

## Operational Event Test

### Shoving or Pushing Equipment = Non-controlled tracks

**Introduction:** This document describes how to perform planned operational event tests when it is known that employees will shove or push equipment on non-controlled tracks at a location that *requires* a crewmember or other qualified employee to provide point protection for the leading end of the movement to determine the track is clear.

**Objective:** The objective is to evaluate employees' knowledge and compliance with the operating rules governing shoving or pushing movements. These event tests are designed to present realistic and controlled operating conditions established by the testing officers on non-controlled tracks. In addition to the specific rules identified in each step, employees must also comply with all other applicable Rules and Special Instructions.

#### Addressing Compliance and Failure

Required Actions:

- ✓ **Compliance:** All employees demonstrate compliance with all observed rules:
  1. At the conclusion of the test, stop the movement if necessary and approach the tested crew,
  2. Introduce yourself and identify all members of the test team,
  3. Review the purpose of conducting the operational test and related operating rules with each employee,
  4. Review the risks associated with non-compliance,
  5. Review the results of the operational testing, and
  6. Conduct a job briefing with all crewmembers discussing work activity or any conditions that have changed as a result of this test.
  
- ✓ **Non-compliance** is observed at any point during the operational test:
  1. Stop the test and restrict any further movement,
  2. Introduce yourself and identify all members of the test team,
  3. Review the results of the operational tests,
  4. Discuss observations and rule violations,
  5. Review the risks of non-compliance,
    - I. Collisions,
    - II. Derailments,
    - III. Personal injury,
    - IV. Potential for decertification
  6. Where appropriate, officers must demonstrate the correct procedures,
  7. Ask the employees if they have any questions or additional concerns,
  8. Determine that the employees understand the requirements of the rules discussed, and
  9. Conduct a job briefing with all crewmembers discussing work activity or any conditions that have changed as a result of this test.

**Scenario:** A train or yard movement is required to shove equipment on a non-controlled track.

Additional Work Activity	Observations Employees must be evaluated on the activities below when performed	Applicable Operating Rules
<b>On or About Tracks and Fouling Equipment</b>	<p>Did the employee comply with all rules associated with fouling equipment, crossing tracks, keeping clear of movements, and crossing within 25' of the end of equipment? <b>Y/N</b></p> <ul style="list-style-type: none"> <li>• <b>Yes</b>, continue</li> <li>• <b>No</b>, stop the test and initiate defined corrective actions</li> </ul>	<p><b>Primary Rule:</b> GS-10 TS-15</p> <p><b>Companion Rules:</b> GS-8</p>
<b>Personal Protective Equipment</b>	<p>Did the employee comply with all rules associated with approved personal protective equipment? <b>Y/N</b></p> <ul style="list-style-type: none"> <li>• <b>Yes</b>, continue</li> <li>• <b>No</b>, stop the test and initiate defined corrective actions</li> </ul>	<p><b>Primary Rule:</b> TS-1</p> <p><b>Companion Rules:</b> GS-6</p>
<b>Hand Operated Switch Or Derail</b>	<p>Did the employee comply with all rules associated with operating a hand operated switch or derail? <b>Y/N</b></p> <ul style="list-style-type: none"> <li>• <b>Yes</b>, continue</li> <li>• <b>No</b>, stop the test and initiate defined corrective actions</li> </ul>	<p><b>Primary Rule:</b> Rule Group 401</p> <p><b>Companion Rules:</b> GS-18, TS-7, 402, 403</p>
<b>Employee's Position and Determining Track is Clear</b>	<p>Is the employee directing the move in the proper position to determine track is clear and provide point protection? <b>Y/N</b></p> <ul style="list-style-type: none"> <li>• <b>Yes</b>, continue</li> <li>• <b>No</b>, stop the test and initiate defined corrective actions</li> </ul>	<p>Primary Rule: 406.1, 406.2, 406.3</p> <p>Companion Rules: 300.4</p>
	<p>If riding equipment, is the employee positioned properly on the equipment and facing the direction of the movement? <b>Y/N</b></p> <ul style="list-style-type: none"> <li>• <b>Yes</b>, continue</li> <li>• <b>No</b>, stop the test and initiate defined corrective actions</li> </ul>	<p>Primary Rule: GS-13,</p> <p>Companion Rules: GS-11, GS-12,</p>
	<p>Are all of the employees involved in the shoving and pushing movement focused on the movement and not engaged in unrelated tasks? <b>Y/N</b></p> <ul style="list-style-type: none"> <li>• <b>Yes</b>, continue</li> <li>• <b>No</b>, stop the test and initiate defined corrective actions</li> </ul>	<p><b>Primary Rule:</b> 406.1, 406.2</p> <p><b>Companion Rules:</b> 300.4, GS-10</p>

<p><b>Initiating a Shoving or Pushing Movement</b></p>	<p>Officers must perform the “initiating a shove or pushing movement” test at the beginning of each planned event test.</p> <p><b>Prior to Test:</b></p> <ol style="list-style-type: none"> <li>1. Identify a reference point to determine distance of the movement (car counts)</li> <li>2. Start recording device (<b>not a cell phone</b>) prior to the instructions being given to the locomotive operator.</li> </ol> <p><b>Begin Test:</b></p> <p>✓ Confirm the employee directing the shoving movement states:</p> <ol style="list-style-type: none"> <li>1. Physical location.</li> <li>2. The employee is in the clear of all tracks.</li> <li>3. Position of switches and derails involved in the movement.</li> <li>4. The distance of the movement to be made or the sight distance available, whichever is less in 50’ car lengths?</li> </ol> <p>Comply? Y/N</p> <ul style="list-style-type: none"> <li>• <b>Yes</b>, continue</li> <li>• <b>No, stop the test and initiate defined actions for non-compliance</b></li> </ul> <p>✓ Confirm the locomotive operator does not initiate movement prior to receiving proper instruction from the employee directing the movement.</p> <p>Comply? Y/N</p> <ul style="list-style-type: none"> <li>• <b>Yes</b>, continue</li> <li>• <b>No, stop the test and initiate actions for non-compliance</b></li> </ul> <p>✓ Continue to the planned event test.</p>	<p><b>Primary Rule:</b> 406.5</p> <p><b>Companion Rules:</b> 1008.1, 1008.2</p>
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<p><b>Improperly lined switch</b></p>	<p>In this example, an officer has set up an operating condition where an intervening switch for the shove move is not properly lined for the designated track. This will require the crew to stop a minimum of 50' short of the improperly lined facing point switch or stop before proceeding past the clearance point of the tract affected if a trailing point switch.</p> <p><b>Tools Needed:</b></p> <ol style="list-style-type: none"> <li>1. Measuring device</li> <li>2. Chalk or paint</li> <li>3. Radio</li> <li>4. Recording device <b>(not a cell phone)</b></li> </ol> <p><b>Prior to Test:</b></p> <ol style="list-style-type: none"> <li>1. Ensure crew will encounter a switch that conflicts with the designated route,</li> <li>2. Measure and mark:       <ol style="list-style-type: none"> <li>a. 50' prior to the improperly lined facing point switch in the direction of movement, or</li> <li>b. If necessary, mark the clearance point of the affected track if a trailing point switch</li> </ol> </li> <li>3. Measure and mark reference points to allow evaluation of instructions given by employee directing the movement,</li> <li>4. Maintain the reference points that identify compliance with the last distance specified by the employee directing the movement.</li> </ol> <p><b>Begin Test:</b></p> <ul style="list-style-type: none"> <li>✓ Perform Initiating a Shoving or Pushing Movement Event Test</li> <li>✓ Did the employee controlling the movement stop the movement in one-half of the last specified distance unless additional instructions were given? Y/N       <ul style="list-style-type: none"> <li>• Yes, continue</li> <li>• <b>No, stop the test and initiate actions for non-compliance</b></li> </ul> </li> <li>✓ Did movement stop:       <ol style="list-style-type: none"> <li>a. Minimum of 50' short of improperly lined facing point switch?, or</li> <li>b. Before passing the clearance point if a trailing point switch?           <ul style="list-style-type: none"> <li>• Yes, continue</li> <li>• <b>No, stop the test and initiate actions for non-compliance</b></li> </ul> </li> </ol> </li> </ul> <p><b>End Test Review:</b></p> <ol style="list-style-type: none"> <li>1. <b>Test Purpose:</b> <ol style="list-style-type: none"> <li>1. Compliance with current operating rules governing shoving or pushing movements,</li> <li>2. Crew stops 50' prior to encountering a facing point switch that is not properly lined for their route or stops before passing the clearance point of a trailing point switch,</li> <li>3. Prevent run through switches, collisions, and test the employee situational awareness,</li> <li>4. Test employee knowledge of physical characteristics of the location.</li> </ol> </li> <li>2. <b>Risks:</b> <ol style="list-style-type: none"> <li>1. Run through switch,</li> <li>2. Personal injury, derailment, or collision with other equipment,</li> <li>3. Discipline within the IDPAP and possible decertification.</li> </ol> </li> <li>3. <b>Test Results:</b> Comply or Fail</li> <li>4. <b>Required Job Briefing</b></li> </ol>	<p><b>Primary Rule:</b> 406.4, 406.5, 406.6</p> <p><b>Companion Rules:</b> 300.4, 1008.1, 1008.2</p>
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<p><b>Simulated Blue Signal</b></p>	<p>In this example an officer has set up an operational condition in which the movement must be stopped short of a Blue Signal where mechanical forces are employed.</p> <p><b>Tools Needed:</b></p> <ol style="list-style-type: none"> <li>1. Blue Signal: A clearly distinguishable blue flag and illuminated blue light,</li> <li>2. Measuring device</li> <li>3. Chalk or paint</li> <li>4. Radio</li> <li>5. Recording device <b>(not a cell phone)</b></li> </ol> <p><b>Prior to Test:</b></p> <ol style="list-style-type: none"> <li>1. For the purpose of this test, both a blue flag and illuminated blue light must be displayed by day or night.</li> <li>2. Measure and mark a distance of 50' prior to the blue signal in the direction of movement.</li> <li>3. Ensure the crew will encounter a Blue Signal displayed either: <ol style="list-style-type: none"> <li>a. A minimum of 50' ahead of standing equipment, or</li> <li>b. Between the clearance point and 50' into the body of a clear track.</li> </ol> </li> </ol> <p><b>Begin Test:</b></p> <ul style="list-style-type: none"> <li>✓ Perform Initiating a Shoving or Pushing Movement Event Test</li> <li>✓ Did the employee controlling the movement stop the movement in one-half of the last specified distance unless additional instructions were given? Y/N <ul style="list-style-type: none"> <li>• <b>Yes</b>, continue</li> <li>• <b>No, stop the test and initiate actions for non-compliance.</b></li> </ul> </li> <li>✓ Did the movement stop a minimum of 50' short of the Blue Signal? Y/N <ul style="list-style-type: none"> <li>• <b>Yes</b>, continue</li> <li>• <b>No, stop the test and initiate actions for non-compliance.</b></li> </ul> </li> <li>✓ Did the crew notify the proper authority of the operational condition encountered? Y/N <ul style="list-style-type: none"> <li>• <b>Yes</b>, continue</li> <li>• <b>No, stop the test and initiate actions for non-compliance.</b></li> </ul> </li> <li>✓ No other employee instructed the crew to remove Blue Signal protection? Y/N <ul style="list-style-type: none"> <li>• <b>Yes</b>, continue</li> <li>• <b>No, other employee instructed crew to remove Blue Signal: stop the test and initiate actions for non-compliance.</b></li> </ul> </li> <li>✓ Crew did not attempt to remove the blue signal? Y/N <ul style="list-style-type: none"> <li>• <b>Yes</b>, continue</li> <li>• <b>No, crew attempted to remove Blue Signal: stop the test and initiate actions for non-compliance.</b></li> </ul> </li> </ul> <p>Continued on next page...</p>	<p><b>Primary Rule:</b> 406.4, 406.5, 406.6, 1101.3,</p> <p><b>Companion Rules:</b> 300.4, 1008.1, 1008.2, 1102.1,1102.2</p>
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<p>Simulated Blue Signal (Continued)</p>	<p><b>End Test Review:</b></p> <ol style="list-style-type: none"><li>1. <b>Test Purpose:</b><ol style="list-style-type: none"><li>1. Compliance with current operating rules governing shoving or pushing movements,</li><li>2. Simulates proper compliance with Blue Signal protection,</li><li>3. Simulate workmen are on, under, or between equipment.</li></ol></li><li>2. <b>Risks:</b><ol style="list-style-type: none"><li>1. Injury to workmen or crew members,</li><li>2. Derailment or collision with other equipment</li><li>3. Decertification and possible discipline up to and including dismissal.</li></ol></li><li>3. <b>Test Results:</b> Comply or Fail</li><li>4. <b>Required Job Briefing</b></li></ol>	<p><b>Primary Rule:</b> 406.4, 406.5, 406.6, 1101.3,</p> <p><b>Companion Rules:</b> 300.4, 1008.1, 1008.2, 1102.1,1102.2</p>
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<p><b>Stop Movement by Hand Signal</b></p>	<p>In this example an officer has set up an operational condition in which the movement will be stopped using a flag or lantern signal.</p> <p><b>Tools Needed:</b></p> <ol style="list-style-type: none"> <li>1. Measuring device</li> <li>2. Chalk or paint</li> <li>3. Radio</li> <li>4. Recording device (<b>not a cell phone</b>)</li> <li>5. Flag or Lantern</li> </ol> <p><b>Prior to Test:</b></p> <ol style="list-style-type: none"> <li>1. Determine the route of movement,</li> <li>2. Identify and mark a safe location for the officer to position themselves where the stop signal can be given sufficiently in advance to permit compliance,</li> <li>3. Mark the physical location where the movement will be in the line of sight of the crew member. The hand signal must be initiated at this point.</li> <li>4. Measure and mark the distance between reference points.</li> </ol> <p><b>Begin Test:</b></p> <ul style="list-style-type: none"> <li>✓ Perform Initiating a Shoving or Pushing Movement Event Test</li> <li>✓ Did the employee controlling the movement stop the movement in one-half of the last specified distance unless additional instructions were given? Y/N <ul style="list-style-type: none"> <li>• <b>Yes</b>, continue test,</li> <li>• <b>No, stop the test and initiate actions for non-compliance.</b></li> </ul> </li> <li>✓ When the movement enters line of sight begin swinging a flag by day or a lantern by night. Flag or lantern must be swung at a right angle to the track, indicating a stop signal. Continue giving signal until movement stops or passes your physical location. Did the movement stop prior to any part of the equipment passed the location of the officer giving the stop signal? Y/N <ul style="list-style-type: none"> <li>• <b>Yes</b>, continue to "End Test",</li> <li>• <b>No, stop the test and initiate actions for non-compliance</b></li> </ul> </li> </ul> <p><b>End Test Review</b></p> <ol style="list-style-type: none"> <li>1. <b>Test Purpose:</b> <ol style="list-style-type: none"> <li>1. Compliance with current operating rules governing shoving or pushing movements,</li> <li>2. Proper compliance with receiving flag and lantern signals indicating stop,</li> </ol> </li> <li>2. <b>Risks:</b> <ol style="list-style-type: none"> <li>1. Personal injury, derailment, or collision with other equipment,</li> <li>2. Discipline within the IDPAP and possible decertification,</li> </ol> </li> <li>3. <b>Test Results:</b> Comply or Fail</li> <li>4. <b>Required Job Briefing</b></li> </ol>	<p><b>Primary Rule:</b> 202.2.A , 300.4,</p> <p><b>Companion Rules:</b> 406.1, 406.2, 406.5</p>
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