the following, when applicable:

1. Signals are cleared sufficiently in advance of approaching trains to avoid delay.
2. Signals or appliances that are not operating properly, unable to be locked, are damaged, or are undergoing repair are properly protected.
3. Control mechanisms of interlocking appliances are not operated when a train is standing or closely approaching the appliance.
4. Train movements that might not shunt are properly protected.
5. When an interlocking station is closed, routes and signals are set to comply with instructions of the dispatcher and building secured.

NOTE: Since the rules observed may vary depending on the actual conditions existing at the time of this TEST, it is recommended that a rule reference be included in the Comments field.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Proper radio procedure.

E. Failure Defined

The test is a failure if:

1. Failure to follow any of the rules governing interlockings or controlled points, as indicated in section C, above.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

NOTE: Do not use this TEST for other interlocking/controlled point rules that are specifically addressed in

- TEST 204 RWP PROTECTION,
- TEST 205 TRACK CAR PROTECTION,
- TEST 206 AUTHORITY TO PASS STOP SIGNAL,
- TEST 208 REVERSE MOVEMENTS, and
- TEST 209 CHANGING ESTABLISHED ROUTE.

TESTS on Train Dispatchers

TEST 211 - RESTRICTION TO TRAINS

A. Description of Test

This test checks compliance by train directors/train dispatchers/operators with the requirement for ensuring that all trains that could be routed to an affected track are notified of a temporary speed restriction.

B. Conditions for Test

This test requires that a temporary speed restriction must be issued to a train.

C. Testing Guidelines

This test should always include the following:

1. Blocking devices are applied until all trains en route have been notified
2. The train dispatcher ensures that all trains are notified.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Proper radio procedure.

E. Failure Defined

The test is a failure if:

1. The train dispatcher fails to apply blocking devices, when required.
2. The train dispatcher fails to notify all trains that could be affected.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on Train Dispatchers

TEST 212 - HIGHWAY CROSSING DEVICES

A. Description of Test

This test checks compliance by train directors/train dispatchers/operators with taking the required actions when notified that automatic highway crossing warning devices are not functioning properly.

B. Conditions for Test

This test requires that a report is received from any source that automatic highway crossing warning devices are not functioning properly.

C. Testing Guidelines

This test should always include the following:

1. The train dispatcher notifies all trains approaching the crossing in both directions, using proper format (for example, NORAC Form D Line 12).
2. The appropriate C & S personnel are notified.
3. All required records are completed.
4. Notification discontinued only after C & S personnel at the crossing confirm that the crossing warning devices are functioning properly.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Proper radio procedure.

E. Failure Defined

The test is a failure if:

1. Failure to notify all trains approaching the crossing.
2. Failure to make any required record or notification.
3. Notification discontinued before receiving confirmation from C & S personnel at the crossing.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on Train Dispatchers

TEST 213 - RECORDS

A. Description of Test

This test checks compliance by train directors/train dispatchers/operators with all rules that require records to be made or retained

B. Conditions for Test

This test checks that required records are properly completed and available.

C. Testing Guidelines

This test should always include the following:

1. Transfer record is completed properly and signed.
2. Record of Train Movement is properly completed, using black ink except for track car movements and blocking devices, which must be recorded in red ink.
3. Hours of service record is completed.
4. Unusual conditions and weather, when required, are recorded.

D. Additional Rules to be Tested – N/A

E. Failure Defined

The test is a failure if:

1. Any required record is not properly completed.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

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13. TESTS on M of W (Engineering Dept.) Employees

The following T&E TESTS may also be used:

- **109 Blue Signal**
- **112 Written Directives**
- **117 Switches & Switching**
- **118 Shoving & Back-Up Moves**
- **120 Radio Procedures**
- **121 Required Documents**
- **125 Required Exams**
- **126 Equipment Restrictions/Detectors/Inspections**
- **128 Drug & Alcohol**
- **129 Safety Rules**
- **132 Electrical Operating Instructions (AMT-2)**
- **198 Employee Instruction**
- **199 All Other Tests or Observations**

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TESTS on Engineering Dept. Employees

TEST 313 - INDIVIDUAL RESPONSIBILITY

A. Description of Test

This test checks compliance by roadway workers with the general requirements of Amtrak's on-track safety program, including the individual's responsibility for following the program.

B. Conditions of Test

This test may be performed anytime that roadway workers are on duty.

C. Testing Guidelines

This test may be performed by observation or by directly questioning an employee. It can be used as a "stand alone" test or used in conjunction with other tests. For example, a good test would be for the testing officer to approach an employee fouling a track while performing work and ask for a description of the on-track safety being provided. If the answer is "Individual Train Detection", then TEST 337 LONE WORKER should also be performed.

This test could include any of the following:

1. Employee does not foul a track except when necessary for the performance of duty.
2. Employee does not foul a track until ascertaining that on-track safety is being provided.
3. Employee refuses to violate Amtrak's on-track safety program.
4. Employee informs employer whenever a good faith determination that on-track safety to be applied on a job does not comply with Amtrak's on-track safety program.

D. Additional Rules to be Tested – N/A

E. Failure Defined

The test is a failure if:

1. Employee is fouling a track while performing work without knowing if on-track safety is being provided.
2. Employee is fouling a track while performing work without the applicable on-track safety being provided.
3. Employee knowingly violates Amtrak's on-track safety program.

TESTS on Engineering Dept. Employees

TEST 316 - JOB BRIEFINGS

A. Description of Test

This test checks compliance by roadway workers with the requirement to participate in an RWP job briefing prior to performing any task that requires fouling a track or has the potential to foul a track.

B. Conditions of Test

This test requires that roadway workers are setting up or performing any task that requires fouling a track or has the potential to foul a track.

C. Testing Guidelines

This test is best performed by observing the actual job briefing, verifying that all employees participated. Another way to perform this test would be for the testing officer to approach an employee fouling a track while performing work and ask for a description of the job briefing.

This test should include the following:

1. Job briefing includes the means by which on-track safety will be provided.
2. Job briefing is conducted by the designated employee and properly logged by the supervisor.
3. Job briefing includes all roadway workers, including those who arrive after the initial job briefing.
4. Job briefing is not complete until all roadway workers acknowledge understanding of the on-track safety being used.

D. Additional Rules to be Tested – N/A

E. Failure Defined

The test is a failure if:

1. Job briefing is not performed, or is not performed properly.
2. Roadway worker does not participate in a job briefing.

TESTS on Engineering Dept. Employees (Also T&E Employees)

TEST 321 - EXCLUSIVE TRACK OCCUPANCY

A. Description of Test

This test checks compliance by roadway workers (or conductor flagmen) with the rules governing establishment of exclusive track occupancy on controlled tracks, under the applicable rules of the rule book under which they are working.

B. Conditions of Test

This test requires that roadway workers (or conductor flagmen) are setting up or working under rules governing exclusive track occupancy.

C. Testing Guidelines

This test should include all applicable rules governing the establishment and working under exclusive track occupancy. Testing officers should have a copy of the written authority to occupy the track and should attempt to remain unseen by the employees for at least an initial period of observation of items 1-3, below.

The following should be verified:

1. Written authority properly completed and in possession of employee in charge.
2. Track flags/signs are properly displayed, at the specified locations, when required.
3. Permission to trains or other employees to enter the limits is given in the proper format.
4. Roadway workers within the working limits are notified before trains are permitted to enter the limits and either leave the track or have been afforded on-track safety through train approach warning.
5. Roadway workers can demonstrate knowledge of on-track safety being provided. If an employee is seen to be working after a train has been given permission to enter the limits, question that employee about the on-track safety being provided.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Radio procedures, including proper terminology and prescribed formats, where applicable.
2. Personal protective equipment in use.

E. Failure Defined

The test is a failure if:

1. Written authority is incomplete, improper, or not in possession of employee in charge.
2. Track is fouled or occupied before exclusive track occupancy is in effect or track flags/signs are displayed.
3. Track flags/signs are improperly displayed.
4. Roadway workers are not notified or fail to clear the track before a train is permitted to enter the working limits.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on Engineering Dept. Employees (Also T&E Employees)

TEST 323 - FOUL TIME

A. Description of Test

This test checks compliance by roadway workers (or conductor flagmen) with the rules that govern the establishment of working limits on controlled tracks, using "Foul Time".

B. Conditions of Test

This test requires that roadway workers (or conductor flagmen) are providing on-track safety using "Foul Time".

C. Testing Guidelines

This test should include all applicable rules governing the establishment and working under "Foul Time". Testing officers should first determine that "Foul Time" is the appropriate form of on-track safety.

The following should be verified:

1. Work does not disturb the track structure or affect the proper operation of the signal system.
2. On-track equipment is not fouling or occupying main tracks.
3. "Foul Time" is being used only on controlled track.
4. Employee contacts train dispatcher to request foul time, identifying the track to be fouled, the track limits required and the time desired.
5. Foul time authority is obtained before occupying or fouling track.
6. Foul time is released only after clear of track.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Radio procedures, including proper terminology and prescribed formats, where applicable.
2. Personal protective equipment in use.

E. Failure Defined

The test is a failure if:

1. Use of "Foul Time" is not appropriate for type of work being performed, or on non-controlled track.
2. Track is fouled or occupied before "Foul Time" is obtained.
3. "Foul Time" is released before clear of track.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on Engineering Dept. Employees

TEST 325 - TRAIN COORDINATION

A. Description of Test

This test checks compliance by roadway workers with the rules that govern the establishment of working limits on controlled tracks using "Train Coordination".

B. Conditions of Test

This test requires that roadway workers providing on-track safety are using Train Coordination, in which working limits are established by a roadway worker through the use of a train's authority on a main track or other controlled track.

C. Testing Guidelines

Train Coordination is a significantly different method of providing on-track safety since it relies on the train's authority to provide working limits. This should not be confused with exclusive track occupancy where the employee in charge must give authority to any train or equipment to enter the limits. Train Coordination will most often be used in situations where it is necessary for a roadway worker to assist or work with a train and when other means of providing working limits are not practical. Therefore, testing officers should be alert for opportunities to perform this type of test whenever the situation arises. Note that an important part of this test includes ensuring that the train crew has a full understanding of the restrictions on their train's movement. When possible, question train crew members to verify that this information has been conveyed to them by the roadway worker.

The following should be verified:

1. Only one train holds exclusive authority to move on the segment of controlled track where working limits have been established under train coordination.
2. The train is visible to the roadway worker before working limits using train coordination are established.
3. The roadway worker must communicate with a crew member of the train and reach an understanding that the train is stopped and will make further movements only as permitted by the roadway worker in charge, and that the train will not give up its exclusive authority until released by the roadway worker in charge.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Radio procedures, including proper terminology and prescribed formats.
2. Personal protective equipment in use.

E. Failure Defined

The test is a failure if:

1. Any of the required conditions for train coordination have not been met, or roadway worker fails to determine that train crew understands all required conditions under which working limits are to be established.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on Engineering Dept. Employees

TEST 327 - INACCESSIBLE TRACK

A. Description of Test

This test checks compliance by roadway workers with the rules that govern the establishment of working limits on non-controlled tracks by making the track physically inaccessible to trains.

B. Conditions of Test

This test requires that roadway workers are providing on-track safety on a non-controlled track by using "Inaccessible Track", in which working limits are established by a roadway worker by making the track physically inaccessible to trains. If the work being performed will disturb the track structure, then "Inaccessible Track" must be used. Otherwise, Individual Train Detection or Train Approach Warning by Watchman/Lookouts may be used on non-controlled track.

C. Testing Guidelines

When working limits are established on non-controlled track, verify that the requirements of "Inaccessible Track" have been met by one or more of the following methods:

1. A switch lined against movement to that track and secured with an effective locking device.
2. A remote control switch lined against movement to that track and the switch operator confirms that locking devices have been applied to the controls of that switch.
3. A derail capable of restricting access to the portion of track where working limits are established and secured with an effective locking device.
4. A discontinuity in the rail capable of restricting access to the portion of track where working limits are established.

   NOTE: Methods 3 & 4 also require that a red flag be placed at the derail or rail discontinuity location and that there is at least 150 feet between that location and the nearest location where track may be fouled by roadway workers.
5. A flagman with instructions to hold all trains and equipment.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Radio procedures, including proper terminology and prescribed formats.
2. Personal protective equipment in use.

E. Failure Defined

The test is a failure if:

1. Working limits using "Inaccessible Track" were not established when required.
2. Working limits using "Inaccessible Track" were not protected as specified.

Failure in any other rules, or of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on Engineering Dept. Employees

TEST 328 - PROTECTION IN MECHANICAL FACILITIES

A. Description of Test

This test checks compliance by roadway workers with the rules that govern work within mechanical facilities or on a non-controlled track with rolling equipment/locomotives occupying the working limits.

B. Conditions of Test

This test requires that roadway workers are providing on-track safety on a non-controlled track that is within a mechanical facility or on a track with rolling equipment/locomotives occupying the working limits. In most cases on-track safety will be provided by "Inaccessible Track", and tests for compliance with these requirements should be entered under Test 327 INACCESSIBLE TRACK. This test (328) covers the additional requirements when roadway workers are in areas where mechanical employees may be working and it is important to ensure that RWP and Blue Signal protection is not shared. This test also covers the securing of rolling equipment that is occupying the working limits of roadway workers.

C. Testing Guidelines

1. When roadway workers are performing work in a mechanical facility with no rolling equipment in working limits:
   - **a.** The RWP employee in charge has notified the Mechanical Foreman and/or Yardmaster of the intended work.
   - **b.** Switches or derails are locked with an effective RWP securing device and tag. Where applicable, protection by remotely controlled switches must be requested by the RWP employee in charge.
2. When roadway workers are performing work in a mechanical facility or any non-controlled track with rolling equipment in working limits:
   - **a.** If working in conjunction with Mechanical employees who are using Blue Signal protection, RWP employees will also apply RWP effective securing devices, using multiple locking devices where provided.
   - **b.** Rolling equipment must be secured against movement and locomotives secured by utilizing RWP tags attached to the Operator's console.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Personal protective equipment in use.

E. Failure Defined

The test is a failure if:

1. Required protection is not provided by the RWP employee in charge.

Failure in any of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on Engineering Dept. Employees

TEST 329 - WARNING PROVIDED BY WATCHMAN

A. Description of Test

This test checks compliance by roadway workers with the rules governing train approach warning provided by gang watchmen/advance watchmen.

B. Conditions of Test

This test requires that roadway workers are using train approach warning for on-track safety. Train approach warning is always required when working limits are established and adjacent tracks are unprotected.

C. Testing Guidelines

This test should include all applicable rules governing the establishment and working under train approach warning. Testing officers should verify that the conditions for use of train approach warning are met and that watchmen are in proper position and properly equipped.

1. Verify that the conditions for train approach warning are met:
   - **a.** Roadway workers have sufficient time to be in the clear at least 15 seconds before the arrival of a train.
   - **b.** The place of safety must be in the clear of all tracks, or onto a track where working limits are established for on-track safety.
   - **c.** The warning method must not require that an employee be looking in any particular direction at the time of warning and it must be detected regardless of noise or distraction.
2. Verify that watchmen are properly equipped and positioned:
   - **a.** Watchmen give their entire attention to watching for trains and stay in position until instructed.
   - **b.** Watchmen are equipped with prescribed signaling devices.
   - **c.** Advance watchmen, or additional watchmen prescribed for use with noisy machinery or other conditions, are provided when required.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Personal protective equipment in use.

E. Failure Defined

The test is a failure if:

1. Train approach warning is used when conditions for this type of on-track safety have not been met.
2. Watchmen are not in proper position, not properly equipped, or not attentive to their duties.

Failure in any of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on Engineering Dept. Employees

TEST 337 - LONE WORKER / INDIVIDUAL TRAIN DETECTION

A. Description of Test

This test checks compliance of roadway workers with the rules governing on-track safety procedures for lone workers.

B. Conditions of Test

This test requires that a roadway worker is performing work involving routine inspection or minor correction and is not being afforded on-track protection by another roadway worker, is not a member of a roadway work group, and is not engaged in a common task with another roadway worker.

C. Testing Guidelines

This test should first determine that all of the above conditions are met by a roadway worker who is using "Individual Train Detection" for on-track safety. If any of the above conditions are not being met, instruct the employee to remain clear of the track until another form of on-track safety is provided and record this test as a failure.

Tests on a lone worker using "Individual Train Detection" must include:

1. The position or activity does not interfere with the worker's ability to maintain a vigilant lookout for and detect a train moving in either direction.
2. The lone worker is able to visually detect a train moving at the maximum authorized speed and move to a place of safety not less than 15 seconds before the train would arrive at the location of the lone worker.
3. The place of safety is not on a track, unless working limits are established on that track.
4. Written Statement of On-Track Safety has been properly completed and is in the possession of the roadway worker.
5. Individual Train Detection is not being used inside the limits of a manual interlocking or controlled point.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Personal protective equipment in use.

E. Failure Defined

The test is a failure if:

1. Individual Train Detection is being used when conditions do not permit its use.
2. Written Statement of On-Track Safety has not been properly completed or provided to the testing officers when requested.

Failure in any of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

TESTS on Engineering Dept. Employees

TEST 341 - ON-TRACK EQUIPMENT

A. Description of Test

This test checks compliance by roadway workers with the specific provisions of the on-track safety program for those who operate or work near roadway maintenance machines.

B. Conditions of Test

This test requires that roadway workers are operating or working near roadway maintenance machines.

C. Testing Guidelines

This test should include all applicable rules governing on-track safety on or near roadway maintenance machines.

This test should include as many of the following as applicable:

1. Operators have been trained and qualified on the roadway maintenance machine and have complete knowledge of the safety instructions applicable to that machine.
2. Roadway machines are kept clear of trains and equipment passing on adjacent tracks. If required to foul an adjacent track, working limits must be established on the track to be fouled.
3. Roadway workers working near roadway maintenance machines must be informed of the applicable safety procedures and participate in a job briefing with the machine operators.
4. Roadway workers stay ten (10) feet from equipment when it is in working mode, unless otherwise specified by the operator.
5. Two or more pieces of equipment must maintain a ten (10) foot clearance between each other unless otherwise instructed by the employee in charge.
6. On-track equipment is operated at the appropriate speed for equipment type and/or operating conditions (see table in RWP Manual).
7. On-track equipment complies with all precautions when operating over highway grade crossings.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Personal protective equipment in use.

E. Failure Defined

The test is a failure if:

1. Failure to comply with any rule specific to operating or working near roadway maintenance machines.

Failure in any of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.

14. TESTS on M of E (Mechanical Dept.) Employees

The following T&E TESTS may also be used:

- **108 Speed**
- **109 Blue Signal (Observance)**
- **110 Air Brake Tests/Inspections**
- **114 Cab Signals**
- **117 Switches & Switching**
- **118 Shoving & Back-Up Moves**
- **120 Radio Procedures**
- **121 Required Documents**
- **125 Required Exams**
- **128 Drug & Alcohol**
- **129 Safety Rules**
- **130 Job Briefings**
- **132 Electrical Operating Instructions (AMT-2)**
- **198 Employee Instruction**
- **199 All Other Tests or Observations**

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TESTS on Mechanical Dept. Employees

TEST 401 - BLUE SIGNAL PROTECTION

A. Description of Test

This test checks compliance by mechanical department employees with the rules governing the proper establishment of blue signal protection, including the proper placement of blue signals.

B. Conditions of Test

This test requires that mechanical department employees are working on, under or between rolling equipment.

C. Testing Guidelines

This test should include all applicable rules as well as Amtrak standards governing blue signal protection. Testing officers should note that the method of establishing blue signal protection is dependent on whether the track is a main track or not, whether the switches leading into the protected track are hand operated or remote controlled, and that the type of protection can differ at each end of the protected track.

1. Blue Signal Protection on a Main Track:
   - **a.** A blue signal is required to be placed at each end of rolling equipment. Note: Amtrak standards require that such signal be located either at the extreme end of the equipment or in advance of the equipment. Displaying a blue signal on either side of the equipment, including a blue flag attached to the engineer's window, will NOT be considered as being displayed at the end of rolling equipment.
   - **b.** A blue signal must be attached to the controlling engine at a location where it is readily visible to the operator at the controls. Note: Amtrak standards require that such signal be located on the control stand or console. Displaying a blue signal on the exterior of the locomotive, such as a blue flag attached to the engineer's window, will NOT be considered to be readily visible to an employee at the controls.
2. Blue Signal Protection on Other than Main Track:
   - **a.** Access to the protected track must be restricted by one or a combination of the following:
     - Lining a manually operated switch against movement onto the track, securing it with an effective locking device (for example, a mechanical department lock) and placing a blue signal at or near the switch.
     - Positioning a derail at least 150 feet from the end of rolling equipment (50 feet on a designated engine servicing track or car shop repair track where speed is limited to not more than 5 MPH), locking it with an effective locking device and displaying a blue signal at each derail.
     - Lining a remotely controlled switch against movement onto the track by requesting the switch operator to do so and receiving confirmation from the switch operator that switch has been so lined and secured. A blue signal is NOT required to be placed at a remotely controlled switch.
   - **b.** A blue signal must be attached to the controlling engine at a location where it is readily visible to the operator at the controls. Note: Amtrak standards require that

such signal be located on the control stand or console. Displaying a blue signal on the exterior of the locomotive, such as a blue flag attached to the engineer's window, will NOT be considered to be readily visible to an employee at the controls.

3. Movement in Engine Servicing Area:

   If an engine is be moved within an engine servicing track area, or cars repositioned within a car shop repair track area verify that:

   a. Movement was under the direction of the employee in charge of the workmen.

   b. The blue signals have been removed from the equipment to be repositioned or coupled.

   c. Employees on the affected track are informed of the movement.

D. Additional Rules to be Tested

Compliance with the following additional rules should be observed during this test:

1. Personal protective equipment in use.

E. Failure Defined

The test is a failure if:

1. Failure to establish blue signal protection when required.
2. Display of blue signals not in accordance with Amtrak standards.
3. Requirements for movement of equipment in an engine servicing area or car shop were not met.

Failure in any of the additional rules listed in section D, above, should be entered as failures separately under the appropriate rule.