

**Outback Railroad  
Association  
Deadwood, SD  
May 11, 2021**

**OPERATIONAL  
TESTING**

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**49 CFR PARTS 217**



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***PLEASE DON'T SHOOT THE MESSENGER!!!***

# THE REGULATION

## 49 CFR PART 217

- ❖ These regulations basically affect every railroad employee and manager;
- ❖ Many of the regulations described in this presentation are already a matter of rule on our railroads today. However, now that these rules have been *federalized*, civil penalties and willful violations can be assessed by the FRA;
- ❖ Non-compliance with rules always puts workers at personal risk. With the implementation of this regulation (2009), the risk for financial catastrophe also became a real possibility.

# THE REGULATION

## 49 CFR PART 217

### REQUIREMENT:

Periodically conduct operational tests and inspections to determine the extent of compliance with operating rules, timetables, and timetable special instructions, specifically including tests and inspections sufficient to verify compliance:

- with the requirements of Subpart F of Part 218 and other specific regulations  
*and*
- in accordance with a written program.

# THE REGULATION

## 49 CFR PART 217

Required prior to 243:

- Part 218 (Subpart F)
- Part 219
- Part 220
- Part 240
- Part 242

Under Part 243, 217 can be used for periodic oversight requirement:

- Part 214
- Part 218 (All).



# THE REGULATION

## 49 CFR PART 217

### WRITTEN PROGRAM MUST:

(1) Provide for testing and inspection under the various *operating conditions* on the railroad with particular emphasis on those operating rules that cause or are likely to cause the most accidents or incidents (identified by quarterly reviews, etc.) –

### Operating Conditions (identified by job roles/requirements):

- Train Service
- Maintenance of Way
- Mechanical
- Signal
- Dispatcher.

# THE REGULATION

## 49 CFR PART 217

(2) Describe each type of test and inspection adopted, including the means and procedures used to carry it out:

➤ **Observation Test –**

Where direct observation is made during the normal course of duties (announced or unannounced)

➤ **Set-up Test –**

Where the conditions are physically changed for the purpose of the test (unannounced).

# THE REGULATION

## 49 CFR PART 217

(3) State the purpose of each type of test and inspection

- Specific rule compliance

(4) State the frequency with which each type of test and inspection is conducted

- Annually, Quarterly, etc., based on your specific operation
- Must meet any minimum requirement spelled-out in a specific regulation (example: §242 requires minimum one observation and §240 requires one set-up test each calendar year).



# THE REGULATION

## 49 CFR PART 217

### ***Railroad and Railroad Testing Officer Responsibilities:***

Each railroad officer who conducts operational tests and inspections (railroad testing officer) shall:

- Be qualified on the railroad's operating rules in accordance with §217.11 of this part;
- Be qualified on the operational testing and inspection program requirements and procedures relevant to the testing and inspections the officer will conduct;
- Receive appropriate field training, as necessary to achieve proficiency, on each operational test or inspection that the officer is authorized to conduct; and
- Conduct operational tests and inspections in accordance with the railroad's program of operational tests and inspections.
- **Written records documenting qualification of each railroad testing officer must be retained and made available to FRA for inspection.**

# THE REGULATION

## 49 CFR PART 217

### ***§217.11 Program of instruction on operating rules:***

Ensure that each railroad employee whose activities are governed by the railroad's operating rules understands those rules and are periodically instructed in accordance with a written program.

# THE REGULATION

## 49 CFR PART 217

- ❖ Model Program available to members on the ASLRRA website.



**ASLRRA**

49 CFR 217

Operating Rules

### Operational Tests and Inspections Program

Effective: ...

# FIELD DOCUMENTATION

LOCATION: \_\_\_\_\_ (E-3) - NAME: \_\_\_\_\_

ENGINE #: \_\_\_\_\_ TRAIN ID: \_\_\_\_\_



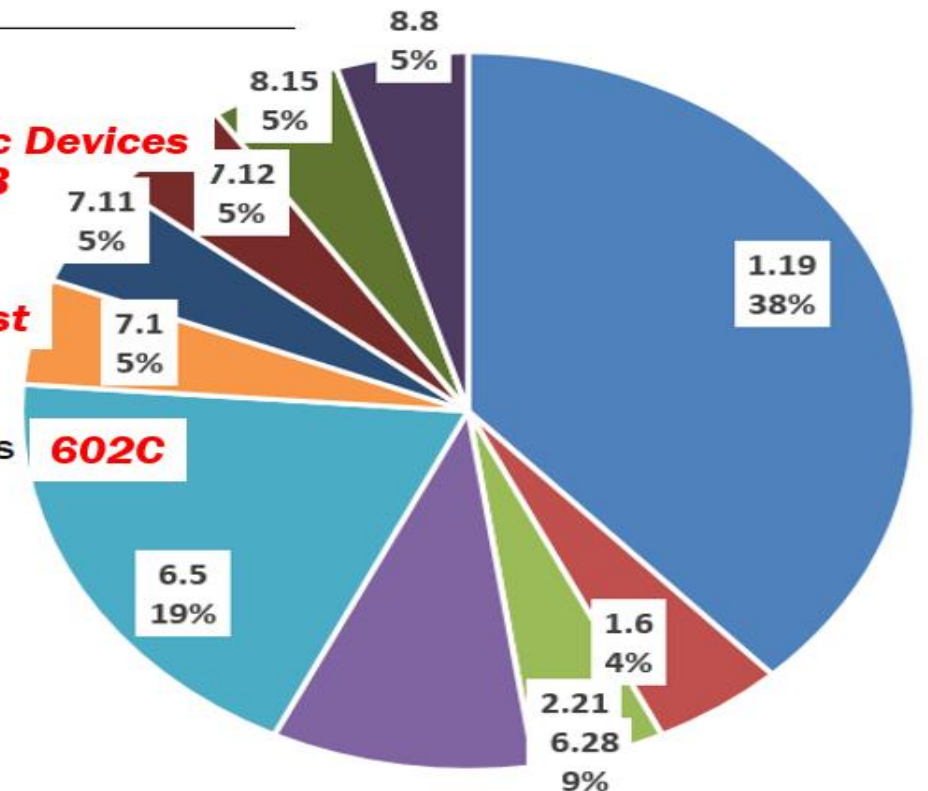
Test	Test Description	Comments		
		E1	E2	E3
01	T-218.99-Shoving or Pushing Movements			
02	T-218.101-Leaving Equipment in the Clear			
03	T-218.103-Hand-operated Switches including Crossover Switches			
04	T-218.105-Hand-operated Main Track Switches			
05	T-218.107-Additional Require. Hand-operated crossover switches			
06	T-218.109-Hand-operated Fixed Derails			
07	T- Electronic Device - GCOR 2.21			
08	T-Speed Limit Compliance			
09	T-Main Track Authority			
10	T-Leaving Locomotive Unattended			
11	T-Proper Radio Procedure			
12	T-Locomotive Air Brake Test			
13	T-Class 1 Air Brake Test			
14	T-Class 2 Air Brake Test			
15	T-Class 3 Air Brake Test			
16	T-Transfer Train Air Test			
17	T-Locomotive Daily Inspection			
18	T-Grade Crossing Warning Compliance			

# REVIEW OF OPERATIONAL TESTING DATA (EXAMPLE)

NOTE: FORMAL REVIEW NOT REQUIRED FOR RAILROADS WITH LESS THAN 400,000 EMPLOYEE HOURS

## ❖ Incidents vs Field Testing

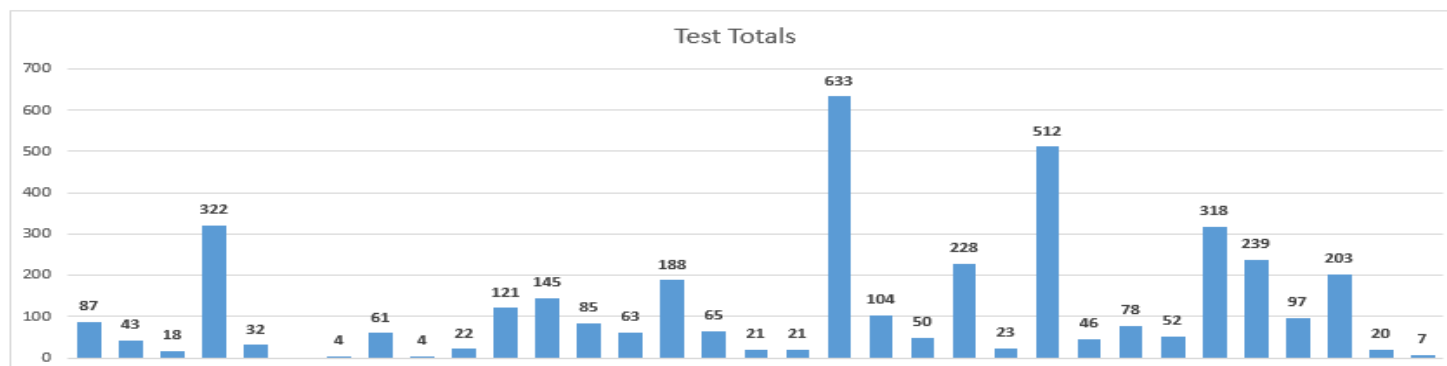
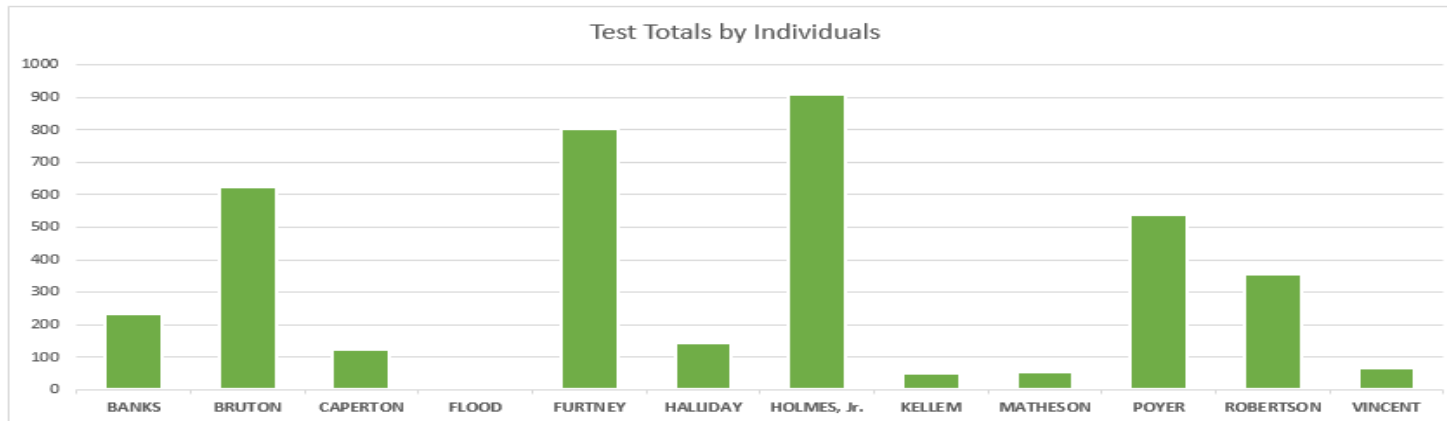
Rule	Count	Description
1.19	8	Care of Property <b>699 - Vehicle Backing</b>
1.6	1	Conduct
2.21	1	Personal Electronic Devices <b>608 - Electronic Devices</b>
6.28	2	Movement on other than main track <b>11A - 11B</b>
6.5	4	Shoving Movements <b>7A - 7D</b>
7.1	1	Switching Safely & Efficiently <b>610</b>
7.11	1	Charging Necessary Air Brakes <b>699 - Air Test</b>
7.12	1	Movement into spur tracks <b>607</b>
8.15	1	Switches Run Through <b>602C</b>
8.8	1	Switches Equiped with Locks, Hooks or Latches
9.18	1	Electrically Locked Switches & Derails
5.4.7	1	Display of Red Flag <b>11A</b>
Grand Total	23	



# REVIEW OF OPERATIONAL TESTING DATA (EXAMPLE)

NOTE: FORMAL REVIEW NOT REQUIRED FOR RAILROADS WITH LESS THAN 400,000 EMPLOYEE HOURS

Employee	10	11A	11B	1A	1B	2	3	4	5	601	602A	602B	602C	603A	603B	604	605A	605B	606	607	608	610	615	699	6A	6B	6C	7A	7B	7C	7D	8	9	Total (no 606)
BANKS	10		1	26				2		1	1	13	2	1	24	3	3	2	22	14	6	16	3	32	4	6	1	9	14	2	11	3		232
BRUTON		2	4	42	11	2		3	1	12	21	21	20	13	15	15	5	5	95	10	12	12	1	90	7	9	7	52	53	35	43	3	4	625
CAPERTON	9		1	8	4		1	5			6	2	5	4	3	5			23					10	1	4	5	9	3	4	8		124	
FLOOD	5			1				1			1								1											1		11		
FURTNEY	6		1	67	10		1	14	1	2	32	27	31	15	59	11	1	6	99	13	8	78	2	138	7	14	8	46	49	37	21		804	
HALLIDAY	12			17						3	3	5	3	3	6	1			15	9	9	9		9		4		12	9	3	6	5	143	
HOLMES, Jr.	26	21	11	93	6			28	2	1	40	44	7	24	36	20	3	3	44	22	3	84	7	60	14	28	24	110	78	2	62	3	3	909
KELLEM																			1					49									50	
MATHESON	2										3			1					8				3	33			1	1			1		53	
POYER	9	12		29			1	8		3	11	12	15	2	37	7	9	5	177	13		13	4	21	10	5	4	49	26	12	39	6	539	
ROBERTSON	4	8		28	1		1				3	21	2		5	3			133	14	6	6	3	69	2	4	2	25	7	2	8	357		
VINCENT	4			11											3				15	9	6	6		1		4		5		3		67		
<b>Total</b>	<b>87</b>	<b>43</b>	<b>18</b>	<b>322</b>	<b>32</b>		<b>4</b>	<b>61</b>	<b>4</b>	<b>22</b>	<b>121</b>	<b>145</b>	<b>85</b>	<b>63</b>	<b>188</b>	<b>65</b>	<b>21</b>	<b>21</b>	<b>633</b>	<b>104</b>	<b>50</b>	<b>228</b>	<b>23</b>	<b>512</b>	<b>46</b>	<b>78</b>	<b>52</b>	<b>318</b>	<b>239</b>	<b>97</b>	<b>203</b>	<b>20</b>	<b>7</b>	<b>3914</b>



TestNum	Title
1A	Going between coupled cars and locomotives
1B	Working behind and/or between uncoupled cars and locomotives
2	Running While Switching
3	Riding Freight Car to Joint
4	Riding End of Car
5	Crossing Between Cars
6A	Getting on moving equipment
6B	Riding on moving equipment
6C	Getting off moving equipment
7A	Shoving Movement - Using Radio for Control
7B	Shoving Movement; Job Briefing 218.99 b1
7C	Shoving Movement; No Unrelated Tasks 218.99 b2
7D	Shoving Movement; Point Protection 218.99 b3
8	Blue Signal
9	Fouling Adjacent Track Before Insuring There is no Movement
10	Crew Communication
11A	Restricted Speed Rule; "Stop Test" (Affirmative Response)
11B	Restricted Speed Rule; Speed limit
601	Uncoupling Equipment - Safety 5.8
602A	Lining Switches; proper body mechanics - Safety 4.1 thru 4.3
603A	Applying/Releasing handbrakes - GCOR 7.5; Safety 8.0
602B	Lining Switches; points fit, Crossovers - GCOR 8.2; 8.12; 218.107
602C	Lining Switches; latches & locks - Safety 8.2; GCOR 218.103(b)(8)
603B	Securing Cars/Engines; Unattended equipment - GCOR 7.6; GO 26
604	Protecting Public Grade Crossings - GCOR 6.32; Safety 7.1, 7.4
605A	Hazmat Car Inspection; Placards - Safety 13.7
605B	Hazmat Papers - Safety 13.1
606	Signs & Symptoms - GCOR 1.5
607	Movement Into Spur Tracks - GCOR 7.12
608	Electronic Devices/Games, Reading; GCOR 1.10, 2.21 / GO 56
610	Leaving Equipment in the Clear - 218.101
615	Derailed; Apply/Remove 218.109



# TEAM & JOINT TESTING



Team Testing with Interdepartmental Managers is Beneficial

--Gain understanding of departmental requirements other than your own

Joint Testing with Other Railroads (Joint Operations) is Critical

--Different Testing Requirements & Philosophies

## PURPOSE & PHILOSOPHY

*“If you can’t measure it...  
you can’t manage it.”*



# PURPOSE & PHILOSOPHY

- ❖ Operations Field Testing provides employees the opportunity to demonstrate their ability to apply the rules and best practices in the work environment. Quality Field Testing communicates clearly to employees what is expected of them. By reviewing particular rule requirements in a field application, both the employee and the supervisor can gauge the level of rules proficiency.
- ❖ The testing officer should use this process to verify that employees are working safely and in compliance with company policies and procedures. When company expectations are not being met this process will allow for corrections of operating deficiencies before those same deficiencies become incidents.

# PURPOSE & PHILOSOPHY

Regard operational testing as an opportunity to:

- Facilitate performance improvement...*what you see wrong that needs addressing*
- Identify training opportunities
- Leverage influence as “safety advocates.”

# PURPOSE & PHILOSOPHY

Monitor & verify that employees are working safely and in compliance with the rules...*something that should in some way be a positive experience for the employees.*

# PURPOSE & PHILOSOPHY

When compliance is evident...the employee(s) should be recognized for a job well done...

Does this fit **your** personal value system?

# PURPOSE & PHILOSOPHY

- ❖ All too often, managers place more emphasis on deficiencies than positive results when they discuss operational testing
- ❖ True...we learn from our mistakes
- ❖ However, we can also learn from good performance.

# PURPOSE & PHILOSOPHY



Think of it as “Positive Performance”

*Example:*

- Employee performs one (1) non-compliant act out of ten (10) observed;
- *9 out of 10 = 90% compliant (positive performance rate).*

# PURPOSE & PHILOSOPHY

Testing is a two-sided coin!

➤ Deficiencies must be documented and addressed...

*and*

➤ Success and excellence must be documented and recognized.

If not, the program may be feared and actively resisted or resented because of the perception that management measures success only by failures.

# EFFECTIVE FEEDBACK / FOLLOW-UP

- ❖ Feedback allows a person to distinguish between the **right, wrong, or best** way to perform the job tasks
- ❖ Without knowledge of the results, people are unable to take the appropriate steps to improve their performance.



# EFFECTIVE FEEDBACK / FOLLOW-UP

## **Feedback is most effective when it is:**

- Immediate
- Specific
- Directed
- Balanced
- Documented
- Followed-up.

# EFFECTIVE FEEDBACK / FOLLOW-UP

A decorative graphic consisting of several concentric, light gray circular arcs that curve from the top right towards the bottom right of the slide.

## REMEMBER TO:

- Re-test employee on same failed rule *ASAP*
- Document the results.

# FEEDBACK SUGGESTIONS


- ❖ Successful feedback reinforces and supports how employees perform their tasks...

**“Yes, I did that right, and I can do it again”.**

- ❖ An unsuccessful task requires **accurate** and **timely** feedback to help modify or change behaviors to achieve the desired results...

**“Now I see what I’ve been doing wrong, and I’ll get it right the next time”.**

# FEEDBACK SUGGESTIONS

- ❖ Feedback is most helpful when it is precise and directly related to the tasks and performance you observed
  - ❖ Avoid general comments as feedback
  - ❖ Remember that you are more effective when personalities are kept out of the discussion.
- 
- A decorative graphic consisting of several concentric, light gray circular arcs is positioned in the upper right corner of the slide. The arcs are of varying thickness and are arranged in a way that suggests a spiral or a series of overlapping paths.

# BALANCED FEEDBACK

- ❖ The employee needs to know what is **right**, what is **wrong**, and what they should do to perform as expected
- ❖ When employees only get “**bad news**” it is impossible for them to feel good about change
- ❖ Discuss the observed actions in a way that holds on to the positive parts and overcomes any weakness.

# TRAINING & EVALUATION

- ❖ Well trained people are important to any organization...but If you stop there, how do you know that all is working well?
- ❖ All too often, training is conducted with the expectation that employees will work as instructed, when in reality this isn't always the case.

# TRAINING & EVALUATION

- ❖ Leading is more than providing training and issuing instructions
- ❖ We must constantly observe, explain, demonstrate, and reinforce the concepts and skills we teach
- ❖ Without evaluation, job performance cannot be measured.

“Commanders must remember that the issuance of an order, or the devising of a plan, is only about five per cent of the responsibility of command. The other ninety-five per cent is to insure, **by personal observation**, that the order is carried out.”

*General George C. Patton*



# FOUNDATIONS OF OPERATIONAL TESTING

## Objectives:

- Reducing variations in behavior
- Improving compliance with rules
- Determining where training is required
- Validating the effectiveness of the training
- Measuring the effectiveness of supervision.

# FOUNDATIONS OF OPERATIONAL TESTING



We achieve our objectives by:

- Communicating our expectations
- Reinforcing compliance (+ & -)
- Providing corrective intervention
- Influencing the culture so that everyone wants to work as safely as possible.

# FOUNDATIONS OF OPERATIONAL TESTING

- ❖ Forming partnerships to foster safer work practices and continuous performance improvement...at the end of the day, we all want to be able to say with certainty:

***“I did a good job today, and as a result of my efforts the railroad is safer.”***

# QUESTIONS/COMMENTS?

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