

2012 TE&Y STUDY GUIDE RESOURCE



Jeffrey R. Ford, Engineer

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2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

From the desk of Jeffrey R. Ford:

This document was published January 14, 2012 using the rule sets available on January 14, 2012 by the UPRR. All information contained is subject to change without notification.

Disclaimer: I make no guarantees that this is the definitive correct information; it is only offered as a learning tool that you may use at your own risk! When in doubt, always take the safe course: refer to official Union Pacific Railroad publications and/or Company Officer to provide the most accurate reference materials and guidance.

Please use as a reference tool; **your answers may be different!** While these answers do not completely exhaust all of the possibilities and/or interpretations of the rules, they should provide a good (and hopefully accurate) foundation in helping determine your own answers.

How to Use This Document:

This is a user-friendly, "Living Document."

- Hovering the mouse-pointer over an underlined Rule Webpage link, will provide the option of being taken to the UPRR Website and reviewing the most up-to-date referenced rule in real time! No more wondering if you know the most recent revision of the rule. The last published update of the rule is located at the bottom of each Webpage.
- Suggested answers and information appear in *italicized text*.
- ***ABTH Rules appearing in green** represent the **new numbering system** that will go into effect upon January 16th 2012. As my time permits, I'll update the new rule numbers and their corresponding Webpage link.

This document was produced in Adobe PDF format so that you may use nearly any kind of computer operating system to read the document.

If you should discover inaccuracies, please drop me an email at: LockHeartKey@msn.com. While I can't promise I'll respond to each email, you can be sure that I will read your effort and constructive suggestions.

Stay safe,

Jeffrey R. Ford
Engineer






2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

Table of Contents

Topic	Questions	Pages
BIG RIVERS SUBDIVISION	1 – 94	4 – 31
GULF COAST SUBDIVISION - TWC Territory	1 – 34	32 – 44

Please note I have **not** attempted the questions covering cab signal or mountain grade territory as I have no training or experience to answer those questions with confidence. If someone would like to tackle them, I'd be happy to publish your efforts with a notation of credit.

The suggested answers in this document are based on the following Carrier's publications and their respective version dates. Verify you have the following versions:

- [2012 TE&Y Study Guide](#) 
Study guide for rules class and exam (01/06/12)
- [2012 Hazardous Materials and Security Awareness Study Guide PB-15968](#) 
(12/08/11)
- [2012 Maps](#) 
(01/11/12)
- [2012 Paperwork](#) 
(01/09/12)
- [2012 UPRR Training Timetable](#) 
(12/08/11)

Please check the Carrier's Website often for any updated materials at:
https://employees.www.uprr.com/emp/operating/op_prac/gcor/index.shtml.

It is highly encouraged that one be **VERY** familiar with the Carrier's supplied handouts before attempting to complete the study guides and exams! Think of this as real trains covering real territory. In answering the questions, keep in mind two thoughts:

- How do the rules affect my initial answer?
- How does my train and territory impact my final answer?

Bounce the questions off your fellow brothers and sisters for their viewpoint and experiences! I've had some great discussions with my coworkers who have provided a greater understanding and application of the rules. After all, that's what it's all about: keeping ourselves and each other safe!

Jeffrey

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

BIG RIVERS SUBDIVISION

Engineer Owens and Conductor Clark are called for a local (LBR54-09) that is on duty at Arkansas Yard. They have a switching move in the yard and then will head west to perform work at Osage.

1. What documents must the crew review before they begin their work? What documents do they need to have with them?

([SSI Item 7-A: Reference Documents](#)) Last U.P. update: 10/21/2011

- *System General Orders – all ten categories.*
- *Subdivision General Order for each subdivision operating upon.*
- *Superintendent Bulletin(s)*
- *Track Warrant(s)*
- *Track Bulletin(s)*
- *Job Briefing Book*
- *Work Order(s)*
- *Train List “BC,” includes “BU”*

- *Rule Books: Transportation - Chapters: 1-17, Glossary, Index; 30-34, Glossary; 70-83; 90*
- *System Special Instructions*
- *Timetable for each territory operating upon.*
- *Instructions for Handling Hazardous Materials, Form 8620*
- *UPRR photo identification card – can be displayed on the “Certificate to Operate Locomotives” card.*
- *“Certificate to Operate Locomotives” card, if applicable, regardless of service type called for.*
- *Emergency Response Guidebook (2008) required of Conductors when transporting hazmat.*

All documents must be of the current version.

2. The crew walks out to the engine. They both have backpack type grips. Can they board the engine while wearing their bags?

([Safety 81.4.3: Loading and Unloading Luggage and Material](#)) Last U.P. update: 7/30/2007

Yes.

3. Engineer Owens notices that the locomotive has a blue flag attached. What can he do while his engine is blue flagged?

([GCOR 5.13: Blue Signal Protection of Workmen](#)) Last U.P. update: 7/23/2010

([CFR 218.23: Blue Signal Display](#))

When a blue signal is attached to an engine, unless directed by the craft who place the blue signal, changing controls, brake settings, turning on or off switches (except overhead cab lights) or circuit breakers or starting or shutting down the engine is prohibited.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

4. To ensure that no one has tampered with safety devices on the engine, what is Engineer Owens inspecting for while taking charge of the controlling locomotive?
([GCOR 1.23.1: Locomotive-Mounted Safety Devices](#)) Last U.P. update: 6/17/2009
([CFR 218.57: Responsibilities of Individuals](#))

The engineer must make a visual inspection of accessible safety devices in the controlling locomotive cab, nose or vestibule, or in the cab control car when taking charge of a locomotive or train to ensure that:

- *Nothing interferes with their intended function.*
- *Switches and breakers controlling the devices are in proper position.*
- *Seals, as appropriate, are properly applied.*
- *There is no apparent damage to the device.*

Safety devices include crew alertness devices, automatic cab signal devices, automatic train control/train stop devices, and audio, video and other recording devices concerning operations.

If any exceptions are detected, immediately report them to the train dispatcher.

5. The LBR54-09 has a work order to deliver an empty flat car to Osage Wind. The car they need is buried in track South 2 in the bowl. The crew comes out of the locomotive servicing track and moves westward towards the RCL Zone. After beginning the move, how does Engineer Owens verify that the locomotive brakes are operative?
([ABTH 31.13.1: Initial Movement of a Locomotive Consist Not Coupled to Other Equipment](#)) Last U.P. update: 7/07/2005
***ABTH 31.8.4.1**

Perform these steps during the initial movement of a locomotive consist or as soon as operating conditions permit:

- At a speed of 1 to 3 MPH, allow the locomotive to drift with the throttle in IDLE.*
- Check that brakes or other defects do not restrict the locomotive's movement.*
- Increase speed to approximately 10 MPH, make a service brake pipe application sufficient to develop brake cylinder pressure.*
- When speed decreases to approximately 5 MPH, actuate to make sure the brakes release.*

6. Before they enter the RCL Zone, what communication must take place?
([GCOR 6.7: Remote Control Zone](#)) Last U.P. update: 11/4/2008

Before entering a remote control zone, all employees that are not part of the remote control crew must determine whether the zone is activated. Employees may receive this information from the remote control operator, other authorized employee, or special instructions.

Only the remote control operator may activate a zone. However, timetable special instructions may designate the hours a zone is active.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

7. They determine the RCL zone is not active. What is their authority to occupy the main track at the west end of Arkansas Yard?
([GCOR 6.14: Restricted Limits](#)) Last U.P. update: 2/03/2009

Restricted Limits. Between designated points specified by signs and in the special instructions, trains and engines are authorized to use the main track not protecting against other trains or engines, only after obtaining a track warrant, listing all track bulletins that affect their movement. All movements must be made at Restricted Speed.

Movements against the current of traffic must not be made unless authorized or protected by track warrant, track bulletin, yardmaster, or other authorized employee.

8. Before they occupy this main track, do they have to check for Track Breach Protection?
([SSI Item 12: Track Breach Protection](#)) Last U.P. update: 10/8/2010

Yes. Between MP 97.7 and MP 96.4 on the Big Rivers Subdivision, inquire if employee announced Track Breach Protection is in effect on channel 020-020. Within Yard Limits and Restricted Limits, the employee will establish protection as designated in Section SI-14 Misc. Instructions of the Big Rivers timetable.

9. Will a five-minute wait be required before entering the main track at Arkansas? When is a five minute wait required before entering main track?
([GCOR 9.17: Entering Main Track at Hand-Operated or Spring Switch](#)) Last U.P. update: 3/25/2010

No. [Rule 6.14 \(Restricted Limits\)](#) is in effect, provided movement does not occur beyond restricted limits for 5 minutes after the main track circuit is fouled, unless a block signal displays a proceed indication.

10. After having the engine pull over the switch, Conductor Clark climbs on the rear locomotive. Can he give hand signs as they shove back to the south lead?
([GCOR 6.5: Shoving Movements](#)) Last U.P. update: 7/29/2011
([CFR 218.99: Shoving or Pushing Movements](#))

After completing a job briefing, yes.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

11. Conductor Clark needs to line multiple switches to get to the South 2 track. What risks must he consider before lining switches and derails?

(GCOR 8.2: [Position of Switches](#)) Last U.P. update: 4/29/2011
(GCOR 8.3: [Main Track Switches](#)) Last U.P. update: 3/30/2010
(GCOR 8.20: [Derail Location and Position](#)) Last U.P. update: 11/6/2008
(Safety 82.3: [Switch Operation](#)) Last U.P. update: 7/30/2007
(CFR 218.103: [Hand-operated Switches, Including Crossover Switches](#))
(ABTH 30.5.1: ? No Listing)
(CFR 34.215: ? No Listing)

Switches have different physical operating characteristics. Be familiar with the procedures for properly lining each type of switch. Always remember that the ease with which a switch operates will change depending on weather, temperature, maintenance, and other operating conditions.

Before operating a switch or derail:

- 1. Look in both directions and be alert for moving equipment on adjacent tracks.*
- 2. Before lining the switch, visually inspect it, and make sure it is not damaged, locked, tagged or spiked and that points are not obstructed by ballast, ice, snow, or other material which may interfere with the normal movement of switch points.*
- 3. If necessary to remove foreign material between the switch point and stock rail, use a broom, stick or similar object. Do not use your hand or foot for this purpose. If the switch is spiked, do not attempt to operate it.*
- 4. Always take a firm stance and be alert for conditions which may cause loss of footing.*
- 5. While handling a switch or derail, keep hands and feet clear to avoid being caught or struck by the switch lever handle or ball.*

Employees operating switches and derails must make sure:

- When the operating lever is equipped with a latch, they do not step on the latch to release the lever except when throwing the switch.*
- The switch is not operated while equipment is fouling, standing on, or moving over the switch.*

12. South 2 track is in the bowl at Arkansas Yard. Will additional protection be required before the crew can perform work within the bowl?

(GCOR 7.13: [Protection of Employees in Bowl Tracks](#)) Last U.P. update: 3/23/2010
(CFR 218.39: [Hump operations](#))

Yes. While working in the south bowl tracks, contact the Humpmaster to establish protection on adjacent tracks.

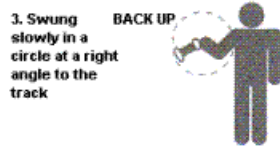
During humping operations, before a train or yard crew member performs any work activities between, protection must be provided against cars released from the hump into the bowl tracks that may be fouled as follows:

- The employee requesting protection must notify the employee controlling the switches that provide access from the hump to the track where the work will occur.*
- After being notified, the switch controller must line any remote control switch against movement to the affected bowl tracks and apply a locking or blocking device to the control for that switch.*
- The switch controller must then notify the employee that protection is provided. Protection will be maintained until the switch controller is advised that work is complete and employee is clear of the bowl tracks and protection is no longer required.*

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

13. Clark climbs back aboard the rear of the locomotive and gives a back-up sign. Describe a backup sign.
([GCOR 5.3.1: Hand Signals](#)) Last U.P. update: 8/05/2003

A picture paints a thousand words...



Employees may use other hand signals only if all crew members understand the signals.

14. After going over the switch, Owens loses sight of Clark. How does this affect their movement?
([GCOR 5.3.3: Signal Disappearance](#)) Last U.P. update: 8/05/2003
([CFR 218.99: Shoving or Pushing Movements](#))

If a person disappears who is giving the signal to back or shove a train, engine, or car, or the light being used disappears, employees must:

- *Stop movement, unless employee on leading car controls the air brakes.*

15. What is the maximum speed that they can make a coupling?
([GCOR 7.4: Precautions for Coupling or Moving Cars or Engines](#)) Last U.P. update: 8/5/2003

Make couplings at a speed of not more than 4 MPH.

16. At impact, the pin dropped and the momentum of the coupling stretched the joint. Given that the joint is now proven, as it tugged the engine, is it required that Owens change direction to check the joint?
([GCOR 7.4: Precautions for Coupling or Moving Cars or Engines](#)) Last U.P. update: 8/5/2003

No. The joint itself has been proven, as the rule requires that the slack be stretched; it does not specify how the slack is to be stretched, nor does the rule specify which way the slack must be stretched.

17. The second car in the track is the one they want. In their job briefing they decide to make a cut and set the flat car over on the lead; then kick the first car back into track 2. Before performing the work does Clark need to establish the "Red Zone" before making the cut?
([Safety 81.5.4: Understanding between Crew Members before Crossing through or Fouling Equipment](#)) Last U.P. update: 7/29/2011

If Conductor Clark is only operating the uncoupling lever, a "Red Zone" does not need to be established for this specific task.

18. After making the cut and pulling over the lead switch, they use hand signs to shove up the lead. Can Clark walk ahead of the cut while making the shove?
([GCOR 6.5: Shoving Movements](#)) Last U.P. update: 7/29/2011
([CFR 218.99: Shoving or Pushing Movements](#))

No. When taking a position ahead of the movement, the employee must continuously observe the movement until the movement is stopped. The employee protecting the shove must not turn their back on the movement or walk backwards ahead of the movement.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

19. The flat car had to be moved 200 feet to be set over to the lead in order to kick the other car back into the track. How must the flat car be secured? What if the crew set out 5 cars on the lead that were charged and placed into emergency after separation?

([ABTH 32.1: Securing Equipment against Undesired Movement](#)) Last U.P. update: 10/21/2011

([Glossary](#)) Last U.P. update: 4/29/2011

*[ABTH 32.1:](#)

*[Glossary](#)

Before detaching from a single car, perform the following steps in the order outlined to prevent uncontrolled movement:

1. *Apply handbrake on car to be set-out.*
2. *Release air brakes.*
3. *Move car a sufficient distance to ensure hand brake is operational.*
4. *Slowly bunch or stretch the slack at the coupler where uncoupling is to be made.*
5. *Observe the cars to be left standing for movement for 1 minute before cutting away.*
6. *If necessary, block the wheels or set out a second car.*

Even if the crew were to set out 5 cars on the lead that were charged and placed into emergency after separation, a handbrake(s) must still be tied. The air brake system must not be depended upon to prevent an undesired movement.

20. The head car is a box car with a “Radioactive #7” placard. It needs to go back into South 2. Can they kick this car?

([GCOR 7.7: Kicking or Dropping Cars](#)) Last U.P. update: 4/26/2010

([Form 8620 Section V – Switching 4.: How to Use the Switching Chart](#)) Last U.P. update: 12/09/2011

Yes. Kicking cars is permitted only when it will not endanger employees, equipment, or contents of cars. This box car and placard meets all of the requirements of Form 8620, Section V – Switching, Figure 10: Switching Chart, Section B.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

21. With their one car train, what tests or inspections are needed to go over to Osage Wind?
([GCOR 1.33: Inspection of Freight Cars](#)) Last U.P. update: 3/11/2011
([ABTH 30.11: Transfer Train Movements Test](#)) Last U.P. update: 6/07/2006
([CFR 232.215: Transfer Train Brake Tests](#))

When personnel are not on duty primarily to inspect freight cars, each car placed in the train may be moved after it receives a safety inspection as follows:

- *Cars must be checked for:*
 - *Leaning.*
 - *Sagging.*
 - *Improper position on the truck.*
 - *Objects hanging or dragging from the car or extending from the side.*
 - *Insecurely attached doors.*
 - *Broken or missing safety appliances.*
 - *Contents leaking from placarded hazardous material car.*
 - *Insecure coupling device.*
 - *Overheated wheel or journal.*
 - *Broken or cracked wheel.*
 - *Brake that fails to release.*
 - *Staff type brake not in fully raised position.*
 - *Any apparent hazard that could cause an accident.*

- *Open top loads, including trailers and containers on flat cars, must be loaded safely.*
- *If width or height approaches clearance restrictions, movement must be cleared with the proper authority.*

Complete a Transfer Train Movement Test.

22. After another train passes their location, the crew enters the main and follows the westbound train. As they approach CP R098, they see a Red over Lunar signal. How should the train be operated by the signal?
([SSI Item 19 - 9.2.13: Restricting](#)) Last Update: 7/29/2011

Restricting. Proceed at Restricted Speed, not exceeding prescribed speed through turnout when applicable.

23. What needs to be entered in the conductor's log for this signal?
([GCOR 1.47 A. 5.: Conductor Report Form](#)) Last U.P. update: 7/29/2011

Enter the following information:

- *Location: "CP R098"*
- *Signal Name or TDD Announcement: "Restricting"*
- *Time: "Current"*
- *Comments & Delays: "Z" – "# MPH" – "None"*

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

24. What is the crew looking out for while operating in the siding? Why?
([GCOR 6.27: Movement at Restricted Speed](#)) Last U.P. update: 11/4/2008

When required to move at Restricted Speed, movement must be made at a speed that allows stopping within half the range of vision short of:

- *Train*
- *Engine*
- *Railroad car*
- *Men or equipment fouling the track*
- *Stop signal*
- *Or*
- *Derail or switch lined improperly*

When a train or engine is required to move at Restricted Speed, the crew must keep a lookout for broken rail and not exceed 20 MPH.

One never knows what one will find fouling the track when authorized to proceed at Restricted Speed. Be cautious and vigilant.

25. The train stops short of the Osage Wind switch. They need to get the car on the other side of the locomotive to get it spotted. Considering the track layout, what two ways could they do this?
([GCOR 7.7.1: Gravity Switch Moves](#)) Last U.P. update: 3/22/2010

Two options:

- *A gravity switch may only be made where authorized by "Superintendent Bulletin" and manned hand brake must be located on the trailing end of the trailing car in the direction of movement.*
- *Or*
- *Runaround the car and shove to spot.*

26. The crew will need to pull a load to spot the empty car. After coupling to the loaded car they notice that the load is not listed as a high-wide. It appears to be properly loaded and secure but Clark thinks that the car has excessive dimensions. Can he still pull this car?
([GCOR 1.33: Inspection of Freight Cars](#)) Last U.P. update: 3/11/2011

If width or height approaches clearance restrictions, movement must be cleared with the proper authority.

27. Owens attempts to contact MTO McBride over the radio, but gets no response. Can he call her on a cell phone?
([GCOR 2.21: Electronic Devices](#)) Last U.P. update: 3/29/2011
([CFR 220.305: Use of Personal Electronic Devices](#))

A railroad operating employee may use a personal cell phone only for voice communication when:

- *Rolling and on track equipment is stopped,*
- *A safety briefing is conducted with all crew members to confirm that it will not interfere with any safety related or required duty,*
- *No member of crew will foul any track.*

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

28. MTO McBride instructs the crew to leave the load and bring their locomotive back to Arkansas Yard. How will they obtain authority to occupy the main track at CP R098?
([GCOR 6.3: Main Track Authorization](#)) Last U.P. update: 3/23/2010

Main Track Authorization would granted by the Dispatcher. Upon signal indication at CP R098, comply with [Rule 6.14: \(Restricted Limits\)](#).

29. They head into the south yard tracks to secure their engine on the west end of South 1 at Arkansas Yard. Clark attempts to couple to cars in the track but the drawbars bypass. What does he need to do before going in to align the drawbars?
([Safety 81.13.3: Coupler Adjustment](#)) Last U.P. update: 11/11/2008
([Safety 81.5.4: Understanding between Crew Members before Crossing through or Fouling Equipment](#)) Last U.P. update: 7/29/2011

Clark needs to contact the Humpmaster for adjacent protection before working in the bowl tracks. Refer to [Rule 7.13: \(Protection of Employees in Bowl Tracks\)](#).

After protection is established, Clark then:

- *Separates the equipment at least 100 feet.*
- *Allows the slack to adjust.*
- *He then calls Engineer Owens to establish and confirm a Red Zone for his work.*
- *He applies sufficient hand brakes, but not less than two, on the unattached portion to prevent movement before going between cars, as he is working on tracks where cars are likely to roll together. Refer to [Rule 81.13.1: \(Going Between Cars\)](#).*

30. If there is another job working on the other end of the Yard, what must happen before Clark enters the red zone?
([GCOR 7.2: Communication between Crews Switching](#)) Last U.P. update: 8/05/2003
([Safety 81.5.4: Understanding between Crew Members before Crossing through or Fouling Equipment](#)) Last U.P. update: 7/29/2011

To avoid injury or damage where engines may be working at both ends of a track or tracks, crews switching must have a clear understanding of movements to be made.

This would include that the:

- *Movement(s) be Stopped and Set and Centered;*
And / or
- *The switch at the other end of the Yard is lined away from the track to be fouled.*

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

31. After releasing the red zone and making the coupling, the crew needs to secure their locomotive. What is required to properly secure the engine?
([ABTH 32.1.1: Securing an Unattended Train or Portion of Train with Locomotive Attached](#)) Last U.P. update: 7/24/2007
([ABTH 32.20.2: Shutdown Procedure](#)) Last U.P. update: 4/05/2010
*ABTH 32.1.3
*ABTH 31.8.7A

To secure a train or a portion of a train with the lead locomotive consist attached, perform the steps below:

1. *Secure equipment against undesired movement as outlined in [Rule 32.1: \(Securing Equipment against Undesired Movement\)](#).*
2. *Secure the lead locomotive consist and apply the air brakes as outlined in [Rule 32.1.3: \(Unattended Locomotives\)](#).*
3. *Complete Train and Locomotive check list at other than terminals and crew change locations.*

32. What is the procedure for shutting down the locomotive?
([ABTH 32.20.2: Shutdown Procedure](#)) Last U.P. update: 4/05/2010
*ABTH 31.8.7.1

Follow this procedure to shut down a locomotive:

- *Make sure the hand brake and independent brake are fully applied.*
- *Place the generator field switch OFF.*
- *Remove and stow the reverser handle.*
- *Move the engine control switch (isolation switch) to the START/STOP/ISOLATE position.*
- *Place switches or breakers for air conditioning, lights, heaters, refrigerator, and other accessories in the OFF position.*
- *Shut down engine.*
- *Open the main battery switch. Main battery switch may be left closed for up to two hours to maintain cab signal link on locomotives operating in cab signal territory.*

33. A day or so later, Engineer Owens and Conductor Clark are called on duty for a through-freight train: The MFLOD-11. Assuming they didn't go over their "Hours of Service" with the local, how much time would they need off before going to work on this train?
([GCOR 1.17: Hours of Service Law](#)) Last U.P. update: 11/23/2004
([CMS Hours of Service Website](#))
([CFR 228 Appendix A](#))

The crew would need a minimum of ten hours of undisturbed rest.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

34. During the job briefing, the crew questions the train make-up. What is the max TPA for their route? Can they take this train with its current TPA?

([32.20: Engine Shutdown](#)) Last U.P. update: 10/21/2011

([SSI Item 5-B: System Train Make-Up Requirements](#)) Last U.P. update: 10/21/2011

Handout

*ABTH 30.9.1

TPA shown on the TCS consist must not be exceeded. If TCS consist is not available, the crew would use TPA table shown in [SSI Item 5-C, 5: \(TPA and Coupler Limits Table by Subdivision\)](#) to determine the maximum TPA for their route.

The maximum TPA allowed on the Big Rivers Subdivision between Osage and Sacramento Junction is 250. Use the following formula to determine the train's TPA:

$$\begin{array}{rcl} \text{Total Train Tonnage} & \div & \text{Total EPA} & = & \text{TPA} \\ 11028 & \div & 44.8 & = & 246.160 \text{ rounded up, is: } 247 \end{array}$$

Note: *When calculating TPA, use the actual EPA number, do not round off. When the resulting TPA is not a whole number, round up to the next whole number.*

Yes, they may take this train as it complies with the TPA requirement of the subdivision in that the train's TPA of 247 is, in fact, less than the route's maximum of 250 TPA.

35. What is the maximum coupler-limit between Osage and Sacramento?

([SSI Item 5-C: Corridor and Subdivision Train Make-Up and Helper Placement Requirements](#)) Last U.P. update: 10/21/2011

Handout

The maximum standard strength coupler limit is 12,501.

The maximum high strength coupler limit is 16,888.

36. How many tons are handled by the lead consist?

([SSI Item 5-C: Corridor and Subdivision Train Make-Up and Helper Placement Requirements](#)) Last U.P. update: 10/21/2011

Determine that the trailing tonnage handled by each consist is less than the coupler limits.

Use the following formula to determine the tonnage handled by each consist:

Tonnage pulled by Lead Consist: *Multiply the EPA of lead consist by the TPA. This figure must be less than the coupler limit for the territory. Applies to trains with cut-in helper, (with or without rear helper), and trains with rear only help.*

$$\begin{array}{rcl} \text{Lead Consist EPA} & \times & \text{TPA} & = & \text{Tonnage Pulled by Lead Consist} \\ 32.8 & \times & 247 & = & 8,101.6 \end{array}$$

The train's trailing tonnage of 8,101.6 handled by the lead consist is less than the standard coupler limits for the Big Rivers Subdivision of 12,501.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

37. What is the maximum amount of dynamic brake axles allowed on the head-end of the train and do they have to cut any out?

([SSI Item 5-B: System Train Make-Up Requirements](#)) Last U.P. update: 10/21/2011

The head-end of this manifest train may have a maximum EDBA of 28.

The head-end's current configuration shows a total of 27.7; rounded down for a final answer of 27. As 27 is less than 28, the dynamic brakes on all three motors may be cut in (operative).

38. What locomotive information does the train list provide?

([ABTH 30.19: Dynamic Brakes](#)) Last U.P. update: 4/15/2004

([ABTH 31.2.4: Locomotive With Non-complying Condition Safe to Move](#)) Last U.P. update: 5/03/2005

Handout

Flash

*[ABTH 31.2.5](#)

*[ABTH 31.5.1](#)

This question is very open-ended. Other than the ABTH 30.19 reference listed by the Carrier and noted below, the train list provides a wealth of information regarding the number, type, status, condition and capabilities of each locomotive.

Inoperative dynamic brake information may also be provided to the locomotive engineer by electronic means on the train documentation under locomotive information, which will show for each locomotive whether locomotive dynamic brake is "operative". Refer to [Rule 30.19.1: \(Dynamic Brake Requirements\)](#).

39. The van hauls the crew out to Osage for the relief of the MFLOD 11. Under what circumstances would they not be required to wear a seatbelt?

([Safety 74.8: Seat Belts](#)) Last U.P. update: 7/30/2007

Seat belt use is not required if vehicle is not exceeding 5 mph and vehicle is used during the task of inspecting cars, coupling air hoses or changing brake shoes.

40. Their ride will only take a half-hour to get to Osage. While being transported to their train can they check the board line-ups on a personal iPhone?

([GCOR 2.21: Electronic Devices](#)) Last U.P. update: 3/29/2011

Yes.

41. While deadheading, can Owens listen to a podcast that is saved on his phone?

([GCOR 2.21: Electronic Devices](#)) Last U.P. update: 3/29/2011

As long as Owens is not in the controlling cab of a locomotive consist, yes.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

42. At Osage, the inbound crew pulls up to a stop. There is a walking path on the north side of the rail and the crew climbs off on that side. How close can they walk in front of the locomotive as they come across the track to the van? Is this considered a work activity?
([Safety 81.2.2: Sufficient Distance](#)) Last U.P. update: 3/22/2010
([Safety 81.5.4: Understanding between Crew Members before Crossing through or Fouling Equipment](#)) Last U.P. update: 7/29/2011
([Safety Glossary: Work Activities \(working on the ground\)](#)) Last U.P. update: 7/23/2010

Unless otherwise authorized, when crossing/stepping foul of tracks, employees must not:

- *Cross tracks unless there is at least 20 feet between the employee and the equipment;*
- *Cross or step foul of tracks closely in front of or behind moving equipment;*
- *Go between standing equipment if the opening is less than 100 feet.*

TE&Y employees performing duties such as walking between adjacent parallel tracks, switching, inspecting, testing, repairing, or servicing equipment or components etc. Activities such as walking to and from a train, which would include getting on and off the locomotive, crew van or yard office, is not considered a work activity.

43. The inbound crew tells them that the previous signal was an Advance Approach. Engineer Owens and Conductor Clark board the train and call the dispatcher. How must the train be handled to the next signal?
([GCOR 9.9: Train Delayed Within a Block](#)) Last U.P. update: 7/23/2010

The train is currently stopped in CTC territory.

Proceed prepared to stop at the next signal until the next signal is visible and that signal displays a proceed indication.

44. As they pass a Clear signal at CP R098, what is their maximum authorized speed?
([GCOR 6.14: Restricted Limits](#)) Last U.P. update: 2/03/2009

Their maximum authorized speed is Restricted Speed as they are entering into Restricted Limits.

45. The train is operating on clear signals. What should their train speed be while passing the clear absolute signal at MP 96.4?
([GCOR 14.1: Authority to Enter TWC Limits](#)) Last U.P. update: 3/29/2005

Based upon the progress of the train so far, their speed should be zero and stopped without passing the Clear absolute signal at MP 96.4. They don't have a valid track warrant in their possession providing authority to enter the Track Warrant Control Territory, which starts at MP 96.4.

If and when their train is issued a valid Track Warrant, the maximum track speed is 45mph, unless otherwise restricted.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

46. The train dispatcher contacts the crew as they are approaching the signal at MP 96.4. The dispatcher wants to issue a track warrant for authority. What actions are required by the crew?
([GCOR 1.47.1: Cab Red Zone](#)) Last U.P. update: 3/23/2010

The crew is already operating in a "Cab Red Zone" (CRZ) as the train is approaching the end of the train's authority. Advise the dispatcher that the crew is operating in a "Cab Red Zone" status and to standby until the train has been stopped. Mandatory directives, [Rule 6.11: \(Mandatory Directive\)](#) must not be transmitted to the crew of a moving train if the conductor, engineer or train dispatcher feels that the transmission could adversely affect the safe operation of the train. Refer to [Rule 2.14: \(Transmission of Mandatory Directives\)](#).

47. After stopping, they inform the dispatcher that they are ready to copy the track warrant. What three things must they tell the dispatcher before copying the warrant?
([GCOR 2.14: Transmission of Mandatory Directives](#)) Last U.P. update: 3/23/2010

The employee must inform the train dispatcher when ready to copy, stating the employee's occupation (ex. conductor, engineer, foreman, maintainer), name and location on the main track or where the main track will be entered.

48. Track warrant # 4563 has a box 2 from MP 96.4 to Platte. Where does their authority end?
([SSI Item 12: Track Breach Protection](#)) Last U.P. update: 10/8/2010
{Hmmm...not quite sure why the Carrier listed SSI Item 12 as a reference for this question. I believe it to be a typo. I believe the correct reference should be:
([GCOR 14.2: Designated Limits](#)) Last U.P. update: 3/30/2005}

When a station name designates the last named point, authority extends to and includes the first siding switch. Authority extends to the station sign if no siding exists. As Box #10 is also checked, their authority ends in the siding at Platte.

49. Will the train fit in the siding at Platte?
Handout

Yes! The train is 7875 feet. Originally, the timetable showed the siding to be only 7434 feet, but the Big Rivers Subdivision General Order No. 4, section SI-00 shows the updated length to be 8027 feet.

50. The crew receives an OK time on track warrant # 4563 and proceeds eastward. A few miles later, the dispatcher calls back and informs the crew that Conductor Felty has track breach protection in effect between switches at Mississippi. The train is only a few miles away from that location. What action must the crew take?
([SSI Item 12: Track Breach Protection](#)) Last U.P. update: 10/8/2010

Before entering TBP limits or designated Yard Limits/Restricted Limits, movements must attempt to contact the employee that established the TBP for instructions. Trains must make 3 attempts (on the designated radio channel) to contact employee in the area. If response is not received, train may enter area looking out for employees working in the area. When cars are on the adjacent track, crew must continue to attempt to contact employee while passing through limits. Continuously sound the engine's bell while passing cars on the adjacent track.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

51. Conductor Felty answers and informs the crew that his train has a broken knuckle. Is it proper for him to ask the train to stop and drop off a knuckle for him?
([SSI Item 12: Track Breach Protection](#)) Last U.P. update: 10/8/2010

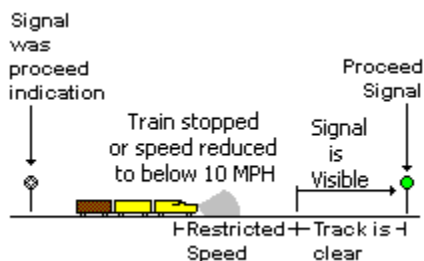
Yes! Crews may work together when necessary to complete work such as exchanging power, etc.

52. If Conductor Owens (sic) Clark helps Conductor Felty replace the knuckle, is he required to list Conductor Owens (sic) Clark on his log for Track Breach?
([Safety 70.3: Job Briefing](#)) Last U.P. update: 11/11/2008
([SSI Item 12: Track Breach Protection](#)) Last U.P. update: 10/8/2010

Yes! When crews are working together within TBP limits, all employees working within the limits must be listed on the TBP log.

53. After helping Felty with his repair, how can the train proceed? Their preceding signal was Clear.
([GCOR 9.9: Train Delayed Within a Block](#)) Last U.P. update: 7/23/2010

The train is located in TWC-ABS territory. Proceed at Restricted Speed. The train must maintain this speed until the next signal is visible, that signal displays a proceed indication, and the track to that signal is clear.



54. Around the curve, the crew sees that the signal at the east end of Mississippi is Red. Are they required to stop for this signal?
([GCOR 6.27: Movement at Restricted Speed](#)) Last U.P. update: 11/4/2008

Yes. The signal at the east end of Mississippi at MP 90.4 is an Absolute signal.

55. They stop short of the signal and call for the dispatcher, but there is no reply. How can they proceed?
([GCOR 9.12.4, A. 3: ABS Territory](#)) Last U.P. update: 7/23/2010

If the train dispatcher cannot be contacted, move 100 feet past the signal, wait 5 minutes, then proceed at Restricted Speed.

56. Having properly complied with the stop indication, they are now moving through the block at restricted speed. They observe the next signal displaying clear. When may they resume maximum speed?
([GCOR : Movement from Signal Requiring Restricted Speed](#)) Last U.P. update: 11/06/2008

When a train passes a signal requiring movement at Restricted Speed, the train must move at Restricted Speed until its leading wheels have passed the next governing signal or the end of the block system.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

57. After passing the Clear signal, the dispatcher calls and issues a radio speed restriction. Does this event need to be recorded in the conductor's log? Does it initiate the Cab Red Zone?

([GCOR 1.47: Duties of Crew Members](#)) Last U.P. update: 7/29/2011

([GCOR 1.47.1: Cab Red Zone](#)) Last U.P. update: 3/23/2010

Yes. Speed Restriction (received enroute) = "RSR" and is entered into the Conductor's log.

Yes. A radio speed restriction is considered a mandatory directive. Refer to [Rule 6.11: \(Mandatory Directive\)](#). When a mandatory directive is copied, the process initiates a Cab Red Zone.

58. The dispatcher gives the crew the radio speed restriction for 10 MPH at MP 78.4 (Weber). After leaving Cimarron on an Advance Approach, how should the train be handled?

([SSI Item 19 - 9.2.4: Advance Approach](#)) Last U.P. update: 7/29/2011

Proceed prepared to stop at second signal. Freight trains exceeding 40 MPH must immediately reduce to 40 MPH. When signal governs the approach to a control point with a 40 MPH turnout speed, be prepared to advance on normal or diverging route.

59. The intermediate signal at MP 79.6 is Clear. When can the crew resume speed?

([GCOR 6.31: Maximum Authorized Speed](#)) Last U.P. update: 8/05/2003

([GCOR 9.8: Next Governing Signal](#)) Last U.P. update: 3/27/2006

Immediately. A train may comply with the next signal's indication when its aspect can be clearly seen and the signal governs the track where movement is occurring or will be made. This does not apply when a rule or previous signal indication requires movement at Restricted Speed.

60. Does the clear signal from the previous question need to go in the conductor log?

([GCOR 1.47: Duties of Crew Members A. 5. Conductor Report Form](#)) Last U.P. update: 7/29/2011

No, the Clear signal does not need to go in the conductor's log as the previous signal was an Advance Approach. However, if the previous signal had been an Approach or Diverging Approach signal, the next signal would have to be entered regardless of signal indication including the speed of the train (even if the signal is Clear).

61. What is Conductor Clark's responsibility when approaching Weber?

([GCOR 1.47: Duties of Crew Members](#)) Last U.P. update: 7/29/2011

([GCOR 1.47.1: Cab Red Zone](#)) Last U.P. update: 3/23/2010

([GCOR 6.31: Maximum Authorized Speed](#)) Last U.P. update: 8/05/2003

Conductor Clark must remind the Engineer that the train is approaching a Radio Speed Restriction located at Weber at MP 78.4 for 10 MPH. The conductor must inform the engineer after the train passes the last station, but at least 2 miles from the restriction.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

62. A half-mile away from the interlocking, they see the signal drop to red. How are they required to handle the train?

([GCOR 9.5: Where Stop Must Be Made](#)) Last U.P. update: 7/07/2005

([GCOR 9.9.1: Approach to Automatic Interlocking](#)) Last U.P. update: 3/22/2010

Even though the train's last signal was Clear at MP 79.6 (see question #59), the engineer would be preparing to comply with the radio speed restriction of 10 MPH at Weber MP 78.4 and already reducing the train's speed accordingly. Because of this, the train's speed is most likely going to be well under the 25 MPH as it, or soon after, as it passes the Clear signal that governs the approach to the automatic interlocking at Weber. Therefore, they must also be prepared to stop the train approximately 1,000 feet before the automatic interlocking signal.

As the Absolute signal has dropped to red, they have 2,640 feet (one-half mile) to get their train stopped, consistent with good train handling.

63. After a BNSF train clears the interlocking, the train receives a proceed indication. How fast can they operate the train?

([GCOR 6.11: Mandatory Directive](#)) Last U.P. update: 3/19/2010

([GCOR 6.31: Maximum Authorized Speed](#)) Last U.P. update: 8/05/2003

Up to 10 MPH at MP 78.4 through the radio speed restriction on the Main Track.

64. While running on clear signals, what is required when approaching Platte Siding?

([GCOR 1.47: Duties of Crew Members](#)) Last U.P. update: 7/29/2011

([GCOR 1.47: Duties of Crew Members A. 3. Calling Attention to Restrictions](#)) Last U.P. update: 7/29/2011

([GCOR 1.47: Duties of Crew Members A. 5. Conductor Report Form](#)) Last U.P. update: 7/29/2011

([SSI Item 10-K: Main Track Switches](#)) Last U.P. update: 3/15/2010

The Conductor must remind the Engineer that their train is approaching the end of their Track Warrant's authority. They will need to stop at MP 70.4 so that the Conductor can line their train into the siding at Platte as Box #10 is checked on Track Warrant #4563 to clear the Main Track at the last named point.

65. After stopping at the west switch at Platte, Clark lines the train into the siding. Conductor Feedhum is on the approaching train, the UP 1996, and contacts them to offer to line the switch behind their train once they have cleared up in the siding. Can Conductor Clark stay on the head end of his train and defer lining the switch back to the other crew?

([GCOR 8.3: Main Track Switches](#)) Last U.P. update: 3/30/2010

([SSI Item 10-K: Main Track Switches](#)) Last U.P. update: 3/15/2010

Within ABS-TWC, ABS-DTC, or [Rule 9.14 \(Movement with the Current of Traffic\)](#) territory at the entering switch of a siding after the following has been done:

- 1. Communication has been established between crews of trains meeting or passing.*
- 2. An understanding has been reached that the train on the main track will stop and restore the switch to the normal position. A crew member must not report clear of the limits until it is known the switch is lined and locked in the normal position.*

Once these two prerequisites are satisfied, Conductor Clark may stay on the head end of his train and proceed eastward into the siding at Platte.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

66. At what speed can the train operate in Platte Siding?
([GCOR 6.28: Movement on Other Than Main Track](#)) Last U.P. update: 11/04/2008
([GCOR 6.31: Maximum Authorized Speed](#)) Last U.P. update: 8/05/2003
([SSI Item 2-A: Maximum Speeds: General](#)) Last U.P. update: 7/21/2011

Signal Indication, up to a maximum of 20 MPH.

67. Once the train is clear and stopped in the siding, the crew member's job brief and report clear of track warrant # 4563. The dispatcher issues them track warrant # 4783 from Platte to CP R060. The signal to depart at East Platte turns clear but the switch on the east end, equipped with a target displaying the letters "SS", appears to be lined against their movement out of the siding. Is this an improperly displayed signal?
([GCOR 8.9: Movement Over Spring Switches](#)) Last U.P. update: 1/11/2005

No. The Clear signal indicates that the train may enter the main track and proceed eastward. The letters "SS", on the switch's target indicate that it is a spring switch.

68. At what speed should the train be moving once they are clear of the siding?
([GCOR 5.4: Flags for Temporary Track Conditions](#)) Last U.P. update: 8/05/2003
([GCOR 6.31: Maximum Authorized Speed](#)) Last U.P. update: 8/05/2003

The train entered the Main at MP 69.0. As a Form "A" is in place between MP 67.5 and MP 67.0 with a maximum authorized speed of 25 MPH, the train should be moving no greater than 25 MPH. until clearing the Form "A" limits.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

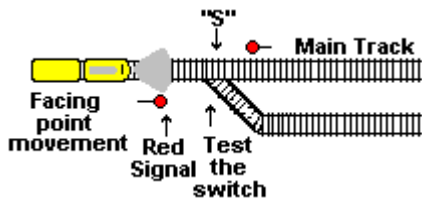
69. The crew identifies an Advance Approach signal at MP 66.5 followed by an Approach at MP 64. The next signal at the west end of Chicago is displaying a restricting indication. Would they have to stop and inspect the spring switch?

([GCOR 8.9: Movement Over Spring Switches](#)) Last U.P. update: 1/11/2005

Yes. A crew member tests the switch by lining the switch over and back by hand and examining the switch points to see that they fit properly.

Before a train or engine makes a facing point movement over a spring switch, the switch must be tested when any of the following conditions exist:

1. *A block signal governing movement over the switch indicates:*
 - *Stop.*
 - *Stop and Proceed.**Or*
 - *Restricted Proceed.*



2. *A switch point indicator protecting the switch indicates Stop and Inspect Switch.*
- Or*
3. *The switch is not protected by a block signal or switch point indicator.*

The switch does not need to be tested if it has been lined for the diverging route or written instructions advise the crew that the spring switch has been spiked.

70. After passing the Restricting signal, how soon does the crew need to be able to stop their train?
([GCOR 6.27: Movement at Restricted Speed](#)) Last U.P. update: 11/4/2008

When required to move at Restricted Speed, movement must be made at a speed that allows stopping within half the range of vision.

71. If Engineer Owens is operating at 19 MPH, is that too fast? What are Conductor Clark's responsibilities?

([GCOR 1.47: Duties of Crew Members](#)) Last U.P. update: 7/29/2011

([GCOR 6.27: Movement at Restricted Speed](#)) Last U.P. update: 11/4/2008

It may be too fast; it all depends on taking into account all of different variables in determining how much distance would be required to stop the train in a safe manner, consistent with good train handling and compliance with the rules. The conductor and the engineer are responsible for the safety and protection of their train and observance of the rules. If any conditions are not covered by the rules, they must take precautions to provide protection. If engineer fails to comply with a signal indication or take proper action to comply with a restriction or rule, crew members must immediately take action to ensure safety, using the emergency brake valve to stop the train, if necessary.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

72. The train continues moving at Restricted Speed between the switches at Chicago. They can see a Clear signal around the curve at the east end of Chicago. When can they act upon this signal?
([GCOR 9.11: Movement from Signal Requiring Restricted Speed](#)) Last U.P. update: 11/06/2008

When a train passes a signal requiring movement at Restricted Speed, the train must move at Restricted Speed until its leading wheels have passed the next governing signal or the end of the block system.

73. The crew sees a Red flag between the rails at MP 60.0. They see the managers' truck behind a pile of ties. There was no Yellow-Red Flag at MP 62.0. Is this a proper test?
([GCOR 5.4.7: Display of Red Flag or Red Light](#)) Last U.P. update: 3/12/2010
([GCOR 6.27: Movement at Restricted Speed](#)) Last U.P. update: 11/4/2008
([GCOR 9.11: Movement from Signal Requiring Restricted Speed](#)) Last U.P. update: 11/06/2008

Yes! The train is moving at Restricted Speed per previous signal indication. The Red Flag is located at MP 60.0. The Clear signal is located at MP 59.8. The train may not act upon the Clear signal until its leading wheels have passed the signal. Until then, the train's crew must remain at Restricted Speed and comply with Rule 6.27.

74. The managers climb aboard the locomotive, debrief the stop test and ask Clark and Owens for their IDs, Subdivision GOs, and location of their cell phones. Where would be an appropriate storage location for their electronic devices?
([GCOR 2.21: Electronic Devices](#)) Last U.P. update: 3/29/2011

An appropriate storage location for their electronic devices would be stored out of sight inside of their respective grips.

75. The managers leave the cab after refocusing the crew. The train departs Chicago, passes CP R046, and reports clear of their second track warrant. They continue over the detector at MP 40.1, and two miles away they still have not received a radio response, what action is required?
([SSI Item 13: Train Defect Detectors](#)) Last U.P. update: 8/05/2011

13.3 @ = NAR, no action required.

76. Around noon, the crew passes MP 35.0 without seeing Yellow-Red boards as they had expected by the information in their bulletins. Is this Form B still in effect?
([GCOR 5.15: Improperly Displayed Signals](#)) Last U.P. update: 8/05/2003
([GCOR 15.2: Protection by Track Bulletin Form B](#)) Last U.P. update: 10/21/2011

Yes! The Form "B" is valid from 0800 – 1600 hrs.

77. Clark calls for Foreman Walter but gets no response as they approach a diverging approach signal at Red River. How should they handle their train?
([GCOR 15.2: Protection by Track Bulletin Form B](#)) Last U.P. update: 10/21/2011

Be prepared to stop, and stop for a Red Flag at MP 33.00. Even if the Red Flag is not present, the train must stop at MP 33.00 and not proceed any further until authorized by Foreman Walter in charge of Form B No. 147162.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

78. Foreman Garcia contacts the train, relaying for Foreman Walter, and asks if the train is still on the move. The crew tells him no, that they are waiting for permission through the Form B. He says, "Foreman Garcia relaying for Foreman Walter of gang 8-5-0-7, using track warrant form B bulletin number 1-4-7-1-6-2, line one, main one, Big Rivers Sub. UP 8482 may pass the red flag at MP 30.0 without stopping at maximum authorized speed." What is their response?

([GCOR 15.2: Protection by Track Bulletin Form B](#)) Last U.P. update: 10/21/2011

Handout

Advise the Foreman that the signal indication reflects that their train will be moving from Main One into the siding at Red River and plan to re-enter Main One at CP R030 and continuing eastward. The Foreman must modify his original instructions for the train's intended movement.

After new instructions are issued by the Foreman, repeated by the crew and confirmed by the Foreman, the train may proceed.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

79. After receiving proper instructions from Foreman Garcia the train pulls through the siding and down to a stop indication at CP R025. The crew contacts the dispatcher but he says he cannot get the crossover to lock-up. He gives their train authority to pass the stop signal and permission to hand-operate the switches at Rio Grande that are necessary for their route from main one to main one. Which switches will they need to operate? Describe the steps the crew must take to properly line themselves through their intended route. When can engineer Owens start through the crossover? ([GCOR 8.12: Hand-Operated Crossover Switches](#)) Last U.P. update: 3/30/2010
([SSI Item 11: Moveable Point Frogs](#)) Last U.P. update: 9/24/2011
([CFR 218.107: Additional Operational Requirements for Hand-operated Crossover Switches](#))
(Timetable Handout)

The question does not specify which of the two crossovers, nor which respective switch(es) will not lock-up. Therefore, the Conductor will need to inspect and line by hand all crossovers and switches, so that the switches are lined Main 1 to Main 1, and Main 2 to Main 2.

The normal position of crossover switches is for other than crossover movement. The crossover switches must be left lined in normal position, except when they are in use for crossover movements. Both switches of a crossover shall be properly lined before equipment begins a crossover movement. A crossover movement shall be completed before either switch is restored to normal position, except when one crew is using both tracks connected by the crossover during continuous switching operations.

At #20 and #24 switches (11-2), there are two switch machines, one of which is a moveable point frog machine.

After Receiving Permission:

At The Switch Point Machine:

1. Inspect switch points (Ensure free of debris). (Do not remove debris until switch is placed in hand position.)
2. Unlock switch machine & place in hand position.
3. Operate the switch back and forth until switch point is seen to move. (This must be done even if the switch appears lined for intended route).
4. Line switch point for intended route & inspect.

At The Frog Point Machine:

5. Inspect frog points (Ensure free of debris). (Do not remove debris until switch is placed in hand position.)
6. Unlock frog machine & place in hand position.
7. Operate the frog back and forth until frog point is seen to move. (This must be done even if the frog appears lined for intended route).
8. Line frog point for intended route & inspect point.

Returning Dual Control Switch Machines to Power:

9. After at least one unit or car has passed over the switch points, the employee must return the switch to power unless otherwise instructed by the control operator.

Both switches of a crossover shall be properly lined before equipment begins a crossover movement.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

80. While the crew is informing the dispatcher that all switches are back in power the dispatcher calls and says "FF is in effect between MP 17 and 15." How should the crew handle their train?
([GCOR 6.21: Precautions Against Unusual Conditions](#)) Last U.P. update: 4/29/2011

In unusually heavy rain, storm, or high water, trains and engines must approach bridges, culverts, and other potentially hazardous points prepared to stop. If they cannot proceed safely, they must stop until it is safe to resume movement.

Do not operate trains and engines over tracks submerged in water until the track has been inspected and verified as safe.

Operate engines at 5 MPH or less when water is above the top of the rail. If water is more than 3 inches above the top of the rail, a mechanical department supervisor must authorize the movement. Refer to [Rule 6.21.2: \(Water Above Rail\)](#).

81. The train passes over a dragging equipment detector at MP 22.0. If the scanner identifies a defect, when should Owens stop the train?
([GCOR 6.31: Maximum Authorized Speed](#)) Last U.P. update: 8/05/2003
([SSI Item 13: Train Defect Detectors](#)) Last U.P. update: 8/05/2011

If a defect is detected, an alarm tone or message transmitted, stop the train at once and inspect for dragging equipment.

82. The crew reports to the dispatcher that the detector reported the defect at axle 462. The dispatcher tells the crew that a track inspector is in the area and can give Clark a ride to the rear of the train. What will Clark be looking for?
([SSI Item 13: Train Defect Detectors](#)) Last U.P. update: 8/05/2011

The inspection must ensure that:

- *Retaining valve is in exhaust position.*
- *Hand brake is fully released.*
- *Brakes are not sticking.*
- *Truck bolster is not broken.*
- *Brake rigging is not down or dragging.*
- *Lading is not down or dragging between cars.*
- *Wheels are not broken.*
- *Lading has not dropped down through container floors or cross members of multi-platform/well cars.*

When a defect is detected, visually inspect the train for dragging equipment as required by existing instructions.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

83. Clark and the track inspector physically count 462 axles back and are now looking at the car marked ITLX40429. They do not see anything underneath the car. What do they do now if the train is on concrete ties?

([SSI Item 13: Train Defect Detectors](#)) Last U.P. update: 8/05/2011

When operating on rails with concrete ties, if no defect is found, perform an audible inspection, listening for indications of a broken wheel, as follows:

- *If grade conditions permit, position yourself 10 cars ahead of the indicated axle and roll the train by 20 cars, listening for indications of a broken wheel. If no axle count is given by the detector, audibly inspect the entire train.*
- *If grade conditions do not permit, proceed not exceeding 20 MPH to the first location where grade conditions do permit making the audible inspection.*
- *If a sound is heard suggesting a broken wheel (thumping sound), set out the car having that wheel and report it to the train dispatcher.*

84. Clark finishes the inspection and notifies the dispatcher that nothing was found and that they are back on the move and headed towards Colorado. Approaching MP 17 they reduce their speed to get a good look at the bridge at MP 16.5. Around the curve, going 7 MPH, they see the track washed out just before the bridge. They stop their train and inform the dispatcher. It is determined that if they back up they can use the center siding to avoid the washout and continue eastward. Can the crew back up to position themselves west of the switch at Colorado?

([GCOR 6.6: Back Up Movements](#)) Last U.P. update: 4/29/2011

Provided the crew is able to meet all of the following requirements, yes!

After obtaining permission from the train dispatcher, a train may back up on any main track or on any track where CTC is in effect under the following conditions:

Before a crew requests and makes a move under this rule, a job safety briefing between crew members must be conducted that includes:

- *Confirmation of authority limits.*
- *Location of nearest affected road crossings in direction of movement.*
- *Distance to be shoved.*
- *Confirmation that train is intact, verified either visually or by determining that brake pipe continuity exists using EOT device or distributed power telemetry.*

1. *The train dispatcher grants permission to make the movement after verifying the following within the same or overlapping limits:*

- Another authority is not in effect unless conflicting movements are protected.*
- A track bulletin Form B is not in effect.*
- A main track is not removed from service by a track bulletin.*
- Track Breach Protection is not in effect.*
- Permission to leave a switch in the reverse position has not been granted.*

2. *The crew ensures movement will not:*

- Exceed the limit of the train's authority.*
- Exceed the train's length.*
- Enter or foul a private or public crossing except as provided by [Rule 6.32.1 \(Providing Warning Over Road Crossings\)](#).*
- Be made into or within yard limits, restricted limits, interlocking limits, drawbridges, railroad crossings at grade, or track bulletin Form B limits.*

When movement is made under these conditions, Restricted Speed does not apply. Trains backing up under the provisions of this rule may pass signals indicating Stop and Proceed, without stopping.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

85. After backing up and moving into the center siding, Clark goes to line the east divide switch towards main one in order to run around the washout. Clark inspects the switch for track #2 but it has a tag on it. He calls the dispatcher on the radio who asks if he is able to line the switch. How should Clark respond?

([GCOR 1.4.1: Good Faith Challenge](#)) Last U.P. update: 2/25/2010

([CFR 218.97: Good Faith Challenge Procedures](#))

Advise the dispatcher that the center siding's east divide switch cannot be lined towards Main 1, as it has a bad order tag in place.

86. What rules are covered under the Good Faith Challenge in the regulation? How can this be resolved?

([GCOR 1.4.1: Good Faith Challenge](#)) Last U.P. update: 2/25/2010

([CFR 218.97: Good Faith Challenge Procedures](#))

Federal Regulations have provisions that allow an employee the right to challenge a directive which, based upon the employee's good faith determination, would violate a railroad operating rule relating to:

- *Shoving movements.*
- *Leaving equipment foul of an adjacent track.*
- Or*
- *Handling of hand-operated switches or fixed derails.*

A challenge may be resolved by one of the following:

- *The supervisor's acceptance of the employee's request.*
- *An employee's acceptance of the directive.*
- *An employee's agreement to a compromise solution acceptable to the person issuing the directive.*

87. The nearby track inspector looks but cannot line the switch to track one. However, he can line the route to main two. The crew informs the dispatcher who decides that since they will be traveling eastward on main two, there is a test load that needs to be picked-up at McCorkle's new transload facility. The car is an RBOX 205669 that weighs 100tns and is 55ft long. Will a new job briefing between crew members be appropriate right now?

([Safety 70.3: Job Briefing](#)) Last U.P. update: 11/11/2008

Yes! Use the Job Briefing process when changes occur to the work plan or conditions change.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

88. The train stops at McCorkle and Clark secures the train. After performing the release test and making the cut, they pull the head end over the switch. Clark lines the switch to back up into the McCorkle Industrial Lead. What must be discussed between the conductor and engineer before making the shove?

([GCOR 6.5: Shoving GCOR 6.5: Shoving Movements](#)) Last U.P. update: 7/29/2011
([CFR 218.99: Shoving or Pushing Movements](#))

Equipment must not be shoved until the engineer and the employee protecting the movement have completed a job briefing concerning how protection will be provided. Employee must be in position, provide visual protection of the equipment being shoved and must not engage in unrelated tasks while providing protection.

When taking a position ahead of the movement, employee must continuously observe the movement until the movement is stopped. Employee protecting the shove must not turn their back on the movement or walk backwards ahead of the movement.

Radio communications for shoving movements must specify the direction and distance and must be acknowledged when distance specified is more than four cars.

MOVEMENT MUST STOP WITHIN HALF THE DISTANCE SPECIFIED UNLESS ADDITIONAL INSTRUCTIONS ARE RECEIVED.

89. The switches at either end of the transload facility are PAS switches. How does the crew know how they are lined as they approach them? What tone to line themselves to the ramp?

([GCOR 8.19.1: Radio Controlled Switches](#)) Last U.P. update: 3/02/2010

Switches will automatically restore to normal position after movement is completed or 10 minutes pass. Normal is for the ladder track, reverse position is for the ramp. Refer the handout for the Big Rivers Subdivision (1963) Timetable, SI-11 Industrial Leads section.

To line the train into the ramp, press DTMF alpha-numeric characters "#01332166" on the radio's keypad.

90. Before the coupling is made, Clark stops the move. The drawbars need adjustment. What separation and protection does he need before going between equipment?

([Safety 81.5.4: Understanding between Crew Members before Crossing through or Fouling Equipment](#)) Last U.P. update: 7/29/2011

([Safety 81.13.1: Going between Cars](#)) Last U.P. update: 11/11/2008

- *Separate the equipment at least 100 feet.*
- *Allow the slack to adjust.*
- *Call Engineer Owens to establish and confirm a Red Zone for the work.*
- *On tracks where cars are likely to roll together, apply sufficient hand brakes, but not less than two, on the unattached portion to prevent movement before going between cars.*

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

91. They couple into the car, stretch the joint, cut-in the air, release the brake, and head back out to the main. The train pulls out onto the main but while making the movement the rear end stops in the CP at Truckee. What is required before they change direction?
([GCOR 6.4.2: Movements Within Control Points or Interlockings](#)) Last U.P. update: 6/05/2006

The Conductor needs to provide point protection.

A request to the Control Operator for making a reverse movement in the plant is not required, as the rest of the crew's train already occupies the preceding block. Their FRED (the train's true trailing end) never entered the OS.

92. What air-brake tests and inspections are required before they depart McCorkle?
([GCOR 1.33: Inspection of Freight Cars](#)) Last U.P. update: 3/11/2011
([ABTH 30.10: Initial Terminal Air Brake Test \(Class 1 Air Brake Test\)](#)) Last U.P. update: 3/18/2010
([ABTH 30.15: Application and Release Test \(Class 3 Brake Test\)](#)) Last U.P. update: 4/15/2001
*ABTH 30.3
*ABTH 30.7

For the car that was just picked up, complete a safety inspection and an Initial Terminal Air Brake Test (Class 1 Air Brake Test). Refer to [Rule 30.10.1: \(Requirement For Test\)](#) and [Rule 30.10.2: \(Procedure For Initial Terminal Air Brake Test \(Class 1\)\)](#).

Finally, complete an Application and Release Test (Class 3 Brake Test) for the entire train. Refer to [Rule 30.15.1: \(Requirement For Test\)](#) and [Rule 30.15.2: \(Procedure for Conducting An Application and Release Test\)](#).

93. After departing Truckee and while the train is accelerating and approaching 50 MPH, Conductor Clark sees a McCorkle Fertilizer truck fouling the grade crossing ahead. What actions should the crew take?
([ABTH 33.8: Emergency Brake Applications](#)) Last U.P. update: 6/06/2006
*ABTH 34.2.10

When emergency braking is necessary to protect life or property, use the maximum braking effort available consistent with safe train handling techniques.

When conditions warrant, use an emergency brake application without hesitation if any condition occurs in which there is doubt that service applications can control train speed. In addition, lift the red cover of the EMERGENCY SWITCH and activate the emergency valve on the end-of-train device (EOT) utilizing the head-of-train (HEU) telemetry device, if equipped.

Sound whistle “- - o -”. Refer to [Rule 5.8.2 \[7\]: \(Sounding Whistle\)](#).

Declare emergency status and initiate emergency call-in over the radio. Refer to [Rule 2.10 \(Emergency Calls\)](#).

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

94. Narrowly missing the fertilizer truck, the train is now stopped at Columbia. Since the train was placed in emergency, is a Class III air brake test required before departing? Will the crew be required to inspect the train to ensure all wheels are properly positioned (*sic*) on the track?
([GCOR 6.23: Emergency Stop or Severe Slack Action](#)) Last U.P. update: 3/23/2010
([GCOR 6.31: Maximum Authorized Speed](#)) Last U.P. update: 8/05/2003
([ABTH 30.15.1: Requirement for Test](#)) Last U.P. update: 5/02/2005
**ABTH 30.7.1*

Yes! A Class 3 Air Brake Test is required. Since operating with a distributed power consist, make a 20 psi brake pipe reduction with the automatic brake valve then use the Train Check feature. Refer to [Rule 30.15.2: \(Procedure for Conducting An Application and Release Test\)](#).

No, an inspection of the train is not required because:

- No mention of severe slack action;*
- No mention of the device located at the rear of train, not immediately indicating that the brake pipe pressure was not restored;*
- Train is not a Key train;*
And
- The train was traveling at a speed greater than 20 MPH at the time of the emergency application.*

Train must be stopped immediately and inspected, if excessive power is required to start or keep the train moving.

After the crew updates the paperwork they depart for Sacramento Yard.

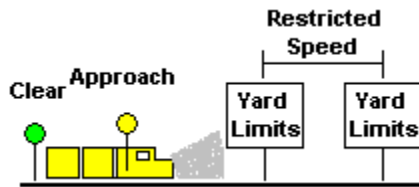
GULF COAST SUBDIVISION (Track Warrant Territory)

1. At MP 2.1 the crew identifies an Approach signal. What action is required? What is the train's maximum authorized speed at Seadrift?

([GCOR 6.13: Yard Limits](#)) Last U.P. update: 3/30/2005

([SSI Item 19, 9.2.6: Approach](#)) Last U.P. update: 7/29/2011

The Approach signal is located at MP 2.1. Yard Limits cover MP 2.5 to MP 6.9. Upon observing or having advance knowledge that a block signal may require Restricted Speed due to Yard Limits, if entering or within Yard Limits, the movement must be at Restricted Speed at that block signal, or as soon as possible thereafter, consistent with good train handling. Yard Limits remain in effect continuously unless otherwise specified by special instructions or track bulletin.



2. As the train passes Seadrift, an employee performing a roll-by on the adjacent track calls to report a car with a possible sticking brake. A gondola car 30 from the rear is smoking. What actions are required?

([GCOR 6.29.1: Inspecting Passing Trains](#)) Last U.P. update: 7/25/2007

([ABTH 32.5: Sticking Brakes](#)) Last U.P. update: 5/03/2005

[*ABTH 32.7.2](#)

When possible, crew members must notify the train dispatcher promptly of any condition that will delay or prevent their train from making the usual speed. Refer to Rule [GCOR 6.31: Maximum Authorized Speed](#).

Sticking brakes occur when brakes on a car(s) remain applied after a train brake release. When brakes stick:

1. Stop the train as soon as possible.
2. Determine why the brakes are sticking. Some reasons for sticking brakes include:
 - Overcharged air brake system.
 - Hand brakes applied.
 - Retaining valve not in EXHAUST.
 - Leak in the air brake system.
 - Releasing a brake pipe reduction with brake pipe air still exhausting.
 - An insufficient brake pipe reduction to ensure proper release.
3. Correct the problem.
4. If necessary, cut out the control valve or set out the car.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

3. If Owens is currently in idle, how should he stop the train in response to the sticking brake?
([ABTH 33.6.4: Stopping](#)) Last U.P. update: 5/03/2005
**ABTH 34.2.8*

According to the Grade Chart, Galveston Jct., located just east of Seadrift Yard, starts upon a comparatively flat plateau, dropping into a descending grade. As Owens already has the power in idle, most likely, the slack is in the process of bunching. The use of dynamic brakes as outlined below would provide good train handling:

When stopping on level or descending grade with dynamic brakes available with slack bunched:

- 1. Gradually reduce the throttle to IDLE. (already done)*
- 2. Wait 10 seconds.*
- 3. Activate the dynamic brake and gradually bunch the slack.*
- 4. Increase braking to the desired level.*
- 5. At a sufficient distance from the stop, make a minimum brake pipe reduction and actuate.*
- 6. Make further split reduction(s) as needed and actuate.*
- 7. As speed drops below dynamic brake range, supplement with the independent brake.*
- 8. Make a final brake pipe reduction and allow the locomotive brakes to apply.*

4. Conductor Clark walks back to the gondola and determines that the hand brake is released, but the air brakes on the car will not release. What will be required to avoid setting the car out?
([ABTH 30.13.3: Brakes Not Operating Properly](#)) Last U.P. update: 5/02/2005
**ABTH 32.7*

Cut out the control valve and drain the air reservoirs in order to release the gondola's brakes.

5. How will Clark cut out the air brakes on the gondola?
([ABTH 32.7.1: Procedure to Cut Out Control Valve or Automatic Vent Valve](#)) Last U.P. update: 5/03/2005
**ABTH 32.7.3*

Cut out control valves or automatic vent valve as follows:

- 1. Close the branch pipe cutout cock.*
- 2. When cutting out a control valve, drain the air reservoirs completely by operating the brake cylinder release valve.*

6. After Clark cuts the brakes out on the car, are there any other requirements before returning to the head end and departing Seadrift? What percentage of operative brakes must the train have?
([ABTH 30.4: Operative Brakes](#)) Last U.P. update: 3/18/2010
**ABTH 30.2.2*

Cars discovered with brakes that fail en route must be tagged on both sides and noted on space provided on train documentation and left in controlling locomotive cab form holder for relieving crew.

At least 85 percent of the cars in a train must have operative brakes under all circumstances.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

7. With the paperwork complete, what else is the crew required to do before departing Seadrift?
([ABTH 33.3.2: Delayed Departure](#)) Last U.P. update: 5/03/2005
([ABTH 32.7: Cutting Out Air Brake Equipment](#)) Last U.P. update: 4/16/2004
*ABTH 34.4
*ABTH 32.10.1
*ABTH 32.7.2

Notify dispatcher or mechanical help desk of the gondola's status. Notify dispatcher that the problem is resolved and the train is ready to continue eastward from its present location.

Since the train is operating with a distributed power consist that is equipped with the automatic Train Check feature at the rear of the train, the engineer will use it to verify brake pipe continuity.

8. After departing Seadrift, the crew passes an Approach Diverging at MP 15, what action is required?
([SSI Item 19, 9.2.5: Approach Diverging](#)) Last U.P. update: 7/29/2011

Proceed prepared to advance on diverging route at next signal at prescribed speed through turnout.

9. As the crew approaches Trinity Bay the dispatcher calls to issue the train a Level 1 Heat Restriction. How does this restriction affect the speed of their train?
([ABTH 33.12.1: Heat Restrictions](#)) Last U.P. update: 6/18/2009
*ABTH 34.2.13

When Level 1 or Level 2 heat restrictions are in effect, engineers must handle their trains according to [Rule 33.12: \(Disturbed Track\)](#) to the extent practicable.

According to the Engineer's copy of the Train List, the maximum authorized speed is 50 mph between BR101 and SR101 (which includes the Gulf Coast Subdivision). The train is currently averaging 88.31 tons per car or platform. As the freight train's average tonnage is less than 90 tons per car or platform, there are no additional restrictions regarding speed. Refer to [SSI Item 2-D: \(Maximum Speeds: Hot Weather\)](#).

However, the train is equipped with distributed power at the rear of the train. Operate in synchronous mode or in independent mode with distributed power 1-3 throttle notches below the lead consist in power and 1-3 throttle positions above the lead consist in dynamic brake, except when cresting a grade or when specific train handling procedures are required by local instructions. Refer to [SSI Item 2-D: \(Maximum Speeds: Hot Weather\)](#).

10. The next signal displays Diverging Approach. What is required to comply with this indication?
([SSI Item 19, 9.2.11: Diverging Approach](#)) Last U.P. update: 7/29/2011

Proceed on diverging route at prescribed speed through turnout prepared to stop before any part of train or engine passes the next signal. Freight trains exceeding 30 MPH must immediately reduce to 30 MPH.

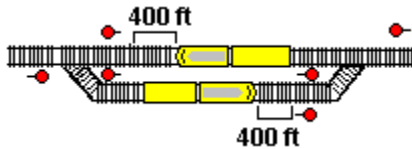
11. What is the maximum authorized train speed through the Trinity Bay turnout?
Timetable Gulf Coast Handout SI-03

Section SI-03 Other Speed Restrictions of the Gulf Coast Subdivision Timetable, shows an updated maximum authorized speed of 25 mph. through the siding and turnouts. Refer to Gulf Coast Subdivision General Order No. 5, SI-03 Other Speed Restrictions.

12. How far should the crew stop from the east fouling point?

([GCOR 6.8: Stopping Clear for Meeting or Passing](#)) Last U.P. update: 12/13/2004

A train that may be met or passed must stop at least 400 feet from the signal or clearance point of the facing point switch the other train will pass over, if length of train permits.



13. After meeting a westward train, the crew receives a Clear to depart Trinity Bay. The crew proceeds and enters the main track moving at 9 MPH. Would this be considered delayed in the block?

([GCOR 9.9: Train Delayed Within a Block](#)) Last U.P. update: 7/23/2010

No, the train had accelerated to 9 mph (so far) as it passed the block. The rule only applies if the train had reduced its speed below 10 mph, or had stopped in the block.

14. The signal at MP 26.5 displays a Stop indication. What is required to proceed?

([GCOR 9.12.2: Manual Interlockings](#)) Last U.P. update: 3/22/2010

([GCOR 14.2: Designated Limits](#)) Last U.P. update: 3/30/2005}

At a signal displaying a Stop indication, if no conflicting movement is evident, the train will be governed as follows:

- *A crew member must immediately contact the control operator.*
- *Before authorizing the train to proceed, the control operator must know that the route is properly lined and no conflicting movement is occupying or authorized to enter the track between that signal and the next absolute signal governing movement or the end of interlocking limits where applicable.*
- *The control operator may authorize the train to proceed by using hand signals or the following instructions, "After stopping, (train) at (location) has authority to pass signal displaying Stop indication," specifying the route where applicable. The train must move at Restricted Speed.*
- *If the signal governs movement over a drawbridge, a crew member must verify that the bridge is in the proper position for the train to pass.*

Before proceeding into or continuing in CTC territory, the manual interlocking control operator must be sure that the CTC control operator has given authority to proceed.

Exception

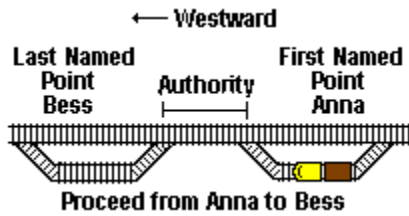
Conflicting Movement: *When the control operator has stopped a conflicting movement, he may then authorize another train to proceed, advising both crews of movements to be made. If the stopped movement is later permitted to proceed, that train must move at Restricted Speed until its leading wheels have passed the next governing signal or the end of the block system.*

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

15. In reference to track warrant # 4029, what are the limits of the trains' authority?
([GCOR 14.2: Designated Limits](#)) Last U.P. update: 3/30/2005}

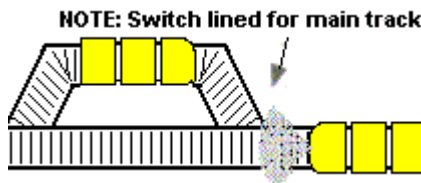
Track Warrant #4029 provides the UP8482 at Sacramento, authority from MP 26.5 to and includes the first siding switch at Sawgrass on the Main Track Gulf Coast Subdivision. Per Box #10, Clear Main Track at last named point.

*When a station name designates the last named point, authority extends to and includes the first siding switch. Authority extends to the station sign if no siding exists.
Here's a visual example:*



16. Once the train clears into the siding at Sawgrass and lines the switch behind, will they need to extinguish their headlight?
([GCOR 5.9.2: Headlight Off](#)) Last U.P. update: 7/06/2005

Yes. The train is stopped clear of the Main Track.



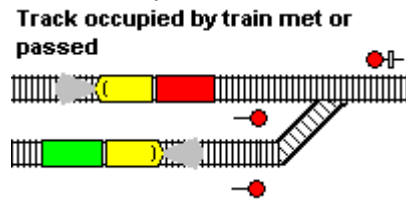
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17. The crew has copied track warrant # 4126 and is ready to depart Sawgrass after meeting a westward train. The signal governing movement from the siding to main track did not clear after the train passed. Can the crew call the dispatcher for permission to pass this signal displaying Stop?
([GCOR 9.12.4: ABS Territory, C. Siding or Other Track](#)) Last U.P. update: 7/23/2010
([GCOR 9.17: Entering Main Track at Hand-Operated or Spring Switch](#)) Last U.P. update: 3/25/2010
(Timetable Handout: Gulf Coast Subdivision)

The crew has Track Warrant #4126 in their possession; it is their authority to enter the Main Track. The absolute signal governing movement from the siding to main track is not controlled by the Dispatcher. After opening up the switch to enter the Main Track, proceed at Restricted Speed.

A 5 minute wait is not required as:

- *Main track between siding switches is occupied by a train that has been met or a standing train that will be passed.*



18. It is now 1640 hrs. and Clarks spots a Yellow / Red flag at MP 54.5. How does the crew comply with the Form B between MP 56.5 and 58.5?
([GCOR 5.4.3: Display of Yellow-Red Flag](#)) Last U.P. update: 3/12/2010
([GCOR 15.2: Protection by Track Bulletin Form B](#)) Last U.P. update: 10/21/2011

*The written Form B itself is dead. **HOWEVER**, when a Yellow-Red flag is displayed and the restriction is not specified by a track bulletin, track warrant, or general order, crew members must be prepared to stop short of a Red flag 2 miles beyond the Yellow-Red flag. Remember that the Maintenance of Way has a one hour period after the written Form B has expired to pull their flags.*

The crew needs to call the Employee-in-Charge of the Yellow-Red flag, located at MP 54.5 and request instructions. The crew also needs to be prepared to stop without passing a potential Red flag at MP 56.5 and hold at that location until further instructions are received from the Employee-in-Charge or Dispatcher.

19. At MP 56.5 the crew does not find a Red Flag displayed, how would they proceed?
([GCOR 5.4.3: Display of Yellow-Red Flag, B. Restriction Is Not Specified in Writing](#)) Last U.P. update: 3/12/2010

As the crew did not find a Red flag displayed at MP 56.5, it is assumed that they were not yet able to contact the Employee-in-Charge of the Yellow-Red flag located at MP 54.5. Therefore, the train will continue to move at Restricted Speed.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

20. When may the crew increase their speed in regard to the previous question?
([GCOR 5.4.3: Display of Yellow-Red Flag, B. Restriction Is Not Specified in Writing](#)) Last U.P. update: 3/12/2010

The crew may increase speed only after:

- a) *A crew member has received instructions from the Employee-in-Charge.*
Or
- b) *The leading wheels of movement are 4 miles beyond the Yellow-Red flag, and the Train Dispatcher has verified that no track bulletin or track warrant protecting men or equipment is in effect at that location.*

21. Before passing MP 65 what is required?
([GCOR 6.3: Main Track Authorization](#)) Last U.P. update: 3/23/2010

Refer to Boxes 12 and 18 of Track Warrant #4126. The crew needs to establish Joint Authority with Employee-in-Charge Samples before passing MP 65.

When a train or employee receives authority joint with an employee(s), the train or employee must not occupy the overlapping limits until working limits are described and permission is received to enter the overlapping limits from the employee(s) listed on the authority.

22. What is the train's maximum speed between MP 67 and MP 68?
([GCOR 6.31: Maximum Authorized Speed](#)) Last U.P. update: 8/05/2003

Refer to Boxes 12 and 13 of Track Warrant #4126. Restricted Speed with a maximum of 10 MPH between MP 67 and MP 68.

23. The signal at the BNSF Interlocking displays a Stop indication. How will the crew proceed?
([GCOR 9.12.4: ABS Territory](#)) Last U.P. update: 7/23/2010
([GCOR 9.12.3: Automatic Interlockings](#)) Last U.P. update: 3/30/2005
([SSI Item 19: Block and Interlocking Signals 9.2.15: Stop](#)) Last U.P. update: 7/29/2011

At a signal displaying a Stop indication, the crew will be governed by instructions in the release box, special instructions, or other instructions. After complying with the instructions that allow the train to proceed, if signal continues to display a Stop indication, the train must move at Restricted Speed. However, if there is a conflicting movement, the train must not proceed until the movement has passed or stopped, and both crews agree on the next movement.

24. They are now proceeding through the limits of the BNSF interlocking at Restricted Speed. When may they increase their train's speed?
([GCOR 9.11: Movement from Signal Requiring Restricted Speed](#)) Last U.P. update: 11/06/2008

When the train passes a signal requiring movement at Restricted Speed, the train must move at Restricted Speed until its leading wheels have passed the next governing signal or the end of the block system.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

25. The dispatcher wants to put the train in the siding at Bullfrog Bayou to meet a westward train. Once cleared in the siding, would the crew need to get track breach if there was work that was required between the siding and the main track? What if the warrant has been released?
([SSI Item 12: Track Breach Protection](#)) Last U.P. update: 10/8/2010

No. The train has TWC authority in non-signalized territory on the adjacent track.

If the warrant had been released, then yes, the crew would need to get Track Breach Protection.

26. After Clark releases the track warrant and the other train passes, the dispatcher issues them track warrant # 4152. In addition he instructs the crew to pick up 4 empty non-placarded tank cars located at Coastal Chemicals (CC) MP 89.3. The cars are 75ft each in length and each weigh 45 tons. The train proceeds and stops clear of the Coastal Chemical switch. During the job briefing Clark asks if 6 axle units may be operated in CC track. What should Owens tell him?
(Timetable Handout SI-14 Misc. Instructions)

Yes. Checking the Gulf Coast Subdivision Timetable, Subdivision General Order and Bulletins, no 6 axle limitation is listed for Coastal Chemicals Business Track.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

27. They proceed to Coastal Chemicals to pick-up the cars. Clark stops the move and walks back to the cars. What must he do before making a coupling?
([GCOR 7.4: Precautions for Coupling or Moving Cars or Engines](#)) Last U.P. update: 8/5/2003
([GCOR 7.8: Coupling or Moving Cars on Tracks Where Cars are Being Loaded or Unloaded](#)) Last U.P. update: 3/22/2010

Before coupling to or moving cars on tracks where cars are being loaded or unloaded, crew members must be sure that all of the following have been removed or cleared:

- *Persons in, on, or about cars*
- *Platforms*
- *Boards*
- *Tank car couplings and connections*
- *Conveyors*
- *Loading or unloading spouts and similar appliances or connections*
- *Vehicles*
- *Other obstructions*

In addition:

- *Be careful to avoid damage to freight of partly loaded cars.*
- *Do not handle cars that are improperly or unevenly loaded if load could shift or fall from the car, or if the car could derail or overturn.*
- *Return any car placed for loading or unloading to the location it was found if it has not been released for movement.*
- *Do not pull empty cars from an unloading facility until any major accumulation of debris is removed.*
- *Ensure that plug-type and swinging doors on cars are closed or secured. However, crew members must not attempt to close those doors. If plug door is found open enroute, car may continue in the train to the next location where mechanical forces are available to close door.*

Before coupling to or moving cars or engines, verify that the cars or engines are properly secured and can be coupled and moved safely.

Make couplings at a speed of not more than 4 MPH. Stretch the slack to ensure that all couplings are made.

28. The crew completes the move and is ready to perform the air test. What air brake test(s) and or inspection(s) will be required before departing Coastal Chemicals?
([GCOR 1.33: Inspection of Freight Cars](#)) Last U.P. update: 3/11/2011
([ABTH 30.10: Initial Terminal Air Brake Test \(Class 1 Air Brake Test\)](#)) Last U.P. update: 3/18/2010
([GCOR 30.15: Application and Release Test \(Class 3 Brake Test\)](#)) Last U.P. update: 4/15/2004
*ABTH 30.3
*ABTH 30.7

For the four cars that were just picked up, complete a safety inspection and an Initial Terminal Air Brake Test (Class 1 Air Brake Test). Refer to [Rule 30.10.1: \(Requirement For Test\)](#) and [Rule 30.10.2: \(Procedure For Initial Terminal Air Brake Test \(Class 1\)\)](#).

Finally, complete an Application and Release Test (Class 3 Brake Test) for the entire train. Refer to [Rule 30.15.1: \(Requirement For Test\)](#) and [Rule 30.15.2: \(Procedure for Conducting An Application and Release Test\)](#). As this train has a distributed power consist, make a 20 psi brake pipe reduction with the automatic brake valve, then use the Train Check feature.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

29. Attempting the air brake test, the remote DP consist is not responding. They notify the dispatcher that Clark will proceed to the rear to troubleshoot. Upon arriving he notices the locomotive has shut down and will not restart. Clark informs the dispatcher of the condition but the dispatcher instructs them to make their tests and drag their engine to Compano Yard. Could they comply with the dispatchers instructions?

([ABTH 32.12.6: Distributed Power](#)) Last U.P. update: 9/02/2010

*ABTH 33.2

No. Per Section E. of Rule 32.12.6: Locomotives manually isolated due to enroute failure must be set out as directed by the train dispatcher.

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30. MOP Robinson and a roundhouse truck arrive and repair the problem with the rear remote locomotive. The crew relinks the train and reports the delay and repair to the dispatcher. Continuing ~~westward~~ {should be **eastward**, per the Timetable and Map Handout} they are now approaching Matagorda Siding. What must they ensure before they pass the siding?
(GCOR 8.19.1: Radio Controlled Switches) Last U.P. update: 3/02/2010

They must ensure that the FAS-PAS switches are lined for their intended movement.

The location of radio controlled switches and operating instructions will be designated in the Timetable and Special Instructions. When movement authority requires a train to stop at an Automatic Switch location, stop must be made before any part of a train passes the signal governing movement over the Automatic Switch.

At locations (designated in the timetable) where radio controlled Power Assisted Switches (PAS) are installed, the following applies:

PAS locations are equipped with:

- *Dual control switch machines.*
- *Bidirectional switch point indicators per (Rule 8.10: Switch Point Indicator).*
- *Occupancy (OS) circuits with limits marked by signs reading "Begin OS" and "End OS".*

Signs reading "Switch Control" are located approximately 2 miles from the PAS locations.

Operating Instructions:

1. *Upon passing a "Switch Control" sign use the radio keypad to transmit the proper sequence (designated in the timetable) to request the desired switch position and receive radio transmitted verbal confirmation of switch alignment at that location.*
2. *Once radio confirmation of proper switch alignment has been received, movement through the PAS location must be made within 10 minutes of confirmation or the movement must approach the PAS location prepared to stop.*
3. *If radio confirmation of proper switch alignment is not received, movement must approach the PAS location prepared to stop until the switch point indicator can be clearly seen to indicate proper switch alignment. Notify the train dispatcher that radio confirmation was not received.*

Stop and Inspect Switch

1. *If the radio message received is "Switch Not Lined" or no radio message is received and the switch point indicator continues to display an indication to stop and inspect switch:*
2. *Movement must stop before entering the OS circuit limits.*
3. *After stopping, the PAS may be operated by unlocking the box on the side of the signal bungalow and using the push-button.*
4. *After push-button operation is attempted, if the switch point indicator continues to display an indication to stop and inspect switch, employee must operate the switch by hand as outlined in Rule 9.13.1 (Hand Operation of Dual Control Switches).*

Note: *If the switch point indicator can be clearly seen to indicate proper switch alignment, the movement may proceed without stopping. Notify the train dispatcher of malfunction.*

Movement Completely Through a PAS Location

After movement has been made through a PAS location, the switch point indicator will display an indication to stop and inspect switch and the switch will remain in the normal position. If switch was reversed, it will return to the normal position.

Continued...

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

Question #30 continued...

Route Change

If necessary to change the route that was originally requested, movement must stop outside the OS circuit limits and:

- Wait 15 minutes and then enter the proper sequence to line the switch for the desired route.
 - Wait 15 minutes and then operate the push-button on the signal bungalow to line the switch for the desired route.
- or
- Operate the switch by hand as outlined in Rule 9.13.1 (Hand Operation of Dual Control Switches) to line the switch for the desired route.

Additional Instructions

The PAS will not operate if the OS circuit at the PAS location is occupied. A proper sequence or push-button request must be made and confirmation of proper switch alignment must be received before movement enters the OS circuit limits at the PAS location.

31. The crew arrives at Compano Yard. What is the train's maximum authorized speed at the west end of the yard?

([GCOR 6.27: Movement at Restricted Speed](#)) Last U.P. update: 11/4/2008

Restricted Speed with a maximum of 5 MPH.

32. The crew sees a red flag ahead and stops the train accordingly. MOP Robinson boards the engine to debrief the FTX. Is it required that Robinson give the crew a copy of the FTX?

([FTX Policy Managers Guide: p.15](#)) Last U.P. update: 7/20/2011

Yes.

The field debriefing form must be completed for each structured and below standard testing event:

- Employee is to be afforded the opportunity to make comments and sign the field debriefing form. Managers must sign the field debriefing form to acknowledge the employees have been debriefed. A copy will be retained for the manager's records for 60 days from the date the test was entered, and a copy will be given to each employee tested.
- An employee's signature is not a requirement on the field debriefing form; however, a notation must be made as to why a signature is not on the form. Field Debriefing Forms involved in a challenge must be retained until challenge has been resolved.

33. After the FTX is completed and Robinson refocuses the crew, he informs them that they will set out all of their cars in yard track 3 and then take the power to track 4. Can the crew leave the DP unit(s) unattended on the main track while setting out the cars?

([ABTH 32.1.3: Unattended Locomotive\(s\)](#)) Last U.P. update: 4/29/2011

**ABTH 32.2.1*

Yes. Distributed power remote consists may be left standing with all hand brakes applied at any location, even on the main track, for short durations when in the process of making up or disassembling a DP train.

2012 TE&Y ****BETA 1.0**** STUDY GUIDE RESOURCE

34. Is a release test required for the cars being left in track 3?
([ABTH 32.1: Securing Equipment against Undesired Movement](#)) Last U.P. update: 10/21/2011
**ABTH 32.1.2*

No. Crew members are responsible for securing standing equipment with hand brakes to prevent undesired movement. The air brake system must not be depended upon to prevent an undesired movement.

Per the Gulf Coast Timetable SI-O8 Rules Items: [Rule 7.6: \(Securing Cars or Engines\)](#) Copano Yard: Two handbrakes are required on the east end of all Yard Tracks.