UNION PACIFIC RAILROAD

2023 COMPLETE TE&Y Rules Training Packet

*** *THIS WILL BE ALL YOU NEED TO PRINT* ***

*** *ALL DOCUMENTS REQUIRED FOR CLASS ARE IN THIS DOCUMENT* ***

This document contains the following items and is required to answer the questions in the study guide:

- **2023 Training Paperwork**
  - **Track Bulletins**
  - **TWC Track Warrants**
  - **Subdivision General Orders**
- **2023 Training Timetable**
- **2023 Rules Training Study Guide**
- **2023 HazMat Study Guide**

UNION PACIFIC RAILROAD

2023 Training Paperwork

****** TO BE USED WITH 2023 STUDY GUIDE ******

This document contains the following items and is required to answer the questions in the study guide:

- **Track Bulletins**
- **Track Warrants**
- **Subdivision General Orders**:
    - Orange Subdivision
    - Rose Subdivision
    - Sugar Subdivision
    - Fiesta Subdivision
    - Iowa Subdivision
- **Training Timetable**

TRACK CONDITION SUMMARY

NO: 6296 DATE: TODAY

FROM: SUNFLOWER TO: LAWRENCE/CORVALLIS

TO: ALL TRAINS

ON: ORANGE (1975) FIESTA (1952) SUB.

04 TRACK BULLETINS IN EFFECT: 1836 3114 83 44629 8445

THIS TRACK CONDITION SUMMARY IS USED TO DELIVER TRACK BULLETINS ONLY AND DOES NOT CONVEY AUTHORITY TO OCCUPY THE MAIN TRACK.

OK 0600 DISPATCHER RCB

NO: 6296 TO: ALL TRAINS

ORANGE (1975)
1836 3114 83

FORM C NO: 1836 TODAY
COMPLY WITH PROCEDURE XH AT MP 237.81 ON ALL TRACKS

FORM C NO: 3114 TODAY
EFFECTIVE 0000 HOURS (TODAY'S DATE) SIGNAL SYSTEM SUSPENDED ON THE ORANGE SUBDIVISION BETWEEN CP W216 MP 216.0 AND CP W206 MP 205.6
TRAINS OPERATING PTC MUST STOP PRIOR TO PASSING FIRST SUSPENDED SIGNAL AND PERFORM A SOFT CUT OUT BEFORE ENTERING THE SIGNAL SUSPENSION LIMITS.
FIRST SUSPENDED SIGNALS FOR MOVES ON TRACKS ARE AS FOLLOWS:
EASTWARD
MAIN TRACK CP W216 MP 216.0
WESTWARD
ALL TRACKS CP W206 MP 205.6
FIRST OPERATING SIGNALS FOR MOVES ON TRACKS ARE AS FOLLOWS:
EASTWARD
MAIN TRACK CP W206 MP 205.6
WESTWARD
ALL TRACKS CP W216 MP 216.0
WHEN LEAVING THE SIGNAL SUSPENSION LIMITS; BETWEEN THE LAST INOPERATIVE SIGNAL AND PRIOR TO PASSING THE FIRST OPERATIVE SIGNAL, PTC EQUIPPED TRAINS MUST: REDUCE TO 15 MPH OR LESS, CUT IN PTC, AND PERFORM A TRACK SELECTION. PTC WILL TRANSITION TO ACTIVE STATE AFTER MOVING APPROXIMATELY 30 FEET AND IMMEDIATELY ENFORCE RESTRICTED SPEED UNTIL TRAIN PASSES NEXT SIGNAL.
IF TRAIN CONSIST DISPLAYED BY THE PTC SYSTEM ON THE CONSIST PAGE IS INCORRECT, ENGINEER MUST STOP IN ADVANCE OF THE FIRST OPERATIVE SIGNAL AND UPDATE TRAIN CONSIST BEFORE CONTINUING.
BE GOVERNED BY GCOR RULES 9.23, 9.23.1, 18.1, 18.2, 18.4, 18.6, AND 18.7
MAXIMUM SPEED PER TIMETABLE AND GENERAL ORDER INSTRUCTIONS NOT TO EXCEED 59 MPH FOR PASSENGER TRAINS AND 49 MPH ON ALL OTHER TRAINS.
ALL TRAINS MUST STOP BEFORE ENTERING THESE LIMITS UNLESS AUTHORIZED TO PROCEED BY EMPLOYEE IN CHARGE. NO FOLLOWING MOVEMENT ON THE SAME TRACK WILL BE PERMITTED TO ENTER THESE LIMITS UNTIL A PRECEDING MOVEMENT HAS CLEARED THE LIMITS OR PASSED A FLAGMAN LOCATED AT THE NEXT INTERMEDIATE POINT. FLAG PROTECTION AGAINST FOLLOWING TRAINS ON THE SAME TRACK IS NOT REQUIRED.
FLAGMAN SWITCH TENDER LOCATED AT CP W216 MP 216.0, CP W213 MP 213.2, AND CP W206 MP 205.6 ON THE ORANGE SUBDIVISION.
ALL TRAINS MUST STOP SHORT OF FLAGMEN UNLESS AUTHORIZED TO PROCEED.
OK TIME: 00:00 P TODAY DISPATCHER: RCB

FORM C NO: 83 TODAY
COMPLY WITH PROCEDURE XG AT MP 174.50 ON ALL TRACKS

NO: 6296 TO: ALL TRAINS

FIESTA (1952)
44629 8445

LINE NO	LIMITS FROM MP	LIMITS TO MP	TRACK	FLAG AT MP	FOR DIR

***** FORM B NO: 44629 *****
ON TODAY BE GOVERNED BY RULE 15.2 WITHIN THE FOLLOWING LIMITS:
1. 384.00 382.00 ALL
FROM: 00:01 P TODAY UNTIL: 23:59 P TODAY
GANG NO: 8470 FOREMAN: SMITH

FORM C NO: 8445 TODAY
SIDING TRACK IS OUT OF SERVICE BETWEEN
CP M362 AND CP M360
BE GOVERNED BY GCOR RULE 15.4 USE ONLY AS AUTHORIZED BY MTM (909 235-5000)

SAFETY BULLETINS

RADIO SPEED RESTRICTIONS AND OTHER CONDITIONS DELIVERED ENROUTE

SUBDIVISION _____

FROM MP _____ TO MP _____ DO NOT EXCEED _____ MPH

(ON _____ TRK)

_____ NO FLAGS DISPLAYED
_____ FLAGS DISPLAYED AT MP _____ FOR _____ TRAINS

OK _____ DISPR _____

==========

SUBDIVISION _____

FROM MP _____ TO MP _____ DO NOT EXCEED _____ MPH

(ON _____ TRK)

_____ NO FLAGS DISPLAYED
_____ FLAGS DISPLAYED AT MP _____ FOR _____ TRAINS

OK _____ DISPR _____

==========

SUBDIVISION _____

FROM MP _____ TO MP _____ DO NOT EXCEED _____ MPH

(ON _____ TRK)

_____ NO FLAGS DISPLAYED
_____ FLAGS DISPLAYED AT MP _____ FOR _____ TRAINS

OK _____ DISPR _____

****

GRADE CROSSING PROTECTION _____ SUBDIVISION

COMPLY WITH PROCEDURE _____ AT MP _____

OK _____ DISPR _____

==========

GRADE CROSSING PROTECTION _____ SUBDIVISION

COMPLY WITH PROCEDURE _____ AT MP _____

OK _____ DISPR _____

RADIO SPEED RESTRICTIONS AND OTHER CONDITIONS DELIVERED ENROUTE

==========

FLASH FLOOD WARNING _____ SUBDIVISION
COMPLY WITH PROCEDURE FF BTWEEN MP _____ AND MP _____
OK _____ DISPR _____

==========

FLASH FLOOD WARNING _____ SUBDIVISION
COMPLY WITH PROCEDURE FF BTWEEN MP _____ AND MP _____
OK _____ DISPR _____

==========

_____ _____ ABSOLUTE BLOCK IS ESTABLISHED IN ADVANCE OF
(TRAIN ID) (DIR)
YOUR TRAIN BETWEEN _____ AND _____ GCOR RULE 11.2 GOVERNS

****

TRACK BREACH PROTECTION ESTABLISHED FOR (ENG)_____

(EMPLOYEE) _____ BETWEEN _____ AND _____ ON

_____ TRACK AT (TIME) _____ DELETED AT _____

==========

WHEN AUTHORIZED TO PASS STOP INDICATION:
"AFTER STOPPING, _____ AT _____ HAS AUTHORITY TO PASS SIGNAL
(TRAIN ID) (LOCATION)
DISPLAYING STOP INDICATION (_____)."
(ADD ROUTE & DIRECTION IF NECESSARY)

****

WHEN AUTHORIZED TO ENTER CTC:

"_____ AT _____ HAS AUTHORITY TO ENTER _____
(TRAIN ID) (LOCATION) (TRACK)
AND PROCEED _____."
(DIRECTION)

****

WHEN CLEARED TO ENTER FORM B LIMITS: FOREMAN _____

GANG _____ USING (1/2) FORM B TRK BULLETIN(S) ON _____ (DATE).

TRK BULLETIN# _____ LINE#(S)_____ TRK#(S)_____ON _____ SUB

TRK BULLETIN# _____ LINE#(S)_____ TRK#(S)_____ON _____ SUB

BETWEEN MP _____ AND MP _____. (TRAIN ID) MAY PASS RED FLAG AT

MP _____ WITHOUT STOPPING. (TRAIN ID) MAY PROCEED THROUGH THE LIMITS

AT _____ MPH (OR MAX AUTHORIZED SPEED), WITH THE FOLLOWING EXCEPTION:

BETWEEN MP _____ AND MP _____ DO NOT EXCEED _____ MPH, SOUNDING

WHISTLE AND BELL WHEN APPROACHING AND PASSING MEN OR EQUIPMENT.

.....UPRR TRAIN AND LOCOMOTIVE SECUREMENT CHECKLIST.....

USED IN COMPLIANCE W/ UPRR ABTH CH 32 & SSI ITEM 10-L TO AID CREW MEMBERS WHEN SECURING TRAINS W/ LOCOMOTIVE ATTACHED. UPON COMPLETION, BOTH CONDUCTOR & ENGINEER MUST SIGN CHECKLIST. UNLESS OTHERWISE INSTRUCTED, LEAVE THE COMPLETED FORM IN THE LOCOMOTIVE INSPECTION REPORT CARD HOLDER

SECUREMENT PROCEDURES (RULE 32.1.1)

( ) 1. PRIMARY PROCEDURE (APPLY HANDBRAKES AND RELEASE ALL AIR BRAKES)

( ) 2. SECONDARY PROCEDURE (SECUREMENT CHART)

LOCOMOTIVE SECUREMENT (RULE 32.2.1)

( ) 1. THROTTLE IS IN IDLE AND REVERSER REMOVED

( ) 2. GENERATOR FIELD SWITCH OFF

( ) 3. APPLY ALL HANDBRAKES ON LEAD CONSIST. RELEASE LOCOMOTIVE BRAKES TO DETERMINE HANDBRAKES PREVENT MOVEMENT. REAPPLY LOCOMOTIVE BRAKES

( ) 4. INDEPENDENT BRAKE IS CUT IN AND FULLY APPLIED

( ) 5. AUTOMATIC BRAKE IS CUT IN AND APPLIED WITH A 20 PSI BRAKE PIPE REDUCTION

( ) 6. ENGINE CONTROL SWITCH IS IN THE ISOLATE POSITION ON ALL UNITS IN THE LEAD CONSIST

( ) 7. TRAILING LOCOMOTIVES ARE SHUT DOWN IF REQUIRED AND DOORS AND WINDOWS ARE CLOSED

( ) 8. DOORS AND WINDOWS LOCKED ON LEAD LOCOMOTIVE IF CAPABLE

OTHER INFORMATION:

( ) 1. HAND BRAKES ARE APPLIED ON _____ HEAD CARS AND/OR _____ REAR CARS

( ) 2. TRAIN CUT FOR _____ HIGHWAY CROSSINGS

( ) 3. TRAIN IS CLEAR OF CROSSINGS AS REQUIRED BY 6.32.4.

( ) 4. DISPATCHER, YARDMASTER, OTHER AUTHORITY NOTIFIED TRAIN IS SECURE KEY TRAIN SECUREMENT ON A MAIN TRACK OR SIDING (SSI ITEM 10-L) INFORM DISPATCHER THAT TRAIN IS SECURE IN FOLLOWING MANNER:

"TRAIN _____ (TRAIN ID) IS SECURED USING _____ (PRIMARY/SECONDARY/BOTH) SECUREMENT PROCEDURE(S) AT _____ (LOCATION) WITH _____ (#) HAND BRAKES APPLIED ON THE _____ (HEAD/REAR/BOTH) END(S). THE WEIGHT OF THE TRAIN IS _____ TONS AND IS _____ FEET LONG. THE TRAIN IS ON _____ % (LEVEL/ASCENDING/DESCENDING) GRADE AND IS _____ (CUT/IN ONE PIECE) ON _____ (STRAIGHT/CURVED) TRACK. THERE ARE _____ (#) CROSSINGS CUT. THE TRAIN IS _____ (INTERMODAL/MANIFEST/UNIT/LOCAL). THE CURRENT WEATHER IS _____ (CLEAR/CLOUDY/RAIN/FOG/SLEET/SNOW)." (IF UNABLE TO LOCK THE DOORS OF THE CONTROLLING LOCOMOTIVE, REMOVE THE REVERSER AND TAKE IT WITH YOU.)

_____ (ENGINEER EID/INITIALS)

_____ (CONDUCTOR EID/INITIALS)

TRAIN ID _____ DATE _____ TIME _____ LOCATION _____

TRACK AUTHORITY FORM – TE&Y FORM 20705

(circle one)

(Track Warrant) Track & Time Track Permit

Number: 86-75 Date: TODAY'S DATE

To: LOCAL At: IOWA

1. ☐ Track warrant _____ is void
2. ☐ Not in effect until after the arrival of _____, _____, _____ at _____
3. ☒ Proceed from CP W204 to MP 180.5 on MAIN track ORANGE Subdivision
4. ☐ Hold Main Track at last named point
5. ☐ Clear Main Track at last named point
6. ☐ Do not foul limits ahead of _____, _____, _____
7. ☐ Work between _____ and _____ on _____ track _____ Subdivision
8. ☐ Authority granted between CP _____ on _____ (track) Switch Yes / No
   and CP _____ on _____ (track) Switch Yes / No
   Joint _____ Blocked until _____ Extended to _____
9. ☒ Limits jointly occupied between WACO and AMES
   (NOTE: Trains must move at restricted speed within joint authority limits)
10. ☒ Joint with SMITH between WACO and AMES
    Joint with _____ between _____ and _____
    Joint with _____ between _____ and _____
11. ☐

From	To	Speed	Track	Flags At

12. ☐ Comply with Procedure _____ at/between MP _____ and MP _____
    Comply with Procedure _____ at/between MP _____ and MP _____
    The ___ switch at _____ is lined for siding
    The ___ switch at _____ is lined for siding
    Leave the ___ switch at _____ lined for siding
    Leave the ___ switch at _____ lined for siding

3 Box(es) marked: 3, 9, 10, _____, _____, _____, _____, _____, _____, _____

OK at 0900 Dispatcher RCB Relayed to _____ Copied by CREW MEMBER

Clear of _____ at _____ Disp _____ by _____
Clear of _____ at _____ Disp _____ by _____
Clear of _____ at _____ Disp _____ by _____

Limits reported clear at _____ by _____

TRACK AUTHORITY FORM – TE&Y FORM 20705

(circle one)

(Track Warrant) Track & Time Track Permit

Number: 51-50 Date: TODAY'S DATE

To: LOCAL At: BEDLAM

1. ☒ Track warrant 86-75 is void
2. ☐ Not in effect until after the arrival of _____, _____, _____ at _____
3. ☒ Proceed from MP 175.0 to RED RIVER on MAIN track ORANGE Subdivision
4. ☐ Hold Main Track at last named point
5. ☒ Clear Main Track at last named point
6. ☐ Do not foul limits ahead of _____, _____, _____
7. ☐ Work between _____ and _____ on _____ track _____ Subdivision
8. ☐ Authority granted between CP _____ on _____ (track) Switch Yes / No
   and CP _____ on _____ (track) Switch Yes / No
   Joint _____ Blocked until _____ Extended to _____
9. ☐ Limits jointly occupied between _____ and _____
   (NOTE: Trains must move at restricted speed within joint authority limits)
10. ☐ Joint with _____ between _____ and _____
    Joint with _____ between _____ and _____
    Joint with _____ between _____ and _____
11. ☐

From	To	Speed	Track	Flags At

12. ☐ Comply with Procedure _____ at/between MP _____ and MP _____
    Comply with Procedure _____ at/between MP _____ and MP _____
    The ___ switch at _____ is lined for siding
    The ___ switch at _____ is lined for siding
    Leave the ___ switch at _____ lined for siding
    Leave the ___ switch at _____ lined for siding

3 Box(es) marked: 1, 3, 5, ____, ____, ____, ____, ____, ____, ____

OK at 1000 Dispatcher RCB Relayed to _____ Copied by CREW MEMBER

Clear of _____ at _____ Disp _____ by _____
Clear of _____ at _____ Disp _____ by _____
Clear of _____ at _____ Disp _____ by _____

Limits reported clear at _____ by _____

TRACK AUTHORITY FORM – TE&Y FORM 20705

(circle one)

Track Warrant **Track & Time** **Track Permit**

Number: 63-28 Date: TODAY'S DATE

To: LOCAL At: RED RIVER

1. ☒ Track warrant 51-50 is void
2. ☒ Not in effect until after the arrival of UP 5309 WEST, _____, _____ at RED RIVER
3. ☒ Proceed from RED RIVER to MORGANTOWN on MAIN track ORANGE Subdivision
4. ☐ Hold Main Track at last named point
5. ☒ Clear Main Track at last named point
6. ☐ Do not foul limits ahead of _____, _____, _____
7. ☐ Work between _____ and _____ on _____ track _____ Subdivision
8. ☐ Authority granted between CP _____ on _____ (track) Switch Yes / No
   and CP _____ on _____ (track) Switch Yes / No
   Joint _____ Blocked until _____ Extended to _____
9. ☐ Limits jointly occupied between _____ and _____
   (NOTE: Trains must move at restricted speed within joint authority limits)
10. ☐ Joint with _____ between _____ and _____
    Joint with _____ between _____ and _____
    Joint with _____ between _____ and _____
11. ☐

From	To	Speed	Track	Flags At

12. ☒ Comply with Procedure _____ at/between MP _____ and MP _____
    Comply with Procedure _____ at/between MP _____ and MP _____
    The ___ switch at _____ is lined for siding
    The ___ switch at _____ is lined for siding
    Leave the ___ switch at _____ lined for siding
    Leave the ___ switch at _____ lined for siding
    Cars secured on siding track at Morgantown

5 Box(es) marked: 1, 2, 3, 5, 12, _____, _____, _____, _____, _____

OK at 1100 Dispatcher RCB Relayed to _____ Copied by CREW MEMBER

Clear of _____ at _____ Disp _____ by _____
Clear of _____ at _____ Disp _____ by _____
Clear of _____ at _____ Disp _____ by _____

Limits reported clear at _____ by _____

TRACK AUTHORITY FORM – TE&Y FORM 20705

(circle one)

(Track Warrant) **Track & Time** **Track Permit**

Number: 10-68 Date: TODAY'S DATE

To: LOCAL At: MORGANTOWN

1. ☒ Track warrant 63-28 is void
2. ☐ Not in effect until after the arrival of _____, _____, _____ at _____
3. ☒ Proceed from MORGANTOWN to MP 175.0 on MAIN track ORANGE Subdivision
4. ☐ Hold Main Track at last named point
5. ☐ Clear Main Track at last named point
6. ☐ Do not foul limits ahead of _____, _____, _____
7. ☐ Work between _____ and _____ on _____ track _____ Subdivision
8. ☐ Authority granted between CP _____ on _____ (track) Switch Yes / No
   and CP _____ on _____ (track) Switch Yes / No
   Joint _____ Blocked until _____ Extended to _____
9. ☐ Limits jointly occupied between _____ and _____
   (NOTE: Trains must move at restricted speed within joint authority limits)
10. ☐ Joint with _____ between _____ and _____
    Joint with _____ between _____ and _____
    Joint with _____ between _____ and _____
11. ☐

From	To	Speed	Track	Flags At

12. ☐ Comply with Procedure _____ at/between MP _____ and MP _____
    Comply with Procedure _____ at/between MP _____ and MP _____
    The ___ switch at _____ is lined for siding
    The ___ switch at _____ is lined for siding
    Leave the ___ switch at _____ lined for siding
    Leave the ___ switch at _____ lined for siding

2 Box(es) marked: 1, 3, _____, _____, _____, _____, _____, _____, _____, _____

OK at 1300 Dispatcher RCB Relayed to _____ Copied by CREW MEMBER

Clear of _____ at _____ Disp _____ by _____
Clear of _____ at _____ Disp _____ by _____
Clear of _____ at _____ Disp _____ by _____

Limits reported clear at _____ by _____

UPRR TRAINING Area Timetable No. 7
Effective December 06, 2022
ORANGE Subdivision General Order No. 2

PURPOSE:
SI-00: Change Station page; CP W213 at MP 213.2 placed in service; CP W215 at MP 214.8 removed from service; Change siding capacity at Texas to read 14,500 feet.
SI-01: Add additional PTC Limits; Add Electronic Conveyance limits.

Recent Changes:
Training Area Timetable #7 in effect at 0900C on December 06, 2022.
Subdivision instructions not modified by this General Order remain in effect.

EFFECTIVE: 0900C, December 26, 2022

CANCELLATIONS:
This order cancels all previous orders for the ORANGE Subdivision.

SI-00 STATION MILES
Effective 1100C on December 27, 2022:
Change Station page at Texas to read:

213.2 216.0	CTC	W213 W216	TEXAS (10.8)	!	RR215	14500

SI-01 MAIN TRACK AUTHORITY
Effective 1100C on December 27, 2022:
Change part to read:
PTC between:
CP W053 and CP W143;
CP W204 and CP W238.
Add:
EC between:
CP W143 and CP W204.

SIGNATURE: J. DOE
SIGNATURE TITLE: GENERAL MANAGER

UPRR TRAINING Area Timetable No. 7
Effective December 06, 2022
ROSE Subdivision General Order No. 1

PURPOSE:
Training Area Timetable #7 in effect at 0900C on December 06, 2022.
Subdivision instructions not modified by this General Order remain in effect.

EFFECTIVE: 0900C, December 06, 2022

CANCELLATIONS:
This order cancels all previous orders for the ROSE Subdivision.

SIGNATURE: J. DOE
SIGNATURE TITLE: GENERAL MANAGER

UPRR TRAINING Area Timetable No. 7
Effective December 06, 2022
SUGAR Subdivision General Order No. 1

PURPOSE:
Training Area Timetable #7 in effect at 0900C on December 06, 2022.
Subdivision instructions not modified by this General Order remain in effect.

EFFECTIVE: 0900C, December 06, 2022

CANCELLATIONS:
This order cancels all previous orders for the SUGAR Subdivision.

SIGNATURE: J. DOE
SIGNATURE TITLE: GENERAL MANAGER

UPRR TRAINING Area Timetable No. 7
Effective December 06, 2022
FIESTA Subdivision General Order No. 2

PURPOSE:
SI-01: Add PTC Limits.
SI-07: Change Detector Table; % detector at MP 377.8 placed in service.
Recent Changes:
Training Area Timetable #7 in effect at 0900C on December 06, 2022.
Subdivision instructions not modified by this General Order remain in effect.

EFFECTIVE: 0900C, December 26, 2022

CANCELLATIONS:
This order cancels all previous orders for the FIESTA Subdivision.

SI-01 MAIN TRACK AUTHORITY
Effective 1100C on December 27, 2022:
Add:
PTC between:
CP W142 and CP M321.

SI-07 ITEM 13 TRAIN DEFECT DETECTORS:
Add:
% 377.8

SIGNATURE: J. DOE
SIGNATURE TITLE: GENERAL MANAGER

UPRR TRAINING Area Timetable No. 7
Effective December 06, 2022
IOWA Subdivision General Order No. 1

PURPOSE:
Training Area Timetable #7 in effect at 0900C on December 06, 2022.

Subdivision instructions not modified by this General Order remain in effect.

EFFECTIVE: 0900C, December 06, 2022

CANCELLATIONS:
This order cancels all previous orders for the IOWA Subdivision.

SIGNATURE: J. DOE
SIGNATURE TITLE: GENERAL MANAGER

PB-27099

UPRR TRAINING
AREA TIMETABLE #7

Effective 0900C Tuesday, December 06, 2022

E. J. Gehringer, Executive Vice President - Operations
D. Torres, Senior Vice President - Northern Region
D. M. Giandinoto, Senior Vice President - Southern Region
J. W. Turner, Senior Vice President - HDC & Network Planning
S. K. Keller, Senior Vice President - Mechanical & Engineering
C. S. Roseberry, Assistant Vice President - Chief Safety Officer

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This document supersedes:

Union Pacific Railroad Training Timetable 6 effective Dec 01, 2020

EXPLANATION OF CHARACTERS

Symbol Represents:	
123.4	MILE POST FOR SUB LIMITS ARE IN BOLD AND ITALICIZED
ABS	AUTOMATIC BLOCK SIGNAL
ACS	AUTOMATIC CAB SIGNAL
ATC	AUTOMATIC TRAIN CONTROL
CTC	CENTRALIZED TRAFFIC CONTROL
EC	ELECTRONIC CONVEYANCE
PTC	POSITIVE TRAIN CONTROL
RL	RESTRICTED LIMITS
TWC	TRACK WARRANT CONTROL
DT	DOUBLE TRACK
#MT	MULTIPLE MAIN TRACK - #(number MT's)
!	SIDING WITH ENTERING SIGNAL ALLOWING ASPECT MORE FAVORABLE THAN LUNAR
(A)	AUTOMATIC INTERLOCKING
B	BASE RADIO STATION
D	DRAW BRIDGE
(G)	GATE-NORMAL POSITION AGAINST CONFLICTING ROUTE
G	GATE-NORMAL POSITION AGAINST THIS SUBDIVISION
(M)	MANUAL INTERLOCKING
(S)	STOP SIGN
T	TURNING FACILITY
(X)	RAILROAD CROSSING AT GRADE
X	CROSSOVER BETWEEN MAIN TRACKS WITH DUAL CONTROL SWITCHES
Y	YARD LIMITS
(Z)	MANUAL INTERLOCKING WITH A RELEASE BOX AND A M/W KEY RELEASE, IF EQUIPPED
(11-2)	SPECIAL INSTRUCTIONS ITEM 11 - 2 SWITCH MACHINES
(11-3)	SPECIAL INSTRUCTIONS ITEM 11 - 3 SWITCH MACHINES
C	CENTER
+	HEAD - END RESTRICTION ONLY

TRACK DIRECTION CODES	
N NORTHWARD	S SOUTHWARD
E EASTWARD	W WESTWARD

Symbol Represents:	
(R)	REDUCE / RESUME SPEED SIGNS AT OTHER THAN PRESCRIBED LOCATION
(#)	HOT BOX AND DRAGGING EQUIPMENT DETECTOR WITH RADIO TRANSMITTED VERBAL INDICATOR
#	HOT BOX DETECTOR WITH RADIO TRANSMITTED VERBAL INDICATOR
(!)	HOT BOX, HIGH WIDE SHIFTED LOAD AND DRAGGING EQUIPMENT DETECTOR WITH RADIO TRANSMITTED DEFECT INDICATOR
@	HOT BOX AND DRAGGING EQUIPMENT DETECTOR WITH RADIO TRANSMITTED VERBAL INDICATOR - TALK ON DEFECT ONLY WITH HOLD OR STOP SIGNALS
$	HOT BOX DETECTOR WITH RADIO TRANSMITTED VERBAL INDICATOR - TALK ON DEFECT ONLY
&	HIGH WIDE SHIFTED LOAD AND DRAGGING EQUIPMENT DETECTOR WITH RADIO TRANSMITTED VERBAL INDICATOR
(&)	HIGH WIDE SHIFTED LOAD AND DRAGGING EQUIPMENT DETECTOR WITH RADIO TRANSMITTED VERBAL INDICATOR - TALK ON DEFECT ONLY
%	DRAGGING EQUIPMENT DETECTOR WITH RADIO TRANSMITTED VERBAL INDICATOR - TALK ON DEFECT ONLY
(@)	WHEEL IMPACT DETECTOR WITH RADIO TRAMSMITTED VERBAL DEFECT INDICATOR - TALK ON DEFECT ONLY
(*)	WHEEL DOWN INDICATOR EQUIPPED WITH RADIO TRANSMITTED VERBAL INDICATOR - TALK ON DEFECT ONLY
H	DETECTORS EQUIPPED WITH HOT WHEEL DETECTOR - REMOTE READOUT ON DEFECT ONLY
+	DETECTORS EQUIPPED WITH RADIO TRANSMITTED TALK ON ARRIVAL AND DEFECT ONLY FEATURE

TRACK DIAGRAM COLOR CODES

CTC	ABS	TWC
ATC	ACS	9.14.2
9.14 / 9.15	YL / RL / NON-SIGNALED	

OTHER AVAILABLE REFERENCE MATERIAL

Area #	Area Name	Order #	Area #	Area Name	Order #	Area #	Area Name	Order #
1	Portland	PB-27020	9	Kansas City	PB-27028	17	Houston	PB-27036
2	Salt Lake City	PB-27021	10	Salina	PB-27029	18	San Antonio	PB-27037
3	Roseville	PB-27022	11	Iowa	PB-27030	19	Livonia	PB-27039
4	Los Angeles	PB-27023	12	Twin Cities	PB-27031	0	All Area 3 Hole Singles	PB-27038
5	Sunset	PB-27024	13	Chicago	PB-27032	0	3" Binder	PB-27019
6	Denver	PB-27025	14	St. Louis	PB-27033	0	Area Tabs (19 Each)	PB-27018
7	North Platte	PB-27026	15	North Little Rock	PB-27034	0	System Special Instructions	PB-27015
8	Council Bluffs	PB-27027	16	Dallas/Ft. Worth	PB-27035	99	UPRR TRAINING TT	PB-27099

Operating Practices

David P. O'Hara, General Director - Operating Practices - Ph - 402-544-1844
Kevin D. Andersen, Sr. Director - Safety Field Operations (COMMIT) - Ph - 402-544-6043
Jason C. Taullie, Director - Operating Practices & Rules - Ph - 402-544-4931
Taylor J. Weisbeck, Sr. Director - Operating Practices & System Compliance - Ph - 402-544-4620
Operating Practices Command Center (OPCC) - Ph - 402-544-6722
(To contact OPCC via radio, dial code 984) (Contact OPCC via email: opcc@up.com)

Rules Manager	*Phone Number*	*Timetable Area*
Robbie Goldman	801-212-3815	Chicago - Council Bluffs - Denver - Iowa - Kansas City - North Platte - Portland - Salt Lake City - St. Louis - Twin Cities
Rob Hunter	909-685-2826	Dallas/Ft. Worth - Houston - Livonia - Los Angeles - North Little Rock - Roseville - Salina - San Antonio - Sunset

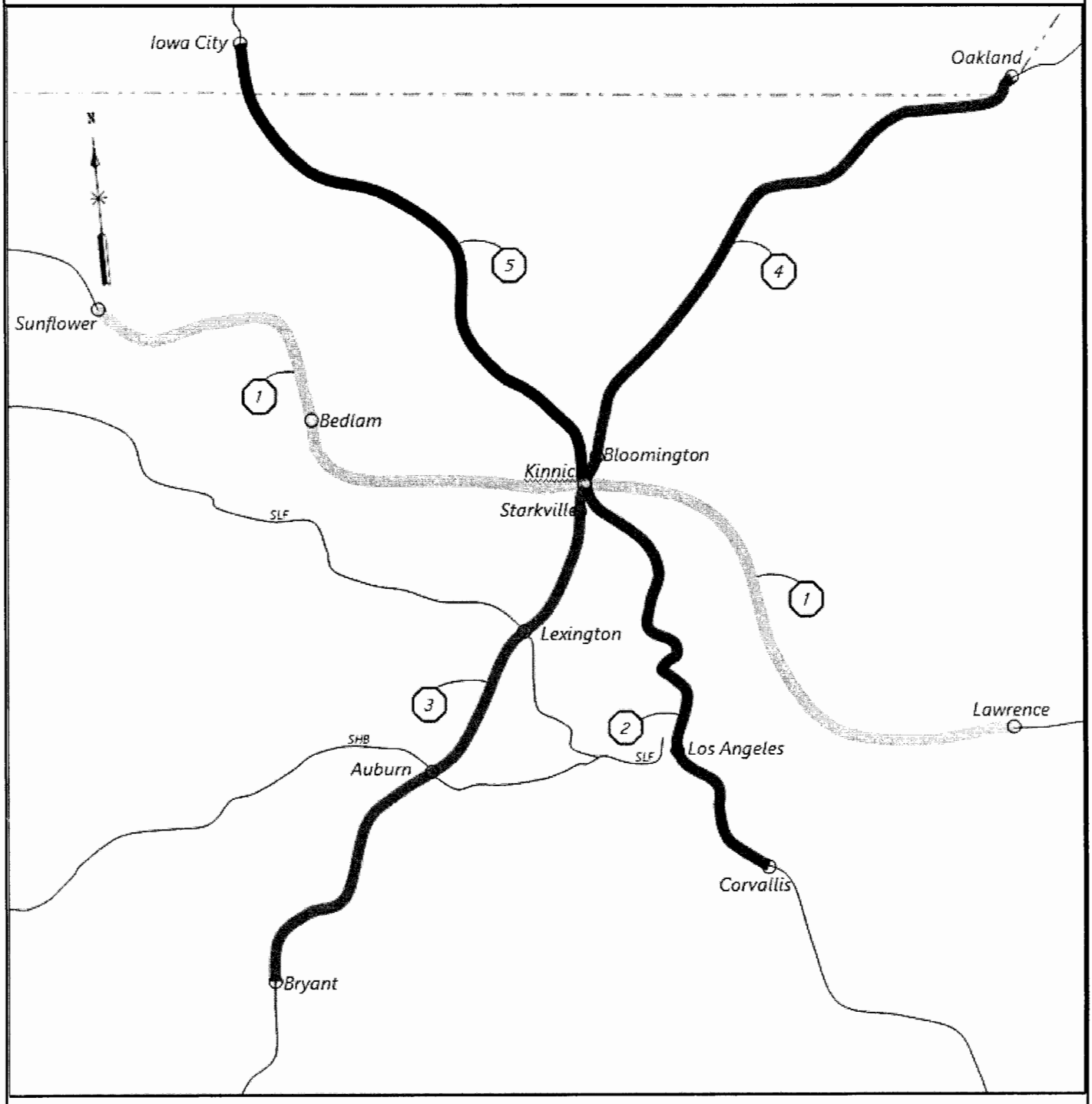
For emergencies call RMCC 1-888 UPRR COP or 1-888-877-7267

Building America

UPRR TRAINING AREA

TIMETABLE #7

Effective 0900C Tuesday, December 6th, 2022



1. ORANGE.....(1975)
2. FIESTA.....(1952)
3. SUGAR..... (1954)
4. IOWA..... (2022)
5. ROSE..... (1976)

TRAINING AREA

SUBDIVISION / Industrial Lead / Maps: **PAGE**

FIESTA (1952)..... 9
Gainesville Industrial Lead (0801)..... 5
Hunter Industrial Lead (1961)..... 9
IOWA (2022)..... 11
ORANGE (1975)..... 2
ROSE (1976)..... 7
Sessums Industrial Lead (1710)..... 3
SUGAR (1954)..... 5

TRAINING AREA

Station Name	Circ7 #	Subdivision	Page #
ADAIR		IOWA	10
AMES	RR185	ORANGE	2
ANN ARBOR		ROSE	6
ATHENS	SG328	SUGAR	4
AUBURN		SUGAR	4
AUSTIN	RR126	ORANGE	2
BATON ROUGE	SG250	SUGAR	4
BEDLAM	RR178	ORANGE	2
BERKELEY		FIESTA	8
BLOOMINGTON	IA353	ROSE	6
BOULDER		FIESTA	8
BRYANT	SG244	SUGAR	4
CASEY	AF416	IOWA	10
CHAMPAIGN	IA374	ROSE	6
COLLEGE STATION	RR254	SUGAR	4
COLUMBIA	SG311	SUGAR	4
COLUMBUS	IA416	ROSE	6
CORVALLIS	CT321	FIESTA	8
DALLAS CENTER	AF374	IOWA	10
EAST LANSING		ROSE	6
EUGENE	CT377	FIESTA	8
EVANSTON	IA384	ROSE	6
FARMAGEDDON		ORANGE	2
FAYETTEVILLE	SG270	SUGAR	4
FORT WORTH	RR171	ORANGE	2
GAINESVILLE	SG341	SUGAR	4
GRIMES	AF367	IOWA	10
IOWA	RR205	ORANGE	2
IOWA CITY	IA431	ROSE	6
IRVING	RR225	ORANGE	2
KANSAS	RR096	ORANGE	2
KINNICK	RR143	FIESTA	8
KINNICK	RR143	IOWA	10
KINNICK	RR143	ORANGE	2
KINNICK	RR143	ROSE	6
KINNICK	RR143	SUGAR	4
KNOXVILLE	SG297	SUGAR	4
LAWRENCE		ORANGE	2
LE CLAIRE	AF353	IOWA	10
LEXINGTON		SUGAR	4
LINCOLN	IA367	ROSE	6
LINDEN	AF384	IOWA	10
LOS ANGELES		FIESTA	8
LUBBOCK	RR081	ORANGE	2
MADISON (Trk. 1)	IA403	ROSE	6
MANHATTAN	RR137	ORANGE	2
MENLO		IOWA	10
MINNEAPOLIS		ROSE	6
MORGANTOWN	RR148	ORANGE	2
NASHVILLE	SG346	SUGAR	4
NORMAN	RR061	ORANGE	2
NORTH CORVALLIS		FIESTA	8
NORTH LOS ANGELES	CT345	FIESTA	8
OAKLAND	AF431	IOWA	10
OKLAHOMA	RR108	ORANGE	2
OXFORD	SG262	SUGAR	4
PANORA		IOWA	8
PULLMAN	CT337	FIESTA	8
RED RIVER	RR161	ORANGE	2
SALT LAKE CITY	CT339	FIESTA	8
SEATTLE	CT369	FIESTA	8
SOUTH LOS ANGELES		FIESTA	8
STANFORD (HOLD)		FIESTA	8
STARKVILLE	SG344	SUGAR	4
STILLWATER	RR115	ORANGE	2
STUART	AF403	IOWA	10
SUNFLOWER	RR235	ORANGE	2
TEMPE	CT352	FIESTA	8
TEXAS	RR215	ORANGE	2
TUCSON	CT386	FIESTA	8
TUSCALOOSA	SG290	SUGAR	4
URBANDALE	AF359	IOWA	10
WACO	RR193	ORANGE	2
WEST LAFAYETTE	IA359	ROSE	6
WEST SUNFLOWER HOLD	RR238	ORANGE	2
WESTWOOD	CT361	FIESTA	8

ORANGE SUBDIVISION (1975)

Radio Display:
Lawrence and West Sunflower: 027-027- *11

Mile Post	Track Layout	Rule 6.3	CP #'s	WEST ▼ EAST ▲ Stations/Control Points	Sta. #'s	Siding Feet
52.8		CTC 2MT	W053	LAWRENCE X(11-2)		
				(7.3)		
60.1			W060	NORMAN !	RR061	N11240
62.3			W062	(14.7)		S11235
74.8			W075	FARMAGEDDON (11-3)		
		CTC		(6.1)		
80.9			W081	LUBBOCK	RR081	5230
82.1			W082	(14.4)		
95.3			W095	KANSAS !	RR096	8028
97.0			W097	(11.7)		
107.0			W107	OKLAHOMA !	RR108	6020
108.3			W108	(7.1)		
114.1			W114	STILLWATER !	RR115	8820
115.9			W116	(11.7)		
125.8			W126	AUSTIN !	RR126	8027
127.1			W127	(10.2)		
136.0			W136	MANHATTAN !	RR137	10410
138.1			W138	(6.6)		
142.6			W142	KINNICK (X)UPRR(M)T	RR143	
143.0			W143	(4.4)		
147.7		TWC	W148	MORGANTOWN (M)!	RR148	9715
149.6		ABS	W150	(12.6) (M)!		
159.8		TWC		RED RIVER	RR161	8345
161.4				(9.9)		
170.4				FORT WORTH	RR171	5994
171.6				(7.4)		
177.1		YL ABS		BEDLAM B	RR178	YARD
179.4				(7.1)		
184.2		TWC		AMES	RR185	9580
186.1				(8.4)		
192.6		ABS		WACO	RR193	9630
194.5				(11.7)		
204.3		CTC	W204	IOWA	RR205	5965
205.6			W206	(10.5)		
214.8			W215	TEXAS	RR215	6114
216.0			W216	(9.2)		
224.0			W224	IRVING !	RR225	9037
225.9			W226	(10.2)		
234.2			W234	SUNFLOWER T	RR235	YARD
236.0			W236	(3.6)		
237.8			W238	WEST SUNFLOWER (HOLD)	RR238	

(185.0)

SI-01 MAIN TRACK AUTHORITY

CTC between:
CP W053 and CP W143;
CP W204 and CP W238.

TWC between:
CP W143 and MP 175.0;
MP 180.5 and CP W204.

ABS between:
CP W148 and CP W150;
MP 175.0 and CP W204.

YL between:
MP 175.0 and MP 180.5.

PTC between:
CP W204 and CP W238.

SI-02 MAXIMUM SPEED TABLE

Maximum Speed Between Mileposts	MPH FRT
52.8 and 237.8 (Except as Below)	70
142.6 and 143.0	40
143.0 and 176.0	49
176.0 and 180.5	40
180.5 and 204.3	60
234.2 and 236.0	40

SI-03 OTHER SPEED RESTRICTIONS

Maximum Speed	MPH
1. Thru Sidings & Turnouts.	
Lubbock	15
Oklahoma, Austin, Ames, Waco	20
2. Dual Control Switch Turnouts.	
CP W053, W075	40
3. Misc. Speed Restrictions.	
Kinnick - All Turnouts and Wye Tracks	20
4. Key Trains: Crude Oil/High Hazard Flammable	
Between Mileposts	
MP 212.2 and MP 237.8	40

SI-04 MAIN TRACK DESIGNATIONS

2MT between: CP W053 and CP W075.

SI-05 MILEPOST EQUATIONS - None.

SI-06 RCL OPERATIONS

RCL Area: Bedlam Yard

Zone Status: Trains entering the Bedlam yard must contact the yardmaster for zone status before entering.

Zone W: RCL Zone on the west end of the South Bedlam Yard begins at the clearance point of the west end of track #5,and extends west on the west switching lead to the end of the West Drill track.

Zone E: RCL Zone on the east end of the South Bedlam Yard begins at the clearance point of the east end of track #5,and extends east on the east switching lead to the end of the East Drill track.

SI-07 ITEM 13 TRAIN DEFECT DETECTORS

(#)H+ 65.4	% 155.0	(#)H+ 198.0
% 77.1	(#) 158.1	% 209.6
(#)H+ 90.3	(#) 167.7	(#)H+ 220.2
(#)H+ 117.8	(#)H+ 171.7	(#)H+ 230.4
(#)+ 131.7	(#)H 175.9	
(#)H+ 145.0	(#)H 182.2	

ORANGE SUBDIVISION (1975)

SI-08 RULES ITEMS

Rule 8.19.1: Radio controlled switch and derail installed on each end of Red River Siding, MP 159.8 and MP 161.4. Normal position will be for main to main movement. Reverse position will be for entering/departing siding. Switch control signs are located 11,000 feet from "Begin OS" signs on main track for eastward movements and 11,800 feet for westward movements. Switch control signs are located 6,600 from "Begin OS" sign on siding for eastward movements and 5,000 feet for westward movements.

Location	Normal	Reverse	Radio
MP 159.8	1327666	1327677	027-027
MP 161.4	1307466	1307477	027-027

Rule 9.15: In effect on siding Morgantown. MofW On-Track equipment must obtain a track permit to occupy this siding. A track permit will be issued to a train only when operating conditions require siding to be jointly occupied by a train and men or equipment

13.1.4 ACS Test Loops: Sunflower Yard: Located on Main Track westward MP 233.8 to MP 234.6.

Rule 32.1: Sunflower Yard Receiving Tracks: Four handbrakes required on east end of all receiving yard tracks.

Bedlam Yard Departure Tracks: Three handbrakes minimum required on east end of all departure yard tracks.

SI-09 FRA EXCEPTED TRACKS

Bedlam: All North Yard tracks.

SI-10 BUSINESS TRACKS

Track Name	MP	Sta.#'s
Riskus	175.1	SR017

SI-11 INDUSTRIAL LEADS

Sessums Industrial Lead: (1710) Off of main track at MP 221.3; extends for 24.0 miles to end of track.

Maximum Gross Weight Restrictions: 134 Tons, Restrictions A and S.

Radio Channel: 071-071

Business Tracks	MP	Sta.#'s
Orange	2.0	HG002
Wheat	4.0	HG004
Hangar	24.0	HG024

SI-12 TONNAGE RESTRICTIONS/TPOB Maximum Gross Weight Restrictions:

158 Tons, Restrictions A and N.

SI-13 TRAIN MAKE-UP RESTRICTIONS

No additional restrictions to system requirements.

SI-14 MISC. INSTRUCTIONS

Track Breach Protection: Employee announced Track Breach Protection may be in effect:

Bedlam Yard:

MP 175.0 and MP 180.5

Radio Display 027-027

Hot Wheel Detectors:

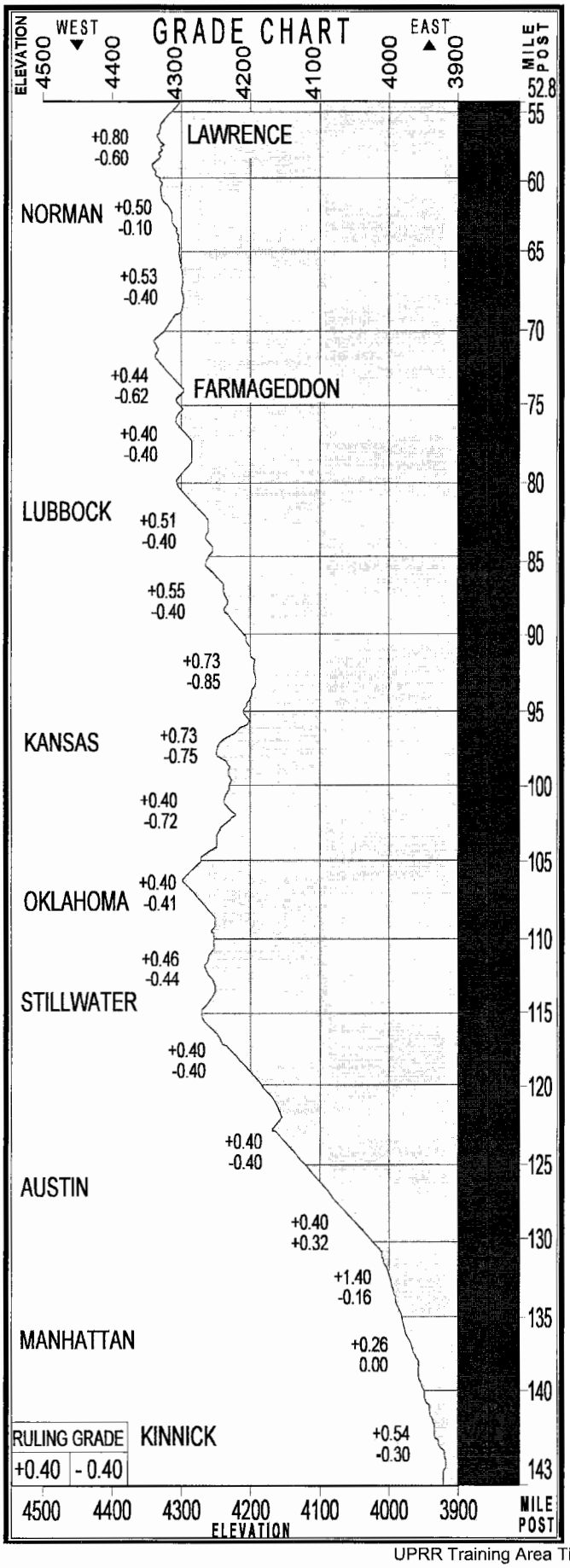
As referenced in SSI Item 13.1, bridge with a through truss structure located at the following location:

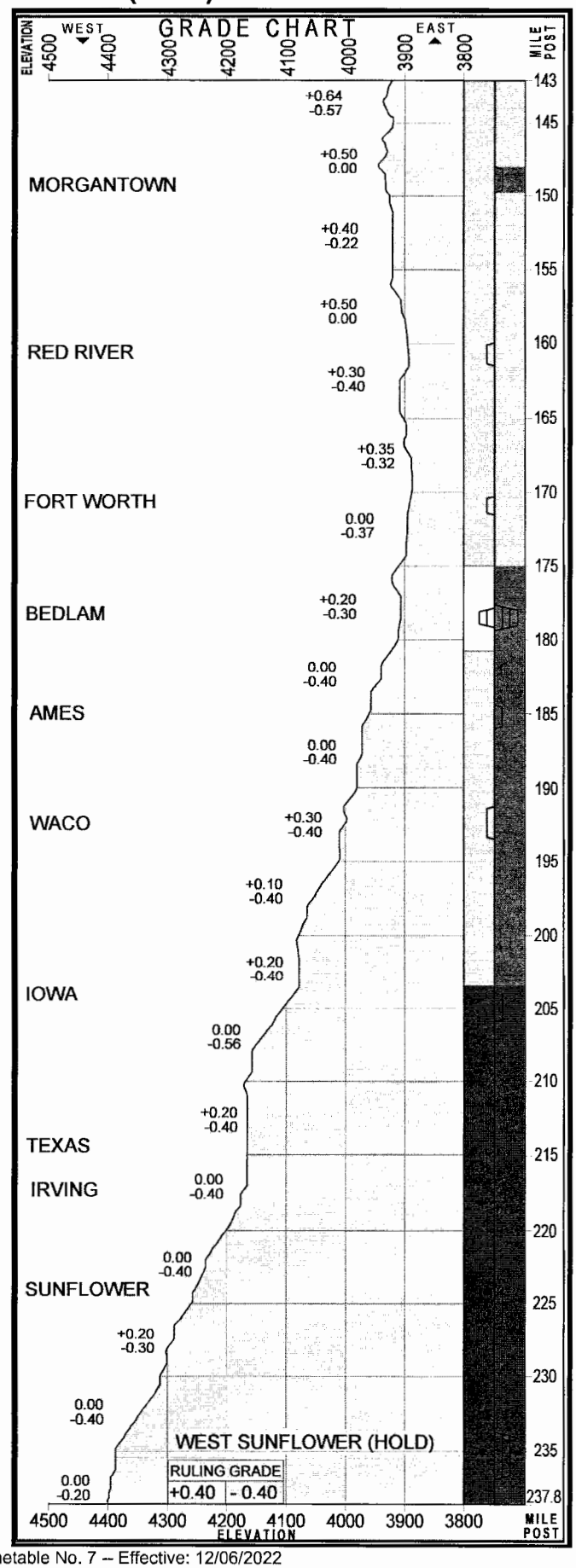
MP 164.2

Set Out Tracks

MP	Name	Track	Access Direction	Length
81.3	Lubbock	Siding	West	300
113.8	Stillwater	Main	East	600
137.8	Manhattan	Siding	West	380
204.5	Iowa	Siding	East	300

ORANGE SUBDIVISION (1975)





SUGAR SUBDIVISION (1954)

Radio Display:
Between Kinnick and Bryant: 096-096 - *54

Mile Post	Track Layout	Rule 6.3	CP #'s	▼ SOUTH NORTH ▲ Stations/Control Points	Sta. #'s	Siding Feet
348.2		CTC	W143	KINNICK (X)UPRR(M)T (2.4)	RR143	
345.8		YL ABS		NASHVILLE (0.9)	SG346	
344.9				STARKVILLE BT (2.9)	SG344	YARD
343.2						
342.0				GAINESVILLE (13.2)	SG341	
340.2		TWC ABS				
328.8			W329	ATHENS (M)!	SG328	11950
326.7			W327	(7.4) (M)!		
321.4				LEXINGTON (X)SLF(Z) (10.1)		
311.3				COLUMBIA (14.2)	SG311	7936
310.1						
297.1				KNOXVILLE (7.5)	SG297	7941
295.9						
289.6				TUSCALOOSA (7.4)	SG290	
282.2			W801	AUBURN (X)SHB(M) (11.2)		
		TWC				
271.0				FAYETTEVILLE (8.6)	SG270	6800
269.7						
262.4				OXFORD (8.5)	SG262	8615
260.8						
253.9				COLLEGE STATION (3.6)	RR254	
250.3				BATON ROUGE (5.8)	SG250	7270
248.9						
244.5		YL		BRYANT B (5.0)	SG244	YARD
242.7						

(103.7)

SI-01 MAIN TRACK AUTHORITY

CTC at:
CP W143 Kinnick

TWC Between:
MP 340.2 and MP 246.1

Yard Limits Between:
MP 348.2 and 340.2;
MP 246.1 and 242.7

ABS Between:
MP 348.2 and 282.2

SI-02 MAXIMUM SPEED TABLE

Maximum Speed Between Mileposts	MPH FRT
348.2 and 242.7 (Except as Below)	60
344.2 and 340.2	40
321.4 (X)	25
301.4 and 300.1	50
282.2 and 246.1	49
246.1 and 242.7	20

SI-03 OTHER SPEED RESTRICTIONS

Maximum Speed **MPH**

1. **Thru Sidings & Turnouts.**
   Fayetteville 20
   Athens 25
2. **Dual Control Switch Turnouts (No Exceptions).**
3. **Misc. Speed Restrictions.**
   Kinnick - All Turnouts and Wye Tracks 20
4. **Key Trains: Crude Oil/High Hazard Flammable** Between Mileposts
   MP 310.1 and MP 274.6 40

SI-04 MAIN TRACK DESIGNATIONS - None.

SI-05 MILEPOST EQUATIONS

MP 242.72 = MP 156.02 El Dorado Subdivision

SI-06 RCL OPERATIONS - None.

SI-07 ITEM 13 TRAIN DEFECT DETECTORS

(#) 346.0	(#) 306.9	(#) 279.7
% 338.5	% 299.7	% 265.5
(#) 323.2	% 292.6	(#) 254.1
% 315.8	% 284.3	(#) 246.2

SI-08 RULES ITEMS

Rule 9.9.1: (Z) Interlocking Locations:
Lexington MP 321.4 (X)SLF(Z)CP W321 Rule 9.9.1 (Passing Approach to Automatic Interlocking) applies.
At a signal displaying a Stop indication: Train movements will be governed as follows:
1. A crew member must contact the train dispatcher and obtain permission:
To operate the time release box.
and
To pass the Stop indication (train may not proceed until complying with instructions in release box).
2. The crew will then be governed by the instructions in the release box.
3. After complying with instructions in the release box that allow the train to proceed, if signal continues to display a Stop indication, the train must move at restricted speed.
Maintenance of Way will be governed as follows:
When moving through limits comply with Rule 42.7.2.
When working within limits comply with Chief Engineer Instruction Bulletin 136.4.8.
Rule 9.15 applies: Siding at Athens. MofW On-Track equipment must obtain a track permit to occupy this siding. A track permit will be issued to a trainly when operating conditions require siding to be jointly occupied by a train and men or equipment.
Rule 32.1: Starkville Yard: Three handbrakes are required on south end of all yard tracks.

SUGAR SUBDIVISION (1954)

SI-09 FRA EXCEPTED TRACKS
College Station

SI-10 BUSINESS TRACKS - None.

SI-11 INDUSTRIAL LEADS
Gainesville Industrial Lead: (801) Off main track at MP 342.0; extends 7.9 miles to end of track.
Maximum Gross Weight Restrictions:
134 Tons, Restrictions A and S.
Radio Channel: 027-027

Business Tracks	MP	Sta.#'S
Conway	2.1	GV002
Chanticleer	6.8	GV007

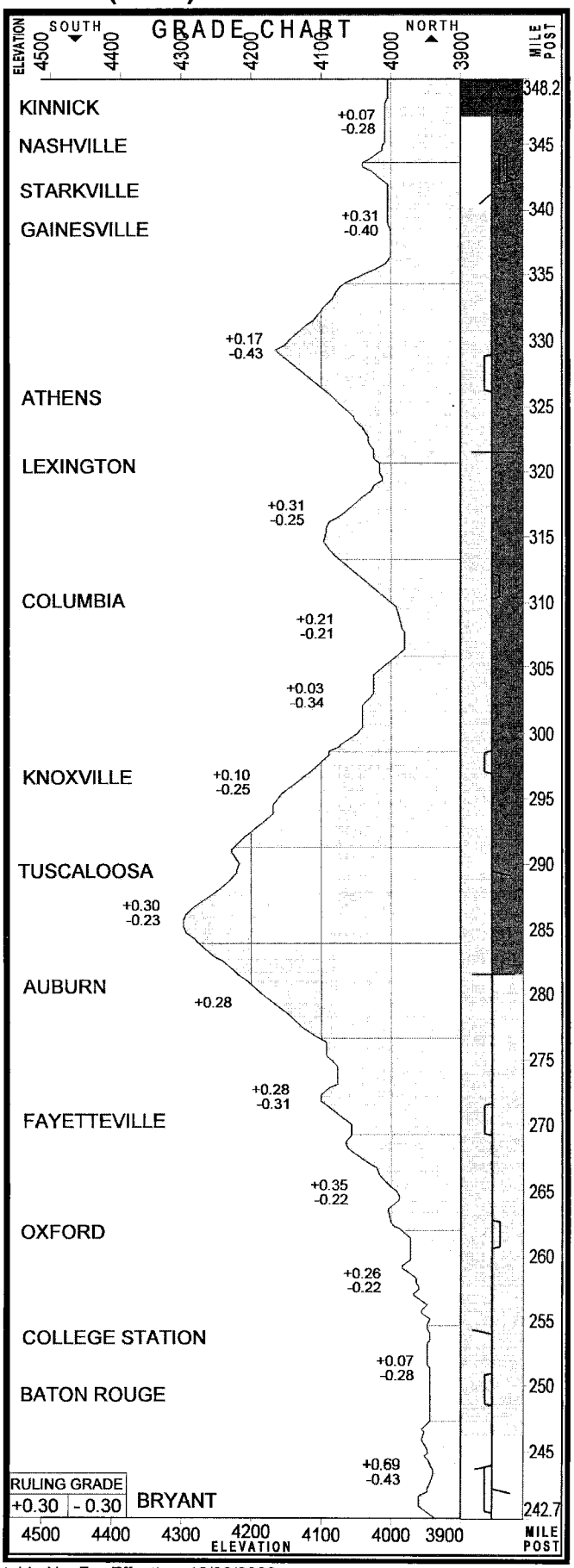
SI-12 TONNAGE RESTRICTIONS/TPOB
Maximum Gross Weight Restrictions:
158 Tons, Restrictions A and N.

SI-13 TRAIN MAKE-UP RESTRICTIONS
No additional restrictions to system requirements.

SI-14 MISC. INSTRUCTIONS
Track Breach Protection:
Employee established Track Breach Protection may be in effect:
Starkville Yard:
MP 344.9 and MP 343.2
Radio Display 096-096
Bryant Yard:
MP 244.5 and MP 242.7
Radio Display 096-096

Set Out Tracks

MP	Name	Track	Access Direction	Length
328.1	Athens	Siding	Both	800
309.6	Columbia	Main	North	300
296.7	Knoxville	Siding	Both	600
283.1	Auburn	Main	South	450
281.1	Auburn	Main	North	500
261.5	Oxford	Siding	Both	680
248.3	Baton Rouge	Main	North	600



ROSE SUBDIVISION (1976)

Mile Post	Track Layout	Rule 6.3	CP #'s	Radio Display: Between Iowa City and Kinnick: 020-020- *07 ▼ SOUTH NORTH ▲ Stations/Control Points	Sta. #'s	Siding Feet
432.7		CTC 2MT	G433	IOWA CITY !	IA431	E12700 W12695
430.2			G430	(9.9)		
422.8			G423	MINNEAPOLIS X(11-2) (5.8)		
417.0			G417	COLUMBUS !	IA416	C9916
415.0			G415	(10.8)		
406.2			G406	MADISON (Trk. 1)	IA403	8763
404.4			G404	(9.3)		
396.9			G397	ANN ARBOR X(11-2) (7.3)		
389.6		CTC	G390	EAST LANSING (11-3) (4.5)		
385.3			G385	EVANSTON !	IA384	14784
382.3			G382	(10.0)		
375.1			G375	CHAMPAIGN !	IA374	8596
373.3			G373	(7.8)		
367.3			G367	LINCOLN	IA367	5056
366.2			G366	(7.4)		
359.9			G360	WEST LAFAYETTE !	IA359	7316
358.4			G358	(5.5)		
354.4		CTC	G354	BLOOMINGTON BT	IA353	Yard
352.2			G352	(8.0)		
346.4			W143	KINNICK (X)UPRR(M)T (0.0)	RR143	

(86.3)

SI-01 MAIN TRACK AUTHORITY

CTC between: CP G433 and CP W143
PTC between: CP G433 and CP W143

SI-02 MAXIMUM SPEED TABLE

Maximum Speed Between Mileposts	MPH FRT
432.7 and 346.4 (Except as Below)	70
420.7 and 418.6	55
380.9 and 380.4	40
370.1 and 369.7	50
368.4 and 368.0	60
354.4 and 352.2	30

SI-03 OTHER SPEED RESTRICTIONS

Maximum Speed	MPH
1. Thru Sidings & Turnouts.	
West and East sidings Iowa City, Columbus, Evanston, Champaign	40
West Lafayette	20
2. Dual Control Switch Turnouts.	
CP G423, G397	50
CP G390	60
3. Misc. Speed Restrictions.	
Kinnick - All Turnouts and Wye Tracks	20
4. Key Trains: Crude Oil/High Hazard Flammable Between Mileposts MP 432.7 and MP 410.7	40

SI-04 MAIN TRACK DESIGNATIONS

2MT between CP G433 and CP G390

SI-05 MILEPOST EQUATIONS - None.

SI-06 RCL OPERATIONS - None.

SI-07 ITEM 13 TRAIN DEFECT DETECTORS

(#)+ 428.2	% 387.0	(#)+ 356.4
(#)+ 419.8	(#)+ 379.3	(#)+ 350.1
% 412.5	% 370.6	
(#)+ 401.6	% 362.9	

SI-08 RULES ITEMS

SI-09 FRA EXCEPTED TRACKS - None.

SI-10 BUSINESS TRACKS - None.

SI-11 INDUSTRIAL LEADS - None.

SI-12 TONNAGE RESTRICTIONS/TPOB

Maximum Gross Weight Restrictions:
158 Tons, Restrictions A and N.

SI-13 TRAIN MAKE-UP RESTRICTIONS

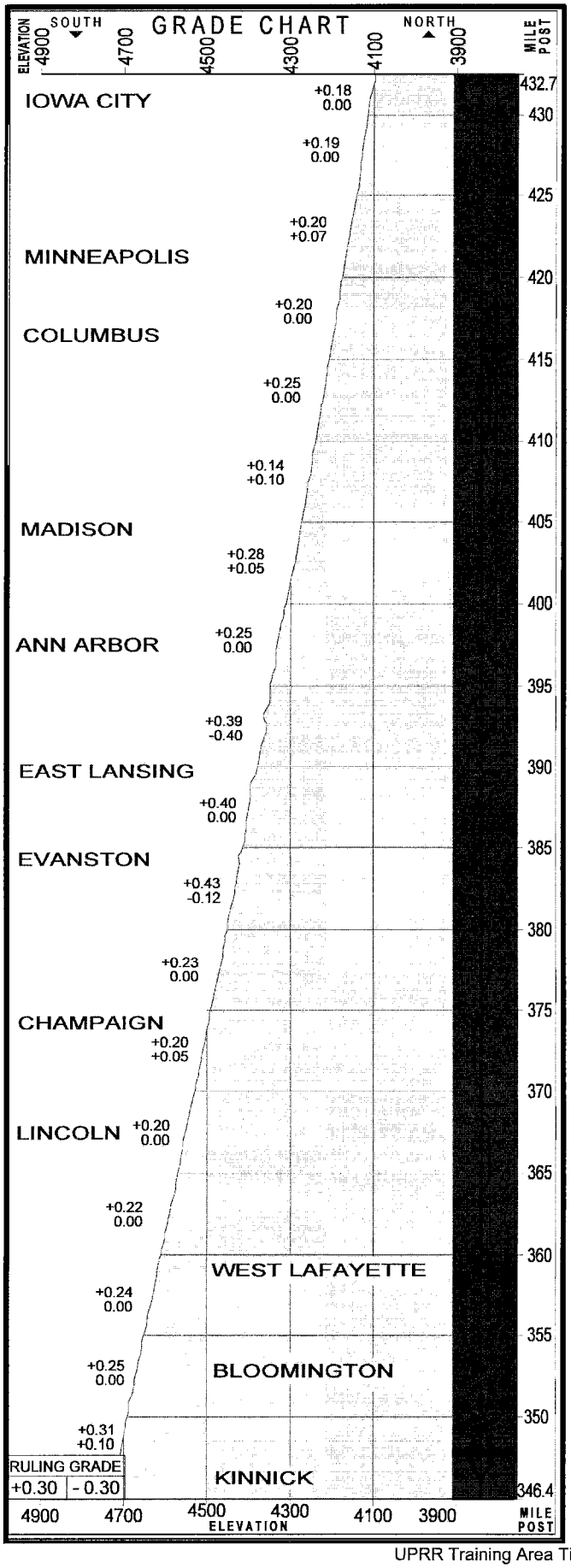
No additional restrictions to system requirements.

SI-14 MISC. INSTRUCTIONS

Set Out Tracks

MP	Name	Track	Access Direction	Length
431.2	Iowa City	E. Siding	Both	1000
431.5	Iowa City	W. Siding	Both	850
421.6	Minneapolis	Trk. 1	South	900
421.4	Minneapolis	Trk. 2	North	1000
398.8	Ann Arbor	Trk. 1	South	800
398.6	Ann Arbor	Trk. 2	North	900
384.3	Evanston	Siding	Both	1200
374.1	Champaign	Main	Both	400
359.0	West Lafayette	Siding	Both	800
354.1	Bloomington	Main	North	1000

ROSE SUBDIVISION (1976)



FIESTA SUBDIVISION (1952)

Mile Post	Track Layout	Rule 6.3	CP #'s	SOUTH ▼ NORTH ▲ Stations/Control Points	Sta. #'s	Siding Feet
				Radio Display: Between Kinnick and Corvallis: 096-096- *35		
393.7		CTC	W142	KINNICK (X)UPRR(M)T (6.5)	RR143	
387.2 385.5			M387 M386	TUCSON ! (9.7)	CT386	8343
377.5 376.4			M378 M376	EUGENE ! (8.0)	CT377	5169
369.5 368.3			M369 M368	SEATTLE ! (7.8)	CT369	5675
361.7 360.0			M362 M360	WESTWOOD ! (8.8)	CT361	8342
352.9 351.8			M353 M352	TEMPE ! (6.5)	CT352	5065
346.4			M346	NORTH LOS ANGELES ! (1.2)		5400
345.2			M345	LOS ANGELES T (1.6)		
343.6			M344	SOUTH LOS ANGELES ! (3.4)		6350
340.2 338.5			M340 M338	SALT LAKE CITY ! (2.6)	CT339	8670
337.6 336.6			M337 M336	PULLMAN (4.0)	CT337	5092
333.6		CTC 2MT	M334	BERKELEY (2.6)		
331.0			M331	BOULDER (4.6)		
326.5		CTC	M327	STANFORD (HOLD) (3.9)		
322.9			M323	NORTH CORVALLIS (1.2)		
321.4			M321	CORVALLIS !	CT321	8501
				(72.3)		

SI-01 MAIN TRACK AUTHORITY

CTC between: Entire Subdivision

SI-02 MAXIMUM SPEED TABLE

Maximum Speed Between Mileposts	MPH FRT
393.7 and 321.4 (Except as Below)	**60**
390.1 and 388.5	55
388.5 and 387.9	50
387.9 and 379.1	40
373.8 and 363.7	40
363.7 and 355.5	35
355.5 and 347.4	30
347.4 and 346.0	35
346.0 and 337.9	40
337.9 and 333.5	35
333.5 and 321.4	30

SI-03 OTHER SPEED RESTRICTIONS

Maximum Speed **MPH**

1. **Thru Sidings & Turnouts.**
   - Sidings Tucson, Eugene, Seattle, Los Angeles (north siding) 25
   - Siding Salt Lake City 20
   - Sidings Westwood, Tempe, Los Angeles (south siding), Pullman 10
2. **Dual Control Switch Turnouts.**
   - MP 345.2 Crossover 10
   - Corvallis Crossover 10
3. **Misc. Speed Restrictions.**
   - Kinnick - All Turnouts and Wye Tracks 20
4. **Key Trains: Crude Oil/High Hazard Flammable** Between Mileposts MP 358.1 and MP 332.8 40

SI-04 MAIN TRACK DESIGNATIONS

Two main tracks between:
MP 333.6 and MP 331.0

SI-05 MILEPOST EQUATIONS - None.

SI-06 RCL OPERATIONS - None.

SI-07 ITEM 13 TRAIN DEFECT DETECTORS

(#) 390.9	(#) 357.5	& 327.3 *
% 384.0	% 347.8	% 326.5
% 379.0	(#) 342.4	% 324.2
% 374.9	% 335.0	& 323.2 *
(#) 372.9	(#) 330.0	
% 365.0	% 329.0	

* Protects Red River Bridge MP 325.0

SI-08 RULES ITEMS

Rule 32.1: Do not tie-up and leave a train unattended between Berkeley CP M334 and Corvallis CP M321 unless track has derail protection.

SSI Item 8: 1% Applicabilty Code applies between Kinnick and Berkeley; 2% Applicability Code applies between Berkeley and Corvallis. Cresting Grade "CG" locations for Southward trains at MP 367.7 (Seattle) and at MP 332.5 (Berkeley).

SI-09 FRA EXCEPTED TRACKS

Tempe Set Out Track.

SI-10 BUSINESS TRACKS - None.

SI-11 INDUSTRIAL LEADS

Hunter Industrial Lead: (1961) Located at MP 346.0 off the North Los Angeles siding. Extends 4.1 miles to end of track.
Maximum Gross Weight Restrictions:
143 Tons, Restrictions A and Q.
Radio Channel: 036-036

Business Tracks	MP	Sta.#'S
Reagan	2.0	CT345
Roseberry	3.7	CT343

FIESTA SUBDIVISION (1952)

SI-12 TONNAGE RESTRICTIONS/TPOB

Maximum Gross Weight Restrictions:

158 Tons, Restrictions A and N.

Descending Grade Between Berkeley and Corvallis:

The following table must be used to determine maximum speed:

Tons Per Operative Brake:	Tons Per Dynamic Brake Axle:	Maximum Speed
80 or less	300 or less	30 MPH
	300+ to 425	25 MPH
	425+ to 500	20 MPH
80+ to 100	300 or less	25 MPH
	300+ to 500	20 MPH
100+ to 130	250 or less	25 MPH
	250+ to 500	20 MPH
130+	500 or less	20 MPH

Between MP 332.6 and MP 322.6: A train that exceeds 500 tons per dynamic brake axle, experiences dynamic brake failure, or the use of full dynamic brake and an 18-lb brake pipe reduction will not control the train at the allowable speed, train must be STOPPED and sufficient hand brakes set to prevent movement. The train must not proceed until additional dynamic braking is obtained, tonnage is reduced or retainers on all cars are placed in operative position. When it is necessary to use retainers, the train must not proceed except as instructed by the district Manager of Operating Practices.

SI-13 TRAIN MAKE-UP RESTRICTIONS

The following table applies when operating between Eugene and Corvallis:

LEAD CONSIST EPA/EDBA TABLE		
Train Type	Max EPA	Max EDBA
Loaded Bulk-Commodity Unit Train	36	31
Intermodal	44	27
All Other Trains	36	27

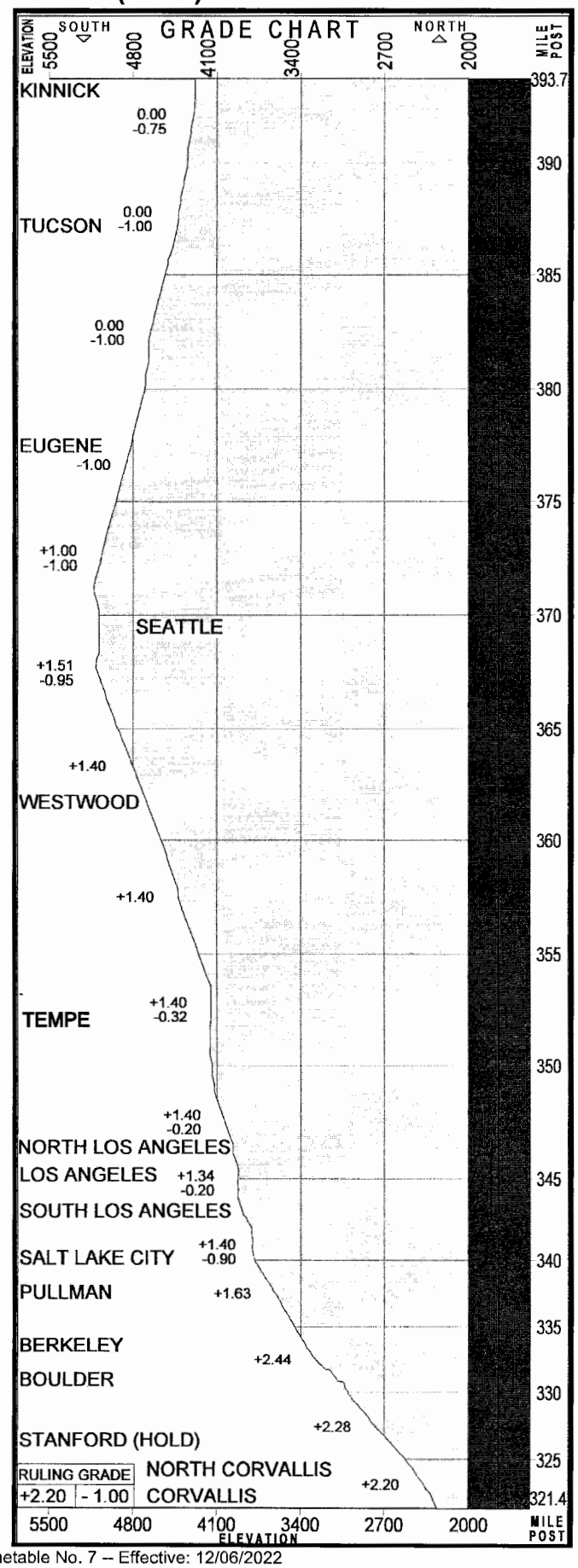
No additional restrictions to system requirements.

SI-14 MISC. INSTRUCTIONS

Special Walkways Special walkways located between MP 325.0 and MP 327.4 to allow trainmen to make an inspection of both sides of train when required. When train inspection is required but walking conditions do not allow both sides of the train to be safely inspected, the following procedures must be followed:

1. Determine safest side of train to perform the inspection.
2. If at any point during the inspection it is determined that the opposite side would be the safest route, employee may crossover and continue the inspection.
3. If employee determines that a walking inspection of the train may not be performed or completed safely, contact the dispatcher for further instructions.

Set Out Tracks				
MP	Name	Track	Access Direction	Length
386.0	Tucson	Siding	South	300
353.1	Tempe	Main	North	500
344.7	Los Angeles		South	500



IOWA SUBDIVISION (2022)

Mile Post	Track Layout	Rule 6.3	CP #'s	Radio Display: Kinnick and Oakland 095-095 - (*93) ▼ SOUTH NORTH ▲ Stations/Control Points	Sta. #'s	Siding Length
432.7		CTC2MT ATC	H433	OAKLAND !	AF431	E12700
430.2			H430	(9.9)		W12695
422.8			H423	ADAIR X(11-2) (5.8)		
417.0			H417	CASEY !	AF416	C9916
415.0			H415	(10.8)		
406.2			H406	STUART (MT1)	AF403	8763
404.4			H404	(9.3)		
396.9			H397	MENLO X(11-2) (7.3)		
389.6		CTC ATC	H390	PANORA (11-3) (4.5)		
385.1			H385	LINDEN !	AF384	13671
382.3			H382	(10.0)		
375.1			H375	DALLAS CENTER !	AF374	8596
373.3			H373	(7.8)		
367.3			H367	GRIMES	AF367	5056
366.2			H366	(7.4)		
359.9			H360	URBANDALE !	AF359	7316
358.4			H358	(5.5)		
354.4		CTC	H354	LE CLAIRE BT	AF353	YARD
352.2			H352	(8.0)		
346.4			W142	KINNICK (X)UPRR(M)T (0.0)	RR143	

(86.3)

SI-01 MAIN TRACK AUTHORITY

CTC between: CP H433 and CP W142
ATC between: CP H433 and CP H354

SI-02 MAXIMUM SPEED TABLE

Maximum Speed Between Mileposts	MPH FRT
432.7 and 346.4 (Except as Below)	70
420.7 and 418.6	55
380.9 and 380.4	40
370.1 and 369.7	50
368.4 and 368.0	60
354.4 and 352.2	30

SI-03 OTHER SPEED RESTRICTIONS

Maximum Speed	MPH
1. Thru Sidings & Turnouts.	
West and East sidings Oakland, Casey, Linden, Dallas Center	40
Urbandale	20
2. Dual Control Switch Turnouts.	
CP H423, H397	50
CP H390	60
3. Misc. Speed Restrictions.	
Kinnick - All Turnouts and Wye Tracks	20
4. Key Trains: Crude Oil/High Hazard Flammable Between Mileposts	
MP 432.7 and MP 410.7	40

SI-04 MAIN TRACK DESIGNATIONS

2MT between CP H433 and CP H390

SI-05 MILEPOST EQUATIONS - None.

SI-06 RCL OPERATIONS - None.

SI-07 ITEM 13 TRAIN DEFECT DETECTORS

(#) 428.2	% 387.0	(#) 356.4
(#) 419.8	(#) 379.3	(#) 350.1
% 412.5	% 370.6	
(#) 401.6	% 362.9	

SI-08 RULES ITEMS

Rule 17.4 ATC Test Loops

Le Claire:
Main Track Northward between MP 354.1 to MP 354.7
Le Claire Yard:
North switching lead to CP H354

SI-09 FRA EXCEPTED TRACKS - None.

SI-10 BUSINESS TRACKS - None.

SI-11 INDUSTRIAL LEADS - None.

SI-12 TONNAGE RESTRICTIONS/TPOB

Maximum Gross Weight Restrictions:
158 Tons, Restrictions A and N.

SI-13 TRAIN MAKE-UP RESTRICTIONS

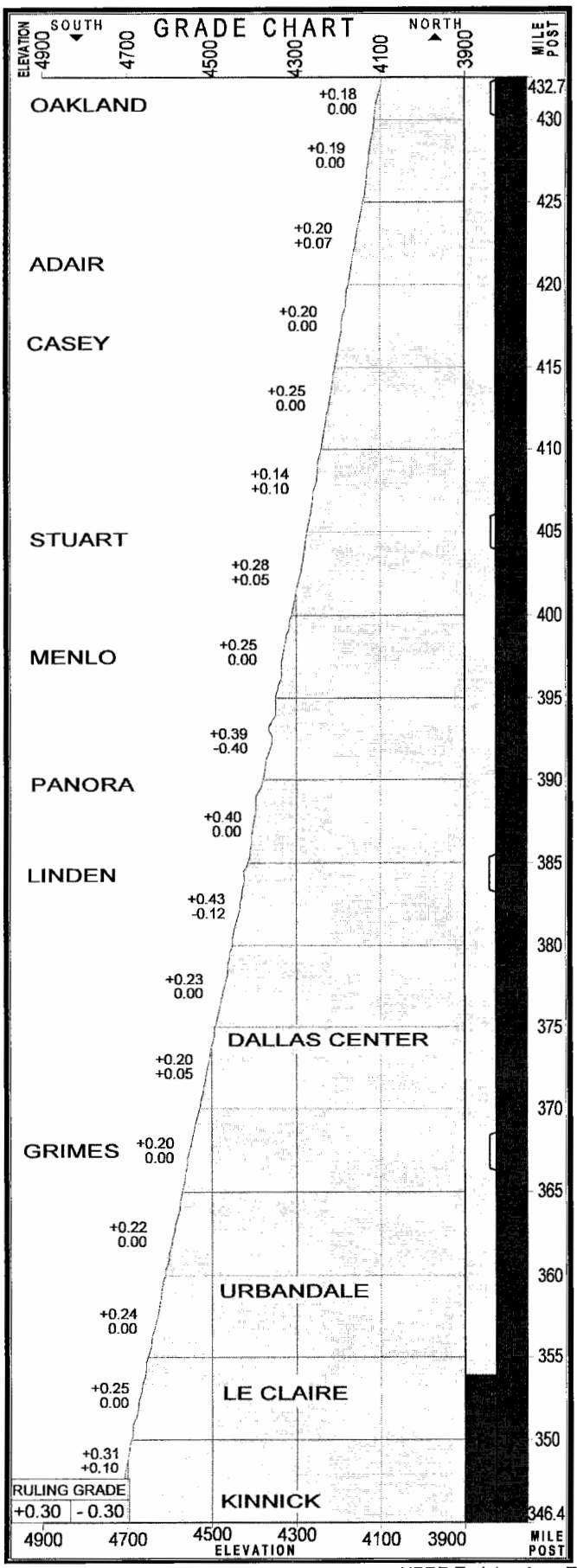
No additional restrictions to system requirements.

SI-14 MISC. INSTRUCTIONS

Set Out Tracks

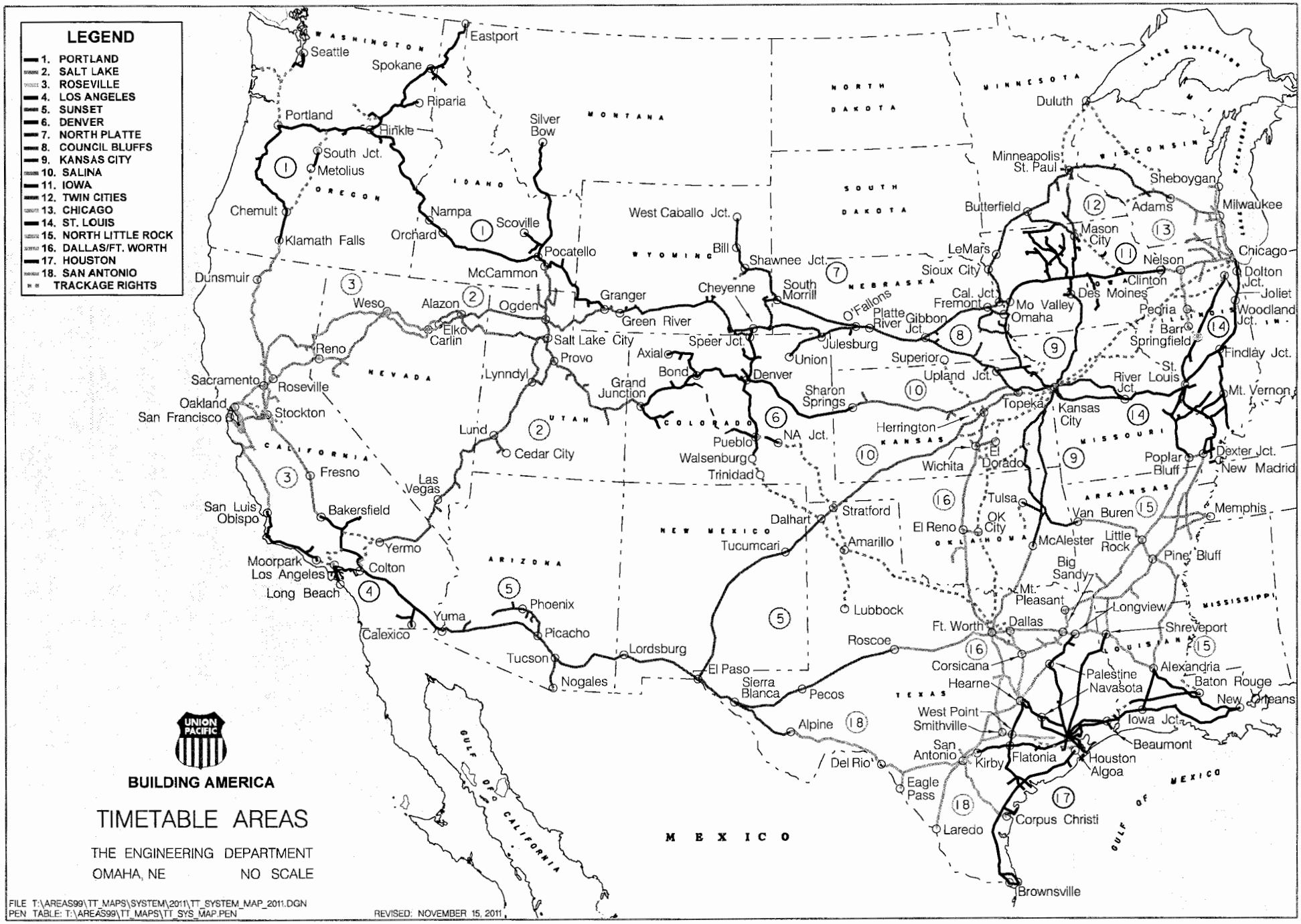
MP	Name	Track	Access Direction	Length
431.2	Oakland	E. Siding	Both	1000
431.5	Oakland	W. Siding	Both	850
421.6	Adair	Trk. 1	South	900
421.4	Adair	Trk. 2	North	1000
398.8	Menlo	Trk. 1	South	800
398.6	Menlo	Trk. 2	North	900
384.3	Linden	Siding	Both	1200
374.1	Dallas Center	Main	Both	400
359.0	Urbandale	Siding	Both	800

IOWA SUBDIVISION (2022)



NOTES:

NOTES:

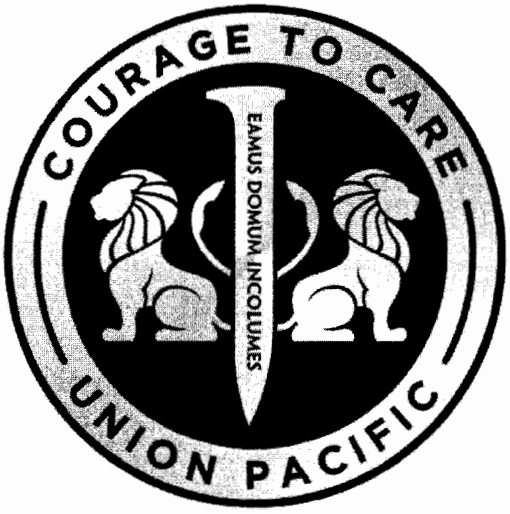

LEGEND
1. PORTLAND
2. SALT LAKE
3. ROSEVILLE
4. LOS ANGELES
5. SUNSET
6. DENVER
7. NORTH PLATTE
8. COUNCIL BLUFFS
9. KANSAS CITY
10. SALINA
11. IOWA
12. TWIN CITIES
13. CHICAGO
14. ST. LOUIS
15. NORTH LITTLE ROCK
16. DALLAS/FT. WORTH
17. HOUSTON
18. SAN ANTONIO
TRACKAGE RIGHTS
Eastport
Seattle
Spokane
Riparia
Portland
Hinkle
Silver Bow
South Jct.
Metolius
Chemult
Nampa
Orchard
Scoville
Klamath Falls
Pocatello
West Caballo Jct.
Bill
Shawnee Jct.
Dunsmuir
McCammon
Granger
Cheyenne
South Morrill
Weso
Alazon
Ogden
Elko
Carlin
Green River
Salt Lake City
Speer Jct.
Julesburg
Reno
Axial
Provo
Union
Superior
Sacramento
Roseville
Lynndyl
Bond
Denver
Upland Jct.
Oakland
San Francisco
Stockton
Grand Junction
Sharon Springs
Topeka
Kansas City
Lund
Cedar City
Pueblo
NA Jct.
Herrington
Walsenburg
Trinidad
Wichita
El Dorado
Fresno
Las Vegas
Tulsa
Dalhart
Stratford
San Luis Obispo
Bakersfield
Van Buren
Memphis
Yermo
Tucumcari
Amarillo
El Reno
OK City
McAlester
Little Rock
Moorpark
Los Angeles
Colton
Long Beach
Big Sandy
Pine Bluff
Mt. Pleasant
Lubbock
Longview
Phoenix
Ft. Worth
Dallas
Shreveport
Yuma
Calexico
Picacho
Roscoe
Tucson
Lordsburg
Corsicana
Alexandria
Palestine
Hearne
Navasota
Baton Rouge
Nogales
El Paso
Sierra Blanca
Pecos
New Orleans
West Point
Smithville
Iowa Jct.
Alpine
Beaumont
San Antonio
Kirby
Flatonia
Houston
Algoa
Del Rio
Eagle Pass
Corpus Christi
Laredo
Brownsville
Duluth
Minneapolis
St. Paul
Sheboygan
Milwaukee
Butterfield
Adams
Mason City
Chicago
LeMars
Sioux City
Nelson
Clinton
Dolton Jct.
Joliet
Cal. Jct.
Fremont
Des Moines
Mo Valley
Omaha
Peoria
Woodland Jct.
Platte River
Gibbon Jct.
O'Fallons
Barr
Springfield
Findlay Jct.
St. Louis
River Jct.
Mt. Vernon
Dexter Jct.
Poplar Bluff
New Madrid
MONTANA
NORTH DAKOTA
SOUTH DAKOTA
WYOMING
NEBRASKA
NEVADA
UTAH
COLORADO
KANSAS
OKLAHOMA
TEXAS
MISSOURI
ARKANSAS
LOUISIANA
MISSISSIPPI
ILLINOIS
WISCONSIN
MINNESOTA
IOWA
OREGON
IDAHO
WASHINGTON
CALIFORNIA
ARIZONA
NEW MEXICO
MEXICO
GULF OF CALIFORNIA
GULF OF MEXICO
LAKE SUPERIOR
UNION PACIFIC
BUILDING AMERICA
TIMETABLE AREAS
THE ENGINEERING DEPARTMENT
OMAHA, NE
NO SCALE
FILE T:\AREAS99\TT_MAPS\SYSTEM\2011\TT_SYSTEM_MAP_2011.DGN
PEN TABLE: T:\AREAS99\TT_MAPS\TT_SYS_MAP.PEN
REVISED: NOVEMBER 15, 2011

Continental Time Conversion Chart

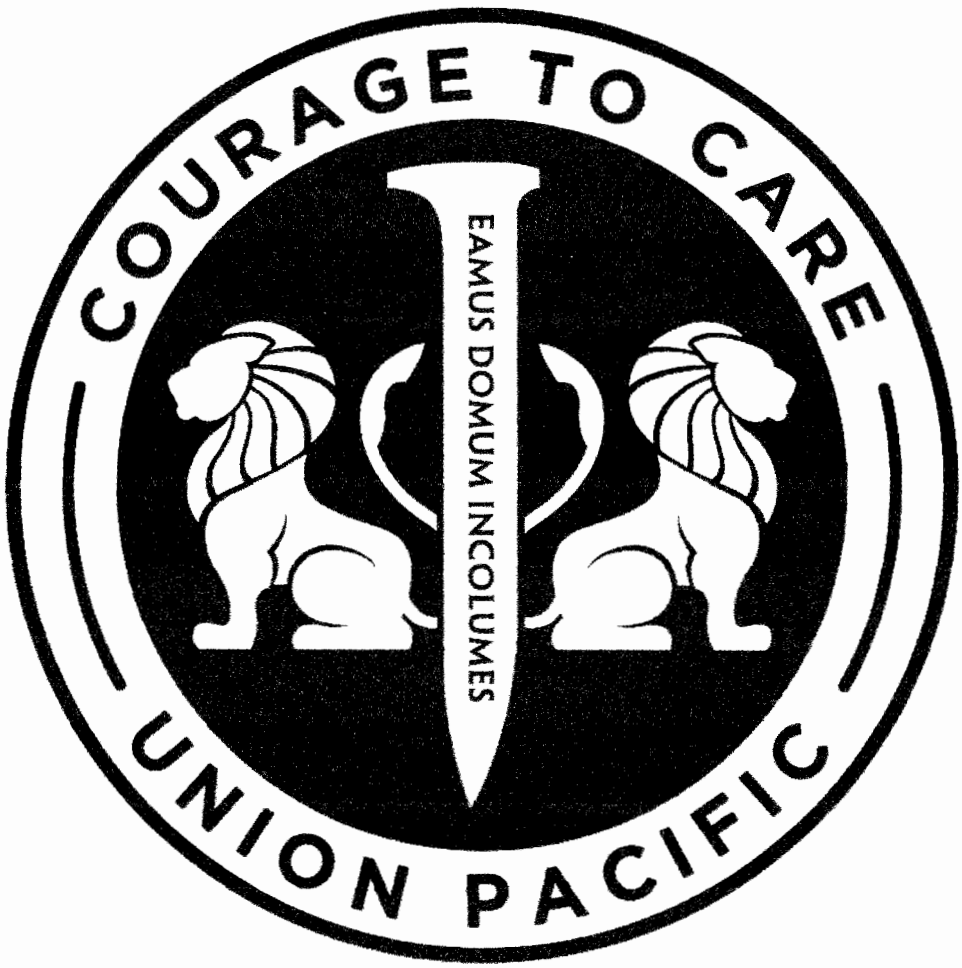
1:00 AM	0100	1:00 PM	1300	
1:30 AM	0130	1:30 PM	1330	
2:00 AM	0200	2:00 PM	1400	
3:00 AM	0300	3:00 PM	1500	
4:00 AM	0400	4:00 PM	1600	
5:00 AM	0500	5:00 PM	1700	
6:00 AM	0600	6:00 PM	1800	
7:00 AM	0700	7:00 PM	1900	
8:00 AM	0800	8:00 PM	2000	
9:00 AM	0900	9:00 PM	2100	
10:00 AM	1000	10:00 PM	2200	
11:00 AM	1100	11:00 PM	2300	
11:59 AM	1159	11:59 PM	2359	
Noon	1200	Midnight	0000	(new date)
12:01 PM	1201	12:01 AM	0001	

TABLE OF TRAIN SPEEDS

Min Per Mi.	Sec. Per Mi.	Miles Per Hour	Min. Per Mi.	Sec Per Mi.	Miles Per Hour	Min Per Mi.	Sec. Per Mi.	Miles Per Hour	Min. Per Mi.	Sec Per Mi.	Miles Per Hour
			1	6	54.5	1	21	44.4	1	35	37.9
0	45	80.0	1	7	53.7	1	22	43.9	1	40	36.0
0	48	75.0	1	8	52.9	1	23	43.4	1	45	34.3
0	50	72.0	1	10	51.4	1	24	42.9	1	50	32.7
0	52	69.2	1	11	50.7	1	25	42.4	1	55	31.3
0	54	66.6	1	12	50.0	1	26	41.9	2	0	30.0
0	56	64.2	1	13	49.3	1	27	41.4	2	5	28.8
0	58	62.0	1	14	48.6	1	28	40.9	2	10	27.7
1	0	60.0	1	15	48.0	1	29	40.4	2	15	26.7
1	1	59.0	1	16	47.4	1	30	40.0	2	20	25.7
1	2	58.0	1	17	46.7	1	31	39.6	2	25	24.8
1	3	57.1	1	18	46.1	1	32	39.1	3	0	20.0
1	4	56.2	1	19	45.6	1	33	38.7	4	0	15.0
1	5	55.3	1	20	45.0	1	34	38.2	6	0	10.0



I have the courage to care. Worn with a lion's pride, it means those I work with will have my back, and I will have theirs. I pledge to shield myself and my team from harm. I will take action to keep them safe, by fixing an unsafe situation, addressing an unsafe behavior or stopping the line. In turn, I will have the courage to accept the same actions from my coworkers, who care enough to correct my path. We wear this badge out of respect for each other and those who have gone before us. On my watch, we will all go home safe to our families every day.



01/10/23

HAZARDOUS MATERIALS

1. Who is required to have either a printed or UPRR electronic version of the Form 8620?

ALL TEY EMPLOYEES

2. What is the most current version of the Emergency Response Guidebook?

2020 ERG

3. During train operations, who is required to carry the most current Emergency Response Guidebook (ERG)?

CONDUCTORS

4. A loaded tank car containing a material poisonous/toxic by inhalation, including anhydrous ammonia, is a Rail Security-Sensitive material (RSSM)?

YES

5. When is a Positive Hand-Off required?

Receiving an RSSM from shipper at any location
Receiving / Delivering
Delivering RSSM in high threat urban area HTUA

6. When a Positive Hand-Off of a RSSM shipment is required, what is necessary for the shipment to be considered attended?

Employee or Rep of the RR & Employee OR
Rep of the Shipper / Receiver or Interchange RR
Physically Attended.

7. What items must be documented during a Positive Hand-Off?

Car Initial, First & Last Name of individual who
attended transfer, Location, Date & Time

8. What documents are required when accepting or transporting a hazardous material shipment?
Acceptable Shipping Documents/Papers
Emergency Response Info.
Position in Train Documentation.

9. List the documents that would be considered acceptable shipping papers:
Train List, Railroad Produced Documents, Connecting Carrier Documents, Hand printed Documents, Not cursive.

10. A crew has a work order to pull 10 cars of TIH/PIH hazardous material from Bridgman Chemicals. The 4th car in the track is not listed on the work order. What is required?
Only pull first 3 cars.

11. Before proceeding, what must be done with all copies of Position-in-Train documents after pickups or setouts have been made?
Documentation must be made., Paper copy of Position in Train Documents, Update both the Conductor & Engineer Train Lists.

12. A crew will be picking up 10 cars listed as TIH/PIH that are a solid block. What inspections are required?
NONE
Solid Block

13. Your crew will be picking up a loaded TIH/PIH tank car at a customer's facility on an Industrial lead. What action is required if the car is missing a placard?
DO NOT Accept until correction is made to replace placard.

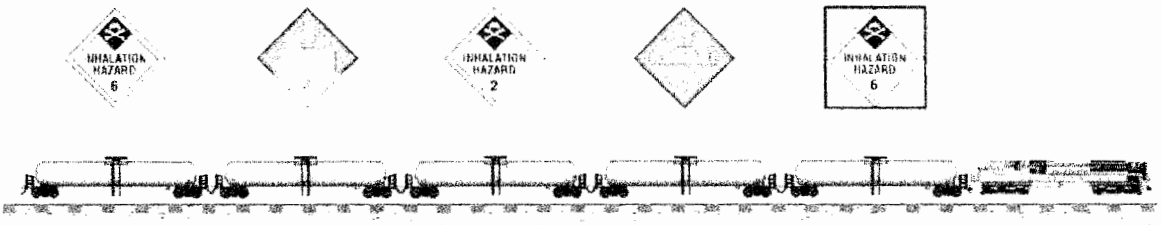
14. What is the maximum coupling speed when a loaded placarded car is cut off in motion?
Not to exceed 4 MPH.

15. The following cars are being switched in a hump yard. Are there any restrictions to switching these cars in a hump yard?

029 PSPX022152 LT22 129 LIVO NKPN APOISN TB028 MFWLI 25 LIVO
** DANGEROUS **
030 PSPX022109 LT22 129 LIVO NKPN APOISN TB028 MFWLI 25 LIVO
** DANGEROUS **
031 CPCX105054 LT22 131 LIVO NKPN APOISN TB028 MFWLI 25 LIVO
** DANGEROUS **

CUTS in 2 OR LESS

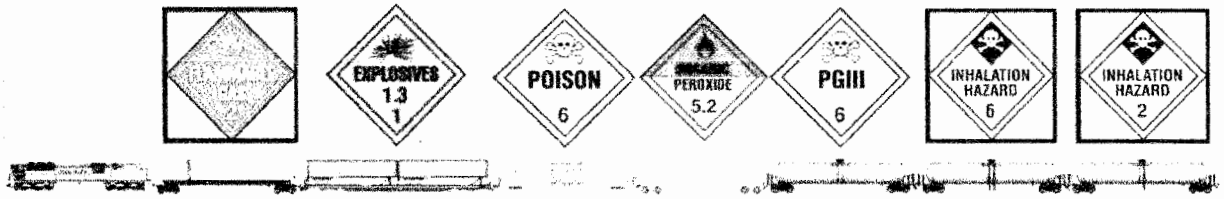
16. What precautions must be taken when flat switching the loaded tank cars shown below?



3 INHALATION CARS SHOVE TO REST

1-3-ES TH PIH CARS SHOVE TO REST

17. During humping operations, which cars must be shoved to rest?

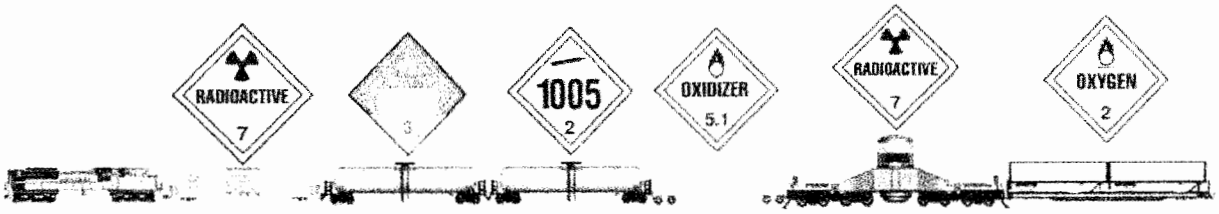


1 2 6

18. In a switching operation, can the car below be kicked or humped? Please explain your answer.

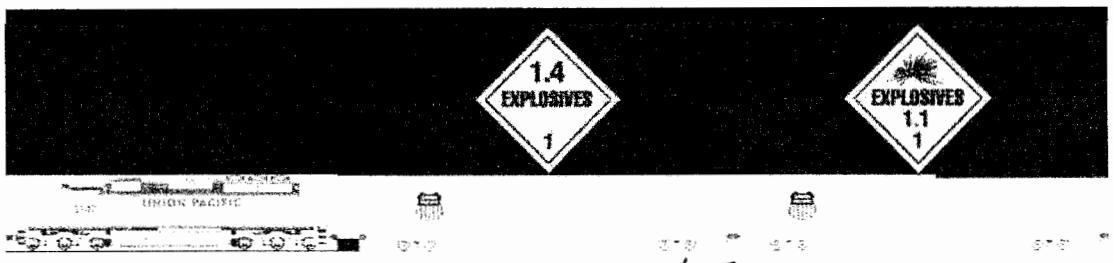
NO - SHOVE TO REST

19. Which car(s) may be cut-off in motion while flat switching?



1 2 4

20. Could you couple the engine to the cut of cars shown below while switching?



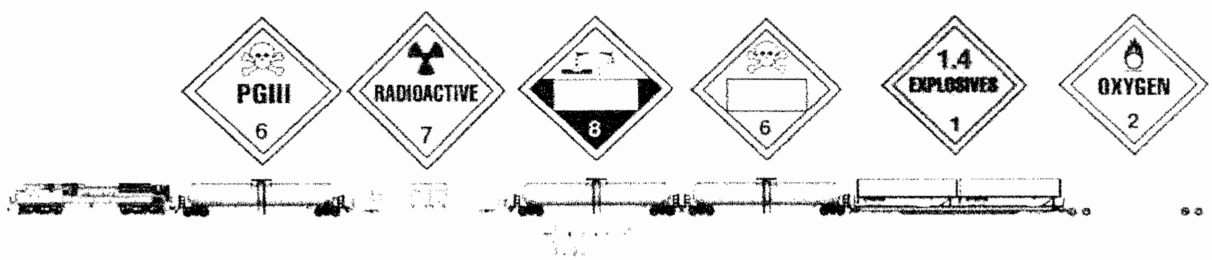
NO NEED A BUFFER CAR

21. While switching at an Industry, could a Local crew couple directly into the cars shown below at either end of the cut?

YES, BECAUSE YOU'RE IN AN INDUSTRY LEAD

```
SEQ INIT NUMB  L AND WGT YBLK SPCD CMDTY  *NEXT*SYS*DES* DEST-TRAIN TBLK
001 TILX601143 L T11 137 IND6 NEHS APOISN JR001  1075416 LOF58 01   INDU
        **DANGEROUS                  **
        FLAT YARD - DO NOT KICK

002 GONX152557 L 55C 133 IND3 HDEN PIPE   JR001  1075002 LOF58 01   INDU

003 GATX176678 E T11 038 IND3 NGHZ        JR001  1075103 LOF58 01   INDU
        **                           **

004 CEMX011128 E C3L 028 IND3 H2          JR001  1075506 LOF58 01   INDU

005 EAGX019031 E T19 035 IND6 DEEM        JR001  1075413 LOF58 01   INDU
        **DANGEROUS                  **

006 SHPX240275 L T12 131 IND6 NKH2 APOISN JR001  1075315 LOF58 01   INDU
        **POISON GAS ZONE A          **
        FLAT YARD - DO NOT KICK
```

22. Will the car placement shown below meet Placement in Train requirements? Explain why or why not.



NO - NEEDS 5 BUFFER CARS
CAR 4 NEEDS TO BE ON THE REAR

23. Will the car placement shown below meet Placement in Train requirements? Explain why or why not.

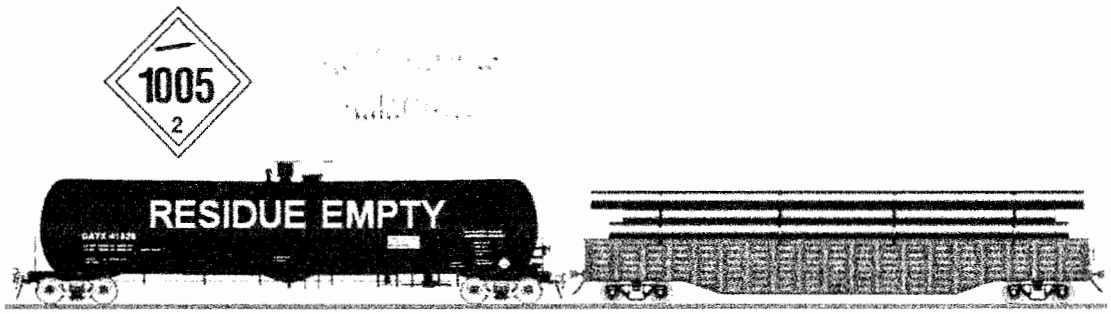
YES – HAS 5 BUFFER CARS.

24. Using the Placard Endorsement Conversion Chart and the Placement in Train Chart, are the following placements correct?

```
  42 CALX   5014 ETOL          RV378              OSOL  TOLENAS  CA SUNPOL RES
    74 FROM HEAD 50-MPH  35-TONS  55-FT  1-F        1.00-BRK 5085-ATONS  5284-AFT
                                                 1 TK
*************************                        RESIDUE: LAST CONTAINED
*                       *                        NA1993
*************************                        COMBUSTIBLE LIQUID,N.O.S.
EMERGENCY CONTACT:                               (CONTAINS MINERAL
  9252615566                                      SPIRITS)
                                                 COMBUSTIBLE LIQUID
                                                 PG III
                                                 SHIPPER CONTACT
                                                   SUNPOL RESINS AND POLYMER
                                                 HAZMAT STCC = 4915559
  43 ARMN 762356 LBF7 MEATS  EK950              OAKL  OAKLAND  CA PACIFI TRA
    72 FROM HEAD 70-MPH  90-TONS  59-FT  1-F        1.00-BRK 6050-ATONS  5348-AFT
               PS  3705 MAINTAIN 0 DEGREES
               PROTECTIVE SERVICE
                                                     MAINTAIN -10 DEG
  44 PROX  15245 LT12 CORSVE RV182  01-702-55      VISTA    NV SIERRA CHE
    72 FROM HEAD 60-MPH 128-TONS  42-FT  1-F        1.00-BRK 2990-ATONS  3740-AFT
               CC  CAR IS LESS THAN 45 FT
                                                 1 TC, 59970 KG
*************************                        UN1830
* DANGEROUS             *                        SULPHURIC ACID
*************************                        8
EMERGENCY CONTACT:                               PG II
  800-424-9300                                   RQ (SULFURIC ACID)
                                                 ERP 2-0034
                                                   2513644214
                                                 TECK METALS LTD
                                                 25 ALDRIDGE AVE
                                                 TRAIL              BC V1R4L
                                                 SHIPPER CONTACT
                                                   CHEMTREC      CCN11488
                                                 HAZMAT STCC = 4930040
```

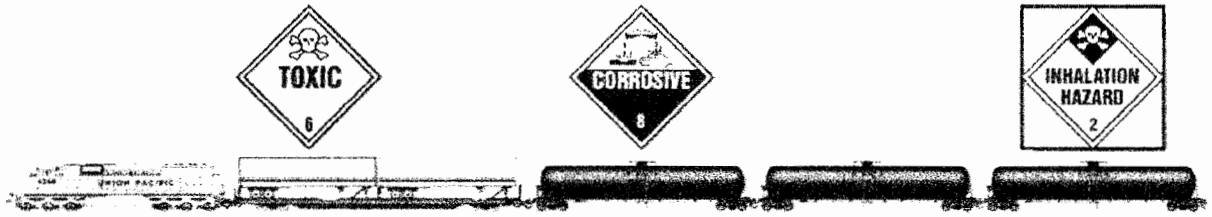
NO – LINE 43 IS PROTECTED SERVICE – COMBUSTIBLE ENGINE

25. Can the cars shown below be placed next to each other in a train?



NO - SHIFTABLE LOAD
TH CANNOT BE NEXT TO GONDOLA

26. Will the car placement shown below meet Placement in Train requirements? Explain why or why not.



YES - ALL AVAILABLE BUFFER CARS USED.

27. Using the Placard Endorsement Conversion Chart and the Placement in Train Chart, are the following placements correct?

```
86  UTLX 48690              LT19
     R60  SPEED  RESTRICTED CAR
                             1/TC,  142115/LB
**********************       ENVIRONMENTALLY HAZARDOUS
*                    *       SUBSTANCES,  LIQUID,
**********************       N.O.S.
EMERGENCY CONTACT:           (DIMETHYL PETHALATE)
800-424-9300                 9
                             UN3082
                             PG III
                             RQ (DIMETHYL PHTHALATE)
                             HAZMAT STCC = 4962114

87  GATX 78240              LT32
     R60  SPEED  RESTRICTED CAR
                             1/TC
**********************       LIQUEFIED PETROLEUM GAS
*     DANGEROUS      *       2.1
**********************       UN1075
EMERGENCY CONTACT:           (PROPANE)
800-424-9300                 HAZMAT STCC = 4905752

88  GATX 78086              LT32
     R50  SPEED  RESTRICTED CAR
                             1/TC
**********************       PHOSGENE
* POISON GAS ZONE A *        2.3
**********************       UN1076
EMERGENCY CONTACT:           RQ (PHOSGENE)
800-424-9300                 POISON-INHALATION HAZARD
```

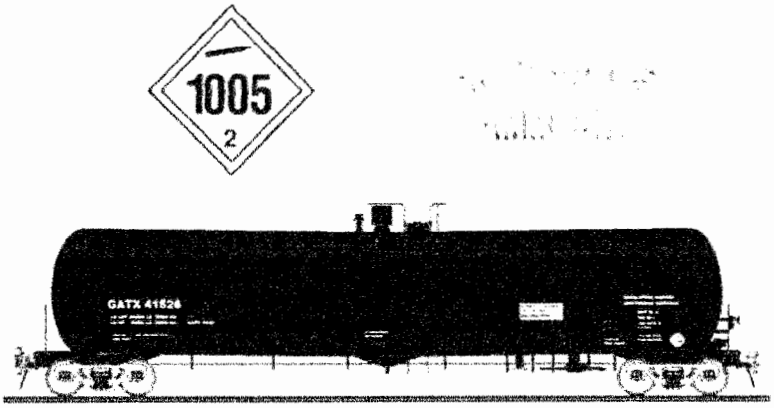
NO - BLUE CANNOT GO NEXT TO PURPLE

28. After switching cars at an Industry, could a Local crew place the cars (as shown below) on the head end of their train and proceed to their next customer located 6 miles away on the Industrial Lead?

```
SEQ INIT NUMB  L KND WGT YBLK SPCD CMDTY  *NEXT*SYS*DES* SEND-TRAIN TBLK
001 TILX601148 L T12 137 IND6 NRH3 APOISN CR001  1078416 LOF88 01   INDU
          **DANGEROUS                **
          FLAT YARD - DO NOT KICK

002 GONX082587 L S8C 138 IND4 HLBN PIPE   CR001  1078100 LOF88 01   INDU

003 GATX072673 E T22 088 IND8 HGH2        CR001  1078209 LOF88 01   INDU
          **                         **

004 SERX111128 E S8L 128 IND2 H2          CR101  1078816 LOF88 01   INDU

005 EAGX119161 E T19 088 IND6 DEEM        CR101  1078418 LOF88 01   INDU
          **DANGEROUS                **

006 SHPX240275 L T12 181 IND6 NRH2 APOISN CR001  1078818 LOF88 01   INDU
          **POISON GAS ZONE A        **
          FLAT YARD - DO NOT KICK
```

NO - LOADED DANGEROUS NEXT TO LOADED GONDOLA WITH PIPE

29. If the car below was added to a train with no hazardous materials, would its Key Train status change?



YES - RCSM SHIPMENT TIH-PIH MAKES IT A KEY TRAIN

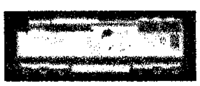
30. Does the rear helper shown below comply with the Placement in Train requirements?

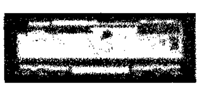
YES - ONLY RESTRICTION 1 APPLIES

HAZMAT - TRAIN PLACEMENT AID

	Color	Color	Color	Color	Color	Color	Color	
	Column	Column	Column	Column	Column	Column	Column	
Restriction 1								Restriction 1
Restriction 2								Restriction 2
Restriction 3								Restriction 3
Restriction 4								Restriction 4
Restriction 5								Restriction 5
Restriction 6								Restriction 6

	Color	Color	Color	Color	Color	Color	Color	
	Column	Column	Column	Column	Column	Column	Column	
Restriction 1								Restriction 1
Restriction 2								Restriction 2
Restriction 3								Restriction 3
Restriction 4								Restriction 4
Restriction 5								Restriction 5
Restriction 6								Restriction 6

	Color	Color	Color	Color	Color	Color	Color	
	Column	Column	Column	Column	Column	Column	Column	
Restriction 1								Restriction 1
Restriction 2								Restriction 2
Restriction 3								Restriction 3
Restriction 4								Restriction 4
Restriction 5								Restriction 5
Restriction 6								Restriction 6

	Color	Color	Color	Color	Color	Color	Color	
	Column	Column	Column	Column	Column	Column	Column	
Restriction 1								Restriction 1
Restriction 2								Restriction 2
Restriction 3								Restriction 3
Restriction 4								Restriction 4
Restriction 5								Restriction 5
Restriction 6								Restriction 6

UNION PACIFIC RAILROAD

Rules Training Study Guide

2023

This study guide will help you prepare for your daily duties and the 2023 exam. When you come to your rules class, bring the reference documents listed below, completed study guide, and supporting documents.

The simulated events occur on the Orange and Fiesta Subdivisions.

Scenario One: You will follow along with a through freight crew beginning their trip at Tucson on the Fiesta subdivision. The crew will complete a work event at Los Angeles and operate the train on grade territory until completing trip at Corvallis.

Scenario Two: You will follow along with a Local crew originating at Sunflower Yard on the Orange subdivision. The Local crew will spot customers on an industrial lead and then operate to Morgantown where they will pick up cars for Bedlam Yard.

As developments occur, you will be asked questions about how situations should be handled, including train movement, tonnage requirements, helper requirements and rule requirements.

As you work through the study guide, keep in mind the situation the crew is in and what is required to respond correctly to the situation.

REFERENCES YOU WILL NEED:

- Union Pacific System Special Instructions
- Union Pacific System General Orders
- Form 8620 Instructions for Handling Hazardous Materials
- Calculator

2023 Rules Training Study Guide

A crew is called on duty at Sunflower Yard (Orange subdivision) at 0600 hours for Pool Freight HOS relief. A contract vehicle will transport the crew to Tucson siding (Fiesta subdivision) where they will add a locomotive to the lead consist of a distributed power train that was previously secured on the siding track and then operate the train southward to Corvallis, stopping at Los Angeles for an enroute work event.

1. On the engineer's previous start, the total trip time was 11 hours and 15 minutes. How much rest was required prior to this start? **1.17**

10 HOURS

2. Is the crew required to contact the train dispatcher to determine if any track warrants, track bulletins or other instructions must be obtained before leaving Sunflower Yard? **15.12**

YES

3. Once the crew receives their paperwork, in addition to reviewing train paperwork, what other items must be reviewed as part of the initial job briefing? **70.3, SSI Item 7-A**

UPRR SYSTEM SPECIAL INSTRUCTIONS DOCUMENT TIMETABLE FOR TERRITORIES OPERATING ON SUBDIVISION GENERAL ORDERS - CURRENT SYSTEM G.O.

4. While deadheading out to the train in the contract vehicle, the engineer would like to take a nap while lying down on the rear seat of the van. Is this permissible? **74.5**

NO - ALL OCCUPANTS SEATED WITH SEATBELT ON

Arriving at the train, the crew discovers the train has been separated for the road crossing at Tucson and the locomotive that will be added to the train is secured in the spur track at the south end of the siding track. The crew boards the lead locomotive and reviews the securement checklist left by the previous crew.

5. The checklist indicates the train was secured two days ago. Secondary Procedure was utilized when securing the rear portion (3,200 tons) and Primary Procedure was utilized when securing the head portion. How many hand brakes were required when securing the rear portion of the train? (1% grade at Tucson) **32.1.1**

14 - HANDBRAKES REQUIRED.

6. The crew job briefs and decides to add the locomotive to the rear of the lead consist before recoupling the train at the crossing. Is the crew required to contact the train dispatcher prior to initiating movement on the siding track? **15.12**

YES - CONTACT DISPATCHER FOR JOB BRIEFING

7. The locomotive daily inspection card on the lead locomotive indicates the last inspection occurred two days ago. Will the engineer be required to perform the locomotive daily inspections on the lead consist and the rear DP remote? **31.2.1**

YES - MUST BE INSPECTED

8. Will the engineer be required to log into the PTC system before detaching the lead consist and picking up the locomotive from the spur track or can the engineer wait and log into the PTC system once the work event is completed? **18.2**

YES - PTC ON LEAD MUST BE INITIALIZED UNLESS INOPERATIVE

9. What items must be reviewed and corrected if needed, during initialization of the PTC system? **18.2, 18.6**

PTC ON CONTROLLING LOCO IS INITIALIZED
ENGINEER REVIEW CONSIST DATA
DEPARTURE TEST

10. Is the crew required to perform a release test before detaching the lead consist from the head portion of the train? **32.1.1, 32.1.3**

YES - VERIFY SUFFICIENT HAND BRAKES ARE APPLIED

11. At what speed must the crew operate while picking up the locomotive from the spur track and returning to the train? **9.10, 6.27**

RESTRICTED SPEED, LEADING WHEELS

12. What PTC action is required, if any, by the engineer before detaching the lead consist from the train and completing the work event? **18.9**

MUST ENABLE RESTRICTED MODE.

After complying with any required actions, the crew detaches the lead consist from the head portion and proceeds to the spur track. After clearing the spur track switch and stopping the movement, the conductor detrains, unlocks the switch, and lines it for movement to the spur track.

13. Is the conductor required to place the lock in the hasp of the switch after lining it for the intended route? **8.8**

YES

14. Is the conductor required to lock the switch before initiating movement into the spur track? **8.8**

NO, MOVEMENT INTO SPUR IS SWITCHING MOVE

15. After placing the derail on the spur track in the non-derailing position, the conductor job briefs with the engineer concerning how protection will be provided to control the shoving movement to a coupling. What items must be included in the radio job briefing prior to initiating the shoving movement? **6.5**

WHO WILL PROTECT SHOVE
HOW SHOVE IS PROTECTED
DISTANCE & DIRECTION TO BE SHOVED

16. After making the coupling and stretching the joint, the engineer exits the lead locomotive to set up the additional locomotive as a trailing unit. Is the engineer required to announce "Red Zone" before fouling the equipment? **81.5.4**

NO - VERIFY SET & CENTERED

17. The locomotive daily inspection card indicates the locomotive was inspected on the previous day. Will the engineer be required to perform a daily inspection on the additional locomotive? **31.2.1**

YES - 24 HOURS
MUST NOT BE OLDER THAN LEAD

18. Will a locomotive air brake test be required after adding the locomotive to the consist? **31.3.1**

YES, STANDING AIR BRAKE TEST

19. After setting up the trailing locomotive and performing any required locomotive air brake tests, the engineer releases the hand brake on the locomotive. Is it permissible for the engineer to place both hands on the brake wheel while operating the hand brake? **81.11**

YES, BOTH HANDS MAY BE PLACED ON WHEEL

The crew operates southward off the spur track with the locomotives. After clearing the spur track, the conductor lines the spur track switch for movement on the siding track and secures the switch.

20. Will the conductor be required to place the derail on the spur track in the derailing position and secure it if the spur track is clear of equipment? **8.20**

YES, DERAIL MUST BE LINED & LOADED

After completing any required actions regarding the derail, the conductor boards the rear of the locomotive consist to be in position to protect the shoving movement back to a coupling on the train.

21. The conductor will be using hand signals to control the shoving movement. Is a radio job briefing required before initiating the movement? **6.5**

NO - HAND SIGNS

After making and stretching the coupling, the conductor requests "Red Zone Protection" through an agreed upon hand signal in order to cut-in air to the head portion of the train and release hand brakes.

22. What action is required by the engineer before the conductor fouls the equipment? **81.5.4**

ENGINEER MUST APPLY BRAKES
CENTER THE REVERSER

23. The securement form left by the previous crew indicates there are 8 applied hand brakes on the head portion of the train. How many hand brakes must the conductor check beyond the last hand brake that is released? **32.1.6**

CONDUCTOR CHECK 3 BRAKES AFTER

24. Will the conductor be required to establish Track Breach Protection if work is performed between the siding and the main track? **SSI Item 12**

YES - TRACK BREACH PROTECTION
SECOND EMPLOYEE

25. The conductor proceeds to the road crossing to couple the train together. The road crossing at Tucson is not equipped with automatic warning devices. What action is required, if any, by the conductor when shoving across the crossing and coupling the train? **6.32.1**

CONDUCTOR NEEDS TO BE ON GROUND
UNTIL OCCUPIED

After making and stretching the coupling, the conductor informs the engineer that the angle cock on the rear portion is closed. The engineer reviews the DP secondary screen and observes 70 psi on the brake pipe gauge of the rear DP remote and a numeric value flow reading while in "Set Out" mode.

26. When is it permissible to close the angle cock on the portion of the train to be left standing when securing a train and detaching locomotives or locomotives and cars? **32.1.3, 33.8.3**

BOTH B & C 20 PSI

27. The conductor requests "Red Zone Protection" using the radio in order to cut-in air to the rear portion and release hand brakes. After confirming "Red Zone Protection", what action is required by the engineer before the conductor can cut-in the air to the rear portion? **33.8.3**

NORMALIZE & EXECUTE
20# REDUCTION, PRESS REMOTE SOFT KEY, VERIFY
SET OUT

28. What air brake tests and inspections, if any, will be required before the train departs Tucson? **30.6.1, 33.8.4, 34.4**

CLASS 3 AIR BRAKE TEST IF OFF AIR FOR 24 HOURS OR MORE & CLASS 1

After performing any required air brake tests and inspections, the crew notifies the dispatcher that they are ready to proceed southward. The leaving signal at the south end of Tucson siding displays a green aspect.

29. At what speed must the train operate to the signal? **9.10, 6.27**

RESTRICTED SPEED UNTIL LEADING WHEELS PASS SIGNAL.

30. As the head end of the train passes the clear signal, the engineer observes a red hash box overlay and a red track line between MP 384.0 and MP 382.0 on the PTC display. Why? **15.2, Paperwork**

FORM B — TALK TO EMPLOYEE IN CHARGE

31. What type of environment must be created in the locomotive control compartment as the train approaches MP 384.0? **1.47.1**

ALL TIME ABOVE

CAB RED ZONE

The conductor calls for the EIC of the Form B. The EIC answers and issues the following instructions: "Foreman Smith to the UP 7430 using Track Bulletin 44629, line 1, UP 7430 has permission to pass the red flag at MP 384.0 and proceed on the main track between MP 384.0 and MP 382.0, without stopping, sounding bell and whistle when approaching and passing men and equipment, over."

32. How should the conductor respond to the instructions from the EIC? **15.2**

INFORM EIC A GREED IS NEEDED

Operating southward, the crew observes an approach indication at CP M378. As the head end of the train passes CP M378, the crew hears the dragging equipment detector at MP 377.8 announce a defect tone followed by a defect message.

33. When should the engineer stop the train? **SSI Item 13**

ON CONCRETE TIES PERFORM AUDIBLE INSPECTION PLACE YOURSELF 10 CARS AHEAD & ROLL BY 20 CARS LISTENING FOR DEFECTS -STOP TRAIN

34. The signal at the south end of Eugene siding, CP M376 is displaying a red aspect. In addition to stopping, what other immediate action is required by the crew regarding the dragging equipment detector defect message? **6.23**

EMERGENCY, EMERGENCY, EMERGENCY IMMEDIATELY TRANSMIT EMERGENCY 911 TO DISPATCHER

After stopping, the conductor establishes Red Zone Protection and inspects the indicated axle location for the defect announced by the detector. The conductor observes the trainline connection between two cars hanging down below the top of the rail.

35. What is the required distance above the top of the rail for the glad hand connections? **32.3.2**

AT LEAST 5 INCHES

A northward train is approaching Eugene and will operate on the siding track. The dispatcher calls the northward train and notifies the crew that the southward train at Eugene is inspecting for dragging equipment.

36. How must the northward train operate while on the siding track at Eugene? **6.23**

NOT TO EXCEED RESTRICTED SPEED

37. The crew on the southward train notifies the dispatcher of the inspection results and departs. As the train is approaching Seattle, the engineer observes a "Comm Loss" on the DP consist at the rear of the train. What action is required? **32.9.6, SSI Item 8**

REDUCE TO 30 MPH & NOTIFY DISPATCHER

38. During the "Comm Loss", if the engineer needed to idle the remote consist, what procedure is required? **33.1.3**

FULL SERVICE APPLICATION

39. Communication with the rear DP consist is restored as the train crests the grade at Seattle. Operating around a curve on clear signals, the crew observes a vehicle in the right-of-way that appears to be fouling the main track. What action is required? **34.2.10**

MAXIMUM BRAKING EFFORT
E BRAKE IF NECESSARY

40. The vehicle was not fouling the track and was not struck. After stopping, is the crew required to notify the dispatcher of the event? **34.2.10**

YES

41. The crew discusses whether an inspection of the train will be required before departing. The train is not a Key Train, weight is 9500 tons, and speed at the time of the event was 25 MPH. Will an inspection be required if there was no severe slack action while stopping and brake pipe pressure is immediately restored to the rear when recovering the air? **6.23**

NO SPEED WAS ABOVE 20MPH.

42. Is the engineer permitted to apply power to hold the train stationary on the descending grade to reduce the total number of hand brakes required while recharging the train line? **34.3.2**

YES PROVIDED ENGINEER ISOLATES
ANY DC LOCOMOTIVES PRIOR

43. Based on the chart and locomotive information shown, how many tons can the engineer hold on a 1.4% grade if applying power in throttle position 3? **34.3.2**

	Tons Held on Listed Maximum % Grade									
	<0.25	0.25-0.49	0.50-0.74	0.75-0.99	1.00-1.24	1.25-1.49	1.50-1.74	1.75-1.99	2.00-2.24	2.25-2.5
Tons Held Using Ind. Brake *	8341	4071	2550	1838	1512	1228	1024	872	752	657
Tons Held in Throttle Position 3 **	11325	5565	3649	2685	2109	1725	1451	1245	1095	957
Tons Held in Throttle Position 4 **	15052	7845	4885	3573	2901	2357	2016	1741	1525	1353
Tons Held in Throttle Position 5 **	19245	9525	6255	4665	3695	3045	2582	2215	1965	1749

```
LOCOMOTIVE   PT       SO       AC
INIT   NUMB  CIRCT    CIRCT    D DC MODEL-#   DP
UP     7481  C5789             F AC C45ACCTE  HC
UP     3942  C5789             F DC SD70M     H
UP     6264  CT336             F AC C44ACCTE  H
UP     6914  C5789             B AC C44ACCCA  RC
```

6403 TONS (1228 TONS HELD BY DC LOCO)
17253 TONS HELD BY AC LOCO

44. While applying power to hold a train when recharging on a grade, what is the correct position for the brake handles? **34.3.2**

INDEPENDENT GETS APPLIED
AUTO RELEASED

45. Using the securement chart, a train weight of 9500 tons, and the amount of tonnage held while in throttle position 3 on a 1.4% grade (calculated in the previous question), will any hand brakes be required before the engineer applies power to hold the train? **34.3.2, 32.1.1**

	Securement Chart – When Not Practical to Verify Required Hand Brakes by Release of Air Brakes												
	Number of Applied Hand Brakes Required												
	Grade (%)												
Tons	<0.25	0.25-0.49	0.50-0.74	0.75-0.99	1.00-1.24	1.25-1.49	1.50-1.74	1.75-1.99	2.00-2.24	2.25-2.49	2.50-2.74	2.75-2.99	≥ 3.00
< 1,000	2	2	2	3	4	4	5	6	6	7	8	8	9
1,000-1,999	2	3	4	6	7	8	10	11	12	14	15	16	18
2,000-2,999	3	4	6	8	11	12	14	16	18	20	22	24	26
3,000-3,999	3	6	8	11	14	16	18	22	24	27	30	32	35
4,000-4,999	4	7	10	14	17	21	24	27	30	34	37	40	44
5,000-5,999	4	8	12	16	20	24	28	32	36	40	44	48	52
6,000-6,999	5	10	14	19	24	28	33	38	42	47	52	56	61
7,000-7,999	6	11	16	22	27	32	38	43	48	54	59	64	70
8,000-8,999	6	12	18	24	30	36	42	48	54	60	66	72	78
9,000-9,999	7	14	21	27	34	40	47	54	60	67	74	80	87

APPLY 16 HAND BRAKES

46. After completing any required inspections, recharging the train, and making a sufficient brake pipe reduction to hold the train while releasing the hand brakes, the crew notifies the dispatcher they are ready to depart. How must the train proceed? (The previous signal was Clear) **9.9**

~~RESTRICTED SPEED UNTIL THE NEXT SIGNAL IS~~ VISIBLE – PTC INDICATES NEXT GOVERNING SIGNAL

Arriving at Los Angeles, the train stops at CP M345. The dispatcher notifies the crew they will complete the work event through the crossovers and that the MYO at Los Angeles will job brief with the crew at the wye track.

47. What securement procedure is required before detaching the lead consist for the work event? **32.1.1, 32.1.3**

PRIMARY SECUREMENT

After detaching the lead consist and clearing the control point, the dispatcher calls on the radio and advises the crew that both switches of the crossover at CP M345 do not show lined and locked for movement to the siding track and that they will need to hand operate both dual control switches at the crossover for their movement.

48. What must be included in the job briefing before the dispatcher can authorize the movement and give the crew permission to place the dual control switches in hand operation? **9.13, 9.13.2**

CLEAR UNDERSTANDING OF SWITCHES CONTROL POINT - ROUTE - SWITCH (ES) THAT MUST BE OPERATED BY HAND

49. After receiving authority into the control point and permission to operate the dual control crossover switches by hand, the conductor proceeds to the first switch. What action is required after placing the switch in hand operation if it is already lined for the intended route? **9.13.1**

OPERATE HAND THROW LEVER & SWITCH POINTS ARE SEEN TO MOVE. LINE SWITCH & RETURN TO POWER.

50. After complying with any required action at the first crossover switch, will the conductor be required to place the second crossover switch in hand operation and line it for crossover movement before initiating movement through the crossover? **8.12**

YES - MAKE SURE SWITCH IS LINED FOR YOUR ROUTE BEFORE INITIATING MOVEMENT

After complying with any required actions, the crew operates northward on the siding track and stops at the hand operated switch for the south leg of the wye. The MYO at Los Angeles job briefs with the crew and tells them their pick-up consists of two blocks of cars. The block of 10 cars on the south wye track is from the local job and is not pre-tested, and the second block of 15 cars on the north end of the siding track was set out from a previous train 8 hours ago.

The crew job briefs regarding the work event. The block of 10 box cars from the Local contains cars that weigh less than 45 tons, and the total weight is 500 tons. The block of 15 hopper cars from the previous train are all loads weighing more than 100 tons and the total weight is 2100 tons. None of the cars contain hazardous materials.

51. Will the crew be required to perform an Initial Terminal Air Brake Test on the entire train if both blocks of cars are added to the train? **30.3.1**

NO - TRAIN WILL NOT REQUIRE A CLASS IF CARS ARE ADDED AS SOLID BLOCK

52. How must the two blocks of cars be assembled for the pick-up to comply with train make-up requirements? (The train is operating on L territory and trailing tonnage will be 12,100 tons after the work event) **SSI Item 5**

HOPPER CARS FIRST
15 LOADS ON HEAD END

53. What air brake tests and inspections, if any, will be required for the block of cars on the wye? **30.3.1, 1.33**

INITIAL TERMINAL
CLASS 1

54. What air brake tests and inspections, if any, will be required for the block of cars set out by the previous train? **30.3.1, 1.33**

HOPPERS WERE GOOD - 8 HOURS
CLASS 1

55. Will the crew be required to assemble the two blocks of cars into one block before performing any required air brake tests and inspections? **30.3.1, 30.7.1, 1.33**

NO

56. What are the piston travel requirements on a body mounted car brake during an Initial Terminal Air Brake Test, and if the car's brakes release prior to the signal being given to release the brakes, can the car be retested? **30.11.1**

6-9 INCHES
RETEST ONCE & REMAIN APPLIED FOR 5 MINUTES

57. After completing any required air tests and inspections on the pick-up, the crew proceeds southward to CP M345. The conductor detrains at the control point. After clearing the crossovers, the conductor lines the crossover switches for straight movement. Is any additional authority needed before shoving northward back to the train? **9.13.1, 9.13.2**

NO

58. When can the power be restored to the dual control crossover switches, and is the crew required to notify the dispatcher once power has been restored? **9.13, 9.13.1**

AT LEAST ONE CAR PASSES OVER SWITCH
NOTIFY DISPATCHER

59. Once the train is back together, what air brake tests and inspections, if any, will be required by the crew before departing Los Angeles? **30.7.1, 33.1.2**

CLASS 3 - GET A RELEASE

60. Will the engineer be required to update the PTC train consist data before departing? **18.6**

YES

61. After completing any required air brake tests and inspections, the crew notifies the dispatcher they are ready to proceed. The head end of the train is between CP M345 and CP M344. How must the train proceed? **9.10**

UNTIL LEADING WHEELS PASS SIGNAL
RUNNING AT RESTRICTED SPEED CP M344

62. Based on the locomotive information and a train weight of 12,100 tons, what is the TPDBA (Tons Per Equivalent Dynamic Brake Axle) for the train if the dynamic brakes are cut-out on the SD70M locomotive? **ABTH Glossary**

LOCOMOTIVE		PU	SD		AD		EA	EA	AD	EYCAHEDDABD		LEN	WBT
INIT	NUMB	DIRCT	DIRCT	D	DD	MODEL-#	PW	DB	AN	DDADDMBPDDB	DB	FT	TN
UP	7430	DBTBB		F	AC	C44ACDDTE	12.1	9.8	6	CYYYYBBDG4A	HD	74	210
UP	8942	DBTBB		F	DC	SD70M	10.4	8.6	6	CYYYY.B.GBE	H	78	199
UP	6164	DBTBB		F	AC	C44ACDDTE	12.1	9.8	6	CYYYYBBDG3A	H	74	208
UP	6914	DBTBB		B	AC	C44ACDDDA	12.1	9.8	6	CYYYYBBDG3A	RD	76	210

12,209 ÷ 29.4 = 418.3
ROUND UP TO 419

63. What is the maximum speed of the train on the descending grade between Berkeley and Corvallis? (The Tons Per Operative Brake (TPOB) of the train is 105.) **Timetable, 6.31**

20 MPH

64. What is the maximum speed of the train as the head end of the train passes MP 332.5? **SSI Item 8, Timetable**

15 MPH CROSSING THE GRADE

65. If the dynamic brakes failed on the lead unit, could the train continue to operate on the descending grade? **31.5.1**

YES - ABILITY TO CONTROL DYNAMICS & A WORKING ACCELEROMETER

66. If the dynamic brakes failed on the lead unit, is the crew required to recalculate the TPDBA (Tons Per Equivalent Dynamic Brake Axle) for the train and maximum descending grade speed? **ABTH Glossary**

YES

67. Approaching Stanford, the engineer notices the flow is increasing on the AFM indicator and the accelerometer indicates the speed is increasing. The speed increases and is approaching 5 MPH over their maximum speed. What action is required? **SSI Item 8**

EMERGENCY APPLICATION - STOP MOVEMENT USING EMERGENCY BRAKE APP.
1. FULLY APPLY INDEPENDENT. 2. DO NOT MOVE TRAIN UNTIL AUTHORIZED

68. The engineer immediately stops the train. What action is now required? **SSI Item 8**

NOTIFY DISPATCH - APPLY HANDBRAKES TO PREVENT MOVEMENT C.

69. If an emergency application is initiated by a crew member, due to speed approaching or reaching 5 MPH above maximum authorized speed while operating on Heavy or Mountain Grade territory, is the engineer permitted to apply power to hold the train stationary on the descending grade to reduce the total number of hand brakes required while recharging the train line? **SSI Item 8**

NO

After complying with any required action(s), the train is ready to depart. A DSLE (Designated Supervisor of Locomotive Engineers) has debriefed the crew regarding the emergency application of the train air brakes.

70. Before departing, the DSLE discusses the use of retainers with the crew. What are the requirements regarding use of retainers? **34.5.5**

RETAINING VALVE GET IN HP ON ENTIRE TRAIN DO NOT EXCEED 15 MPH. FREIGHT CAR BRAKE CYLINDER IS NOT RETAINED UNTIL BRAKE PIPE REDUCTION OF 10 PSI IS MADE & RELEASED

Both answers

71. The train passes an Approach indication at CP M323 and the crew observes a Stop indication at CP M321, Corvallis. A member of the outbound crew calls the train and inquires how the supplies are in the cab. How should the crew on the train respond? **1.47.1**

PTC TERRITORY, LIMITED RADIO COMMUNICATION

A Local crew is called on duty at Sunflower Yard on the Orange Subdivision. After building their train at Sunflower, the crew will spot Orange and Wheat industries on the Sessums Industrial Lead. The crew will then operate light power eastward to the siding track at Morgantown, where they will pick up cars set out by a previous train and take those cars to Bedlam where they will tie up for the day.

The Local crew is performing a job briefing when the Yard Controller calls on the crew room phone and advises the crew that their power is in the engine spur, the rear portion of their train is in departure track 4, and the head portion will need to be switched out of Bowl track 6.

72. The engineer on the Local notices that the brakeperson is wearing an electronic device (Apple I Watch Type device). Can the brakeperson wear this device while on duty? **2.21**

NO

73. The Local crew rides in the Yard van out to the engine spur. The speed limit in the yard is 5 MPH. Are all occupants required to wear seatbelts? **74.5**

YES – ALL OCCUPANTS

74. The two locomotives in the engine spur are MU'd, shut down and blue flagged. Can the engineer start the locomotives while they are blue flagged? **5.13**

NO – UNLESS INSTRUCTED BY PERSON IN CHARGE

75. The mechanical employee completes the daily inspection and removes the blue flags from the locomotives and the track. When can the engineer release the hand brakes on the locomotives? **31.1**

YES - ENSURE IT IS CHARTED
WHEN ENGINEER TAKES CONTROL OF LOCO & EVERYONE IS CLEAR

76. The engineer changes operating ends and sets up the east locomotive as the controlling unit. Will the engineer be required to perform an Electronic Alertness Control Device Test (Alerter Test) before departing Sunflower Yard? **31.8.4.3**

YES

77. How does the engineer verify that the locomotive brakes are operative? **31.8.4, 31.8.4.1**

STAND TEST, RUN TEST
BRAKES, APPLY & RELEASE

78. The crew stops on the Bowl lead at the switch for Bowl track 6. Is any protection required before lining the switch to Bowl track 6 and entering the track during humping operations? **7.13**

JOB BRIEF WITH REMOTE CREW OR YARD MASTER
MAKE SURE TO ASK EMPLOYEE IN CHARGE TO LOCK OUT SWITCH WHERE THEY WILL BE WORKING

79. After receiving any required protection, what actions, if any, are required before operating the switch? **8.2, 82.3**

LINED FOR INTENDED ROUTE, POINTS FIT, LOCKS SECURE THE SWITCH ALL ABOUT

80. While coupling bowl track 6, the conductor discovers a misaligned drawbar. Will the conductor need to establish "Red Zone Protection" to adjust the drawbar? **81.5.4**

YES - BETWEEN EQUIPMENT RED ZONE

81. What other requirements, if any, need to be met before making the coupler adjustment to the car while in Bowl track 6? **81.2.1, 81.13.1**

100 FOOT SEPARATION - LOOK BOTH WAYS, WATCH FOOTING WALK STRAIGHT ACROSS TRACKS, STEP OVER RAILS, FROGS, SWITCHES

82. After coupling the track, the crew pulls the track and will set the rear 6 cars to the lead. The conductor is riding the trailing end of the rear car which is a tank car equipped with one vertical hand hold. Can the conductor get on or off the car while it is moving? **81.4.2, 81.7**

NO
AS WEATHER PERMITS, ~~NOT FASTER THAN 4 MPH~~

83. After setting the rear 6 cars to the lead, the crew will immediately shove the remainder of the cars back into track 6. Will point protection be required when shoving track 6? **6.5**

NO AS LONG AS TRACK COMPLETELY EMPTY

84. The crew pulls down to the departure yard with the head portion. The brakeperson will drop off to be in position to line the switch for track 4 once the movement clears the switch. What precautions are required when getting off the moving equipment? **81.4.2**

MUST NOT EXCEED WALKING SPEED, NO MORE THAN 4 MPH.

85. The brakeperson will be riding the point of the movement while protecting the shoving movement. Can the brakeperson ride the car to a coupling? **81.13**

NO

86. A Utility employee contacts the crew and tells them that track 4 was worked earlier and that all air hoses are coupled. Was any protection required while the Utility employee coupled air hoses on track 4? **5.13.1**

YES - BLUE FLAG PROTECTION A, B, C ALL DEPENDING ON SITUATION

87. What air brake tests and inspections, if any, will be required before the Local departs Sunflower Yard and proceeds to the Sessums Industrial Lead? (Less than 20 miles to the customer tracks.) **1.33, 30.5.1**

TRANSFER TEST
TRANSFER LESS THAN 20 MILES
SAFETY INSPECTION

88. The conductor will use a handheld gauge to complete any required air brake tests. Does the accuracy of the gauge need to be verified, and if so, how is this accomplished? **30.2.6.1**

CHANGE TO 90 PSI, CHECK GAUGE ON LOCOMOTIVE COMPARE WITH ENGINE BRAKE PIPE GAUGE
3 PSI DIFFERENCE MUST BE CALIBRATED

After completing any required air brake tests and inspections, the crew contacts the Yard Controller and receives permission to depart on the east departure lead to the signal at CP W234. The Yard Controller instructs the crew to leave the derail on the east end of the lead in the non-derailing position when departing, as there will be an inbound movement later in the day.

89. How should the crew respond to the instructions from the Yard Controller regarding the derail? **1.4.1**

GOOD FAITH CHALLENGE

90. What rules are covered by "Good Faith Challenge"? **1.4.1**

SHOVING MOVEMENTS
LEAVING EQUIPMENT IN FOUL OF ADJACENT TRACK
HANDLING OF HAND OPERATED SWITCHES, OR FIXED DERAILS

91. The Local arrives at the main track switch for the Sessums Industrial Lead. After lining the switch for movement to the lead, and placing the derail in the non-derailing position, can the crew leave the main track switch open to maintain their authority while spotting customers on the industrial lead? **8.3**

NO TRACK 4 TIME OR ATTENDED BY CREW MEMBER

92. After arriving at Orange Industries, the engineer stops the movement and the conductor and brakeperson detrain. What precautions must be observed when getting off the standing equipment? **81.4.1**

ONLY WHEN IT CAN BE DONE IN A SAFE MANNER
FALE EQUIPMENT, 4 POINT CONTACT

93. Orange Industries is protected by a gate. What is required before operating through the gate opening? **7.10**

STOP MOVEMENT
MAKE SURE GATES ARE COMPLETELY OPEN & SECURE
DO NOT RIDE ON SIDE OF CAR.

94. After securing the rear portion, the conductor cuts away with the head 5 cars. Orange Industries is a spur track. What are the requirements when shoving into Orange Industries? **7.12**

STOP 150 FEET FROM END OF TRACK. APPLY HANDBRAKES TO CONTROL SLACK. STOP SHORT OF BUMPER

95. After returning with the power to the cars on the lead, what air brake tests, if any, will be required before departing Orange Industry and proceeding to Wheat industry? **30.6.1, 30.10.1**

RESTORE BRAKE PIPE PRESSURE
BRAKES ON REAR CAR APPLY & RELEASE FROM A 20 PSI BRAKE PIPE REDUCTION

96. Approaching Wheat Industry, the Local is approaching a road crossing at grade equipped with automatic warning devices. What action(s) are required before fouling the crossing? **6.32.2**

PREPARED TO STOP
ENSURE THEY ARE WORKING
MAKE SURE GATES ARE LOWERED

97. Arriving at Wheat Industry, the crew pulls through the runaround and secures the remaining cars. The customer has requested they leave one of the cars at the spot mark for unloading. What securement procedure should the crew use when leaving the single car at the spot mark in the runaround track? (Derail protected) **32.1.4, 32.1.1**

SINGLE CAR SECUREMENT

98. After securing the cars at Wheat Industry, the Local will operate light power back to the main track switch. Will the engineer be required to change operating ends before proceeding to the main track switch? **31.6.1**

YES, EXCEEDS 2 MILES

99. What authority is needed to occupy the main track off the Sessums Industrial Lead at MP 221.3 and proceed eastward? **6.3, 10.1**

CTC
GC DISPATCHER FOR AUTHORITY

After receiving the proper authority to enter the main track and operating the switch, the signal governing movement to the main track continues to display a stop indication. After the required 10 minute wait, the local enters the main track and restores the main track switch. The engineer changes operating ends and the crew proceeds eastward.

100. Operating eastward on the main track, how must the Local approach all road crossings at grade equipped with automatic warning devices? (Crew is operating light power with two 6 axle locomotives.) **6.32.2**

PREPARED TO STOP
MAKE SURE GATES ARE DOWN
LIGHT POWER

101. Approaching the west end of Texas siding, CP W216, the crew has initiated a "Cab Red Zone" and is preparing to stop. Why? **1.47.1, 9.23.1**

FORM C #3114 SIGNAL SUSPENSION

102. What actions, if any, are required by the crew before passing CP W216? **SSI Item 10-B, 9.23.1**

ALL TRAINS MUST STOP - AUTHORITY FROM EIC
SOFT CUT OUT

103. What is the maximum speed of the Local (light power) while operating within the signal suspension limits? **6.31, 9.23.1, 18.12**

~~AMA TRAIN CAB RED ZONE BE PREPARED TO STOP~~
40 MPH WITHIN PTC REQUIREMENTS

104. Operating eastward, how should the crew approach the signal at CP W206? **9.23.1**

MAINTAIN CAB RED ZONE - BE PREPARED TO STOP
AFFECTED TRACKS, LOCATION OF FLAGMEN POSITION OF
DUAL CONTROL SWITCHES, TRACK WARRANTS TO AUTHORIZE MOVEMENT

105. The signal at CP W206 is displaying an Approach indication. What action is required by the engineer on the Local before passing the signal at CP W206? **SSI Item 10-B, 18.7**

CRZ

15 MPH TO CUT IN PTC

106. The next signal at CP W204 is displaying a Stop indication. The Local stops at the signal and calls the dispatcher for TWC authority between CP W204 and MP 180.5. Using Track Warrant #86-75, how far may the Local proceed? **14.2, 14.3**

CP W204
MP 180.4

FIRST NAMED POINT - LAST NAMED POINT
DON'T FOUL SWITCH

107. After verifying the authority number, designated limits, and any conditions of authority with the train dispatcher, the signal at CP W204 changes to Clear and the Local departs eastward. What action, if any, is required by the crew before passing the east switch of Waco? **6.3, 14.2**

JOINT
BOX 10

108. At what speed must the Local operate between the east switch of Waco and the west switch of Ames? **6.3, 6.31, 14.2**

JOINT LIMITS,
RESTRICTED SPEED BETWEEN 180 -- 204

109. Operating eastward, the crew observes an Approach indication at the signal at MP 180.5. What action(s), if any, are required by the crew before passing MP 180.5? **6.13, SSI Item 12, Timetable**

MAKE 3 ATTEMPTS FOR ANYONE WITH TBP
TALK TO FOREMAN

110. While operating on Clear signals within Yard Limits, the dispatcher calls the crew and communicates that a Track Warrant has been delivered to the onboard system. What actions are required by the crew, if any, before acting on the transmitted authority? **SSI Item 10B, 18.11**

COPY MANDATORY DIRECTIVE ON PTC SCREEN
VERIFY DESIGNATED LIMITS, ETC.
ALL ABOVE

111. Using track warrant 51-50, how far may the Local proceed? **14.2**

CLEAR MAIN 400 FEET FROM FOULING POINT

112. Approaching Red River, what action is required after the Local passes the "Switch Control" sign in advance of the west end of Red River siding? **8.19.1**

RADIO CONTROLLED SWITCH BOTH ANSWER

113. After complying with any required action, the crew does not receive radio confirmation of proper switch alignment. What action, if any, is required? **8.19.1, 9.13.1**

PREPARED TO STOP - NOTIFY DISPATCH

114. The crew observes the switch for the siding track, and it appears to be lined for movement to the siding, however, the switch point indicator for the siding switch is dark. What action is required? **8.19.1, 9.13.1**

NOTIFY DISPATCHER
ALL OF THE ABOVE

115. After stopping in the siding track, the crew job briefs and releases Track Warrant 51-50. The dispatcher then issues Track Warrant 63-28. How must the crew determine that the UP 5309 has passed their location? **6.2.1**

DIRECT COMMUNICATION OR DISPATCH INFO

116. The crew observes a westward train approaching Red River. Which side of the train must the crew member who will perform the roll by inspection detrain, and from which side of the train must the inspection be made? **6.29.1**

FIELD SIDE - SIDE AWAY FROM THE ADJACENT MAINTRACK

After the UP 5309 west passes Red River, the crew departs eastward. The signal at the west end of Morgantown siding is displaying a Restricting indication and the crew enters the siding track and couples to the cars previously secured on siding track. There are 10 loaded covered hopper cars on the west end coupled to 40 loaded ethanol cars (Class 3 Flammable Liquid tank cars). The work order indicates the crew will need to pick-up all the covered hoppers and 10 of the ethanol tank cars and take the cars to Bedlam. The cars were previously secured on the siding track 3 days ago.

117. What information was the previous crew required to provide to the dispatcher when securing the loaded ethanol tank cars on the siding track at Morgantown? **SSI Item 10L.**

NUMBER OF BRAKES APPLIED, TONNAGE & LENGTH, TYPE OF EQUIPMENT, GRADE & CURVATURE OF TRACK, WEATHER CONDITIONS, PRIMARY OR SECONDARY TYPE OF SECUREMENTS

118. Will the crew be required to perform a securement test on the remaining cars at Morgantown before departing with the west 20 cars, and if so, will they be required to provide the dispatcher with the securement information? **32.1.1, SSI Item 10L**

YES KEY TRAIN SECUREMENTS
ALL ETHANOL CARS

119. What air brake test(s) and inspections are required, if any, before departing Morgantown and taking the cars to Bedlam Yard? **30.3.1, 30.10.1, 1.33, 8620 III**

CLASS 1, SAFETY TEST

120. After separating the west 20 cars from the remaining cars on the siding track at least 100 feet and establishing "Red Zone Protection", the conductor installs the EOT device. After arming the device, what is required to test the EOT device? **32.9.2, 32.9.3, 32.9.4**

CLOSE ANGLE COCK AHEAD OF REAR CAR
ENGINEER INITIATES EOT EMERGENCY

121. After receiving any needed main track authority, the leaving signal at the west end of Morgantown siding does not clear and continues to display a Stop indication. What action, if any, is required before the Local can pass this signal? **9.12.2**

AUTHORITY FROM CONTROL OPERATOR
TRAIN MUST MOVE AT RESTRICTED SPEED

122. The Local crew properly complies with the Stop indication at West Morgantown and is now proceeding westward at Restricted Speed. When can they resume maximum authorized speed? **9.11**

LEADING WHEELS PASS CDW 150

123. As the Local passes over the (#) detector at MP 158.1, it announces a defect tone and message for a Hot Box on axle 88 from head of train. What action(s), if any, are required by the crew? **SSI Item 13, 13.2**

REDUCE SPEED, STOP TRAIN AFTER CLEAR
GET ENTIRE TRAIN THROUGH.

124. After stopping, can the train be moved to assist with the inspection if the train is operating on rail with concrete ties? **SSI Item 13, 13.2**

NO — CONCRETE TIES NO GO

125. The conductor inspects the car for a Hot Journal but does not find anything wrong with the car. The conductor wants to shove the train back instead of walking back to the head end. Is this move permissible, and if so, how could it be performed? **6.6**

YES → TALK TO DISPATCHER
PERMISSION FOR REVERSE MOVE
MUST NOT EXCEED LIMIT OF TRAINS AUTHORITY, EXCEED THE TRAINS LENGTH, NOT ENTER A PUBLIC CROSSING.

126. Once the conductor is back on the head end, the Local departs westward. How should the crew proceed? **Timetable**

MAX SPEED (AUTHORIZED)

127. While operating at 40 MPH, the engineer on the Local notices the HEU displays a "FR NOCOM" message. What action is required? **32.9.6**

NO ACTION REQUIRED

128. As the Local passes over the (#)H+ detector at MP 171.7, it announces a defect tone and message for a Hot Box on the same axle identified by the previous Hot Box detector. What action(s), if any, are required by the crew? **SSI Item 13, 13.1, 13.2**

STOP TRAIN IMMEDIATELY TO INSPECT & GET OUT

129. After stopping, the conductor inspects the car a second time for a Hot Journal but does not find anything wrong with the car. What action(s), if any, are required by the crew? **SSI Item 13, 13.1**

GET OUT CAR IF SAFE TO MOVE

130. Before proceeding, the crew contacts the dispatcher regarding the Hot Box detector defect inspection results and the dispatcher instructs the crew to set the car out at Bedlam Yard. At what speed must the crew operate to the location where the car will be set out? **SSI Item 13, 13.1**

10 MPH OR DISPATCHER WILL INSTRUCT SPEED

131. The Local crew is approaching the crossing at MP 174.5 and the crew observes the automatic warning devices at the crossing working properly. What action(s), if any, are required by the crew? **6.32.2**

TRAIN MUST STOP BEFORE FOULING
CREW MEMBER MUST BE ON GROUND
XING CROSSING GUARD

132. Approaching Bedlam Yard, the Yard Controller contacts the crew and instructs them to secure their train in track 3 in the North Bedlam Yard. How should the crew respond to these instructions? **6.12, Timetable**

TRAINS ENTERING BEDLAM YARD MUST CONTACT YARDMASTER FOR ZONE STATUS BEFORE ENTERING. FRA TRACK & YOU HAVE PLACARDED CARS. NO MORE THAN 5 CARS

133. The Yard Controller notifies the crew to secure their train in receiving track 2 in South Bedlam Yard and that YS22R has RCL Zone W activated. What action(s), if any, are required by the crew on the Local before the train can enter South Bedlam yard and operate on the west switching lead into receiving track 2? **6.7, Timetable**

CONTACT REMOTE OPERATOR FOR PERMISSION
TALK TO FOREMAN IN CHARGE TO GET DIRECTIONS.

134. While the Local crew shoves into receiving track 2, the YS22R crew is waiting in the clear in track 4. After the Local crew clears in track 2, what is required before the YS22R crew can go back to work in their RCL Zone? **6.7**

TALK TO YARDMASTER & JOB BRIEF WITH LOCAL CREW

135. After shoving in the clear in track 2, the Local crew secures the train. What securement procedure should the crew use in the receiving yard at Bedlam. **32.1.1**

PRIMARY SECUREMENT PROCEDURE

136. The sun was setting as the Local arrived at Bedlam. Will the brakeperson be required to carry a light while securing the train if the receiving yard is equipped with operative overhead lighting? **80.6**

YES

137. What precautions should the brakeperson observe if using a brake stick to secure the hand brakes on the cars? **81.11.3**

CAR MUST BE STOPPED
WORK FROM FIELD SIDE
PROPER FOOTING - KEEP HANDLE CLEAR OF ADJACENT TRACK

138. After securing the cars, the brakeperson releases "Red Zone Protection" and walks around the end of the train out to the south road. What is the minimum separation needed between the rear car of the train and the brakeperson? **81.2.2**

20 FEET

139. What precautions must the brakeperson observe before fouling, walking near, or crossing tracks when walking out to the south road? **81.2.1**

LOOK IN BOTH DIRECTIONS
GOOD FOOTING
WALK STRAIGHT ACROSS, STEP OVER RAIL, FROGS, SWITCHES

140. After arriving at the yard office, is it permissible for the engineer to tie-up the brakeperson using the brakeperson's User ID and password if the brakeperson has a function to attend and is running late? **1.27**

NO