



# Timetable No. 144

Effective 0001 Hours, Monday, May 1, 2023

**Bill O'Leary**

President and Chief Executive Officer

**Clark Hopp**

Chief Operating Officer

**Brian Lindamood**

Vice President, Chief Engineer

**Jon Garner II**

Superintendent, Transportation

**Lloyd Tesch**

Superintendent, Maintenance

**Sean Mesloh**

Chief Mechanical Officer

# **Emergency Response**

## **PASSENGER SERVICE**

Determine the number of cars in the train, cars with vestibules, train make-up, (push/pull, bi-level, dome) location of baggage car, power car, or any other special equipment.

## **OPERATIONAL**

1. Manifest number of passengers departing.
2. Scheduled Stops locations to board or detrain passengers.
3. From which cars will passengers board or detrain.
4. Who will operate doors?
5. Will baggage be handled?

## **SAFETY**

1. Locate the Minor First Aid Kits.
2. Locate the Major Medical Kits.
3. Locate AED, if equipped.
4. Locate Emergency Response Kits.
5. Locate Fire Extinguishers.
6. Locate emergency lighting.
7. Locate emergency exit windows.
8. Other emergency exit methods.
9. Locate and identify medically trained passengers.

## **TRAIN OR MEDICAL EMERGENCY**

In the event of a train or medical emergency the Conductor or other crew member will:

1. Report the location of the incident or emergency to the Train Dispatcher.
2. Evaluate the situation and provide emergency first aid.
3. Request emergency medical services as warranted.
4. Determine availability of on-board medical assistance.
5. Determine types of assistance required.
6. Determine state of injuries, if any.
7. Determine age (approximate) and gender of any injured persons.
8. Report location in train of emergency (car number/name of car, position of car in train).

## **TRAIN EVACUATION**

1. Necessary steps to protect train:
2. Before evacuating check area for downed power lines, natural gas leaking, traffic, ground conditions (bridges, tunnels, deep cuts alongside roadway, sharp sloping embankments, water).
3. Announcement to evacuate is made.
4. Passengers are made aware of the evacuation and are directed to designated exits.
5. Keep passengers clear of adjacent tracks and off right of way.
6. Advise passengers to leave carry-on baggage and personal belongings.
7. Assign crew member to remain outside of train to direct passengers away from train.
8. Search cars, including lavatories, to ensure all passengers have evacuated.

## **METHODS OF EVACUATION**

The method of evacuation to be selected is the one that offers maximum passenger safety and minimum inconvenience.

Evacuation to roadbed should be avoided unless no other means of evacuation is possible. The preferred methods of evacuation, in priority order are:

1. From one car to another.
2. From train to station platform.
3. From train to public or private crossing.
4. From one train to another.
5. From train to roadbed.
6. Emergency window exits will be used only as a last resort.

## **INITIAL ACTIONS CHECKLISTS FOR HAZMAT EMERGENCIES**

1. FIRST - ASSESS YOUR SAFETY
2. Determine the safety of other crew members.
3. Notify Train Dispatcher.
4. Locate the source if safe to do so.
5. Assess the situation for safety and risk factors – CONSIDER WIND DIRECTION.
6. Stop the flow if safe to do so (fuel & oil only).
7. Contain the release as much as possible.
8. Evacuate the area and keep the public away from the site.
9. Document your actions.
10. Collect any further information and update the Train Dispatcher.
11. Prepare any information in written format for Emergency Responders as they arrive.

## **INITIAL ACTIONS CHECKLIST FOR PASSENGER SERVICES EMERGENCIES**

1. Remain Calm.
2. Assess Personal Safety.
3. Notify the entire crew of the situation.
4. Assess passenger and crew safety.
5. Notify Train Dispatcher.
6. Evacuate passengers and crew unless greater hazard is presented outside of the cars.
7. Inform passengers of situation details, what is being done, and update as necessary.
8. Locate any medically trained passengers who might provide help.
9. Arrange first aid for ill or injured passengers, advise Train Dispatcher and first responders of injuries.
10. Provide on-board medical equipment to trained passengers/crew.
11. Identify need for emergency medical evacuation, ambulance, life flight.
12. Coordinate with Train Dispatcher for helicopter traffic, ambulance traffic.

**SAFETY BRIEFING CHECKLIST****Passenger Train Incident****SITUATION**

- ☐ Crew members names – Employee in Charge
- ☐ Local conditions, weather, geographical considerations
- ☐ Number of passengers on the train
- ☐ Medical needs?
- ☐ Time to receive backup/assistance
- ☐ Local population concerns
- ☐ Access Points

**COMMUNICATIONS**

- ☐ Method of communication
- ☐ Radio channel to use
- ☐ Cell phone numbers

**GOALS/PLAN**

- ☐ Immediate prioritization for team
- ☐ Risk factors during execution
- ☐ Possible failure points
- ☐ Backup plans for contingency
- ☐ Preparation for support en route

**EVACUATION TEAMS**

- ☐ Evacuation Concerns
- ☐ Rally Points
- ☐ Number of teams, Team Leaders

**QUESTIONS?**

- ☐ \_\_\_\_\_
- ☐ \_\_\_\_\_

**SAFETY BRIEFING CHECKLIST****HAZMAT Train Incident****SITUATION**

- ☐ Crew members names – Employee in Charge
- ☐ Local conditions, weather, geographical considerations
- ☐ Material carried, hazards and type of container
- ☐ Medical needs?
- ☐ Time to receive backup/assistance
- ☐ Local population concerns

**COMMUNICATIONS**

- ☐ Method of communication
- ☐ Radio channel to use
- ☐ Cell phone numbers

**GOALS/PLAN**

- ☐ Immediate prioritization for team
- ☐ Risk factors during execution
- ☐ Possible failure points
- ☐ Backup plans for contingency
- ☐ Preparation for support en route

**QUESTIONS?**

- ☐ \_\_\_\_\_
- ☐ \_\_\_\_\_

## Alaska Railroad Operations Phone Numbers

### Emergency Numbers:

To make an emergency phone call from a radio telephone to the Anchorage Police Department, select appropriate radio telephone channel for your physical location, enter \*1, wait for dial tone, and then enter 911. It may take up to ten seconds for the APD 911 Dispatcher to answer.

To make an emergency call to the Alaska Railroad Train Dispatcher dial 911 on any radio and on any channel (EXCPET channel 4). The radio will tone back acknowledging the call has been received by the system.

To make an emergency call from any ARRC landline dial 9-911.

To make an emergency call from a cell phone or any other non ARRC landline dial 911.

### Quick Reference Phone numbers

Entity	Phone Number
District 1 Train Dispatcher	265-2315
District 2 Train Dispatcher	265-2316
EMERGENCY ARRC (ARRC Dispatch Office)	265-2330
Chief Train Dispatcher	265-2421
ARRC Special Agent	265-2462
ARRC Signal Trouble Phone	265-2334
Hazardous Material Spill	Call the ARRC Train Dispatcher
Anchorage Yard	265-2434
ARRC Front Desk	265-2300
Anchorage Warehouse	265-2507
Clearance Dept.	265-2375
Crew Dispatch	265-2636
Customer Service - Anchorage	265-2624
District Road Master, South End	265-2445
District Road Master, District 2	265-3976
District Road Master, District 4	458-6027
Facilities - Anchorage	265-3952
Facilities - Fairbanks	458-6032
Fairbanks Yard	458-6016
IT Help Desk	265-2570
Locomotive Utilization Manager	265-3913
Mechanical MOD	265-3919
MOW Logistics Technician	265-2490
Passenger Service MOD	265-3965
PTC MOD	265-4442
Safety	265-2515/2265
Signal	265-4444
Telecom	265-3900
Time Keeper, Maintenance	265-2459
Time Keeper, Train & Engine	265-2644
Whittier Tunnel TCC	265-2306

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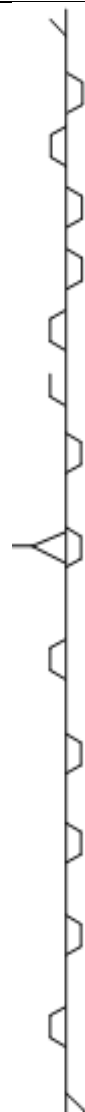
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Key	
Symbol / Abbreviation	Definition
*	Non-controlled track
▲	Derail
L	Loop track
Y	Wye Track
(10)	TO or SDG speed 10 MPH
(15)	TO or SDG speed 15 MPH
(20)	TO or SDG speed 20 MPH
(25)	TO or SDG speed 25 MPH
(30)	TO or SDG speed 30 MPH
S	South
N	North
EL	Electric Lock
FRA	FRA Excepted Track (GCOR 6.12)
MAG	SD70MAC handling cars – prohibited track
Ø	Track Out of Service
CC	Close Clearance
<u>          </u>	Significant Speed Reduction (Item 83.2)
<b>Bolded SZ</b>	Slide Zone permanently in effect
Ж	Snow (Slide Zone)
Θ	Debris (Slide Zone)
M	Main
SDG	Siding
TO	Turnout
FMAIN and KMAIN	North legs of the wye tracks at Portage and Houston
AWS	Automatic Whistle System
CAD	Computer Aided Dispatch
ChCh	Channel Change location
CLP	Clearance Point
CP	Control Point (controlled signal)
DIC	Dead In Consist (locomotive)
EIC	Employee In Charge
FP	Fouling Point
HER	Head End Restriction
NSS	North Siding Switch
NSW	North Switch
AD	Avalanche Detector
SI	Special Instruction Item
SSS	South Siding Switch
SSW	South Switch
TB	Track Bulletin
TGBO	Tabular General Bulletin Order
TSIA	Ted Stevens International Airport
TTSI	Timetable Special Instructions
TWD	Trackside Warning Detector
VSI	VSI Switches at Station



## 80.1 Kenai Subdivision MP 3.43 - MP 105.07

S ↑ ↓ N	Station/ Abbr. Length	Special Characters	Call Code/ Channel	TWD & Type (Channel)	Slide Zone/ CP's	Method of Oper. /PTC	Track Layout	Speed....Freight / Passenger MPH
3.43	Seward/SEWA		00/02			3.43		MP 3.43 - 8.06.....35/35 MP 8.06 - 20.42.....25/25
11.7 12.1	Divide/DIVI SDG 1903	▲, ⑩TO, ⑩ SDG, VSI	06 or 00/02	14.3 D (02)	SZ 11: MP 11.27 - 11.48 ЖӨ	TWC/PTC		MP 20.42 - 22.93.....35/35 MP 22.93 - 23.39.....25/25 MP 23.39 - 25.56.....35/35 MP 25.56 - 33.16.....25/25 MP 33.16 - 40.53.....35/40 MP 40.53 - 42.56.....25/25 MP 42.56 - 44.51.....20/20 MP 44.51 - 47.49.....25/25 MP 47.49 - 51.85.....15/15 MP 51.85 - 53.0.....10/10 MP 53.0 - 53.63.....20/20
24.4 25.2	Crown Point /CROW SDG 3707	▲▲, ⑩TO, ⑩SDG, VSI	02/02	18.4 B (04)	SZ16: MP 16.25 - 16.54 Ж SZ 18: MP 17.84 - 18.44 Ж SZ 21: MP 20.82 - 21.79 Ж			
29.2 29.5	Jack Burton/JACK SDG 999	▲, ⑩TO, ⑩ SDG, VSI		29.4 B (04)				
39.2 40.1	Hunter/HUNT SDG 4527	▲, ⑩TO, ⑩ SDG, VSI	01/02					
44.8 45.3	Grandview/GRAN SDG 2240	▲, ⑩TO, ⑩ SDG, VSI	04 or 05/02	42.2 A (04)	SZ 43: MP 42.56 - 43.84 Ж			
51.3	Tunnel/TUNN SDG 1251	▲, ⑩TO, ⑩ SDG, VSI	04/02		SZ 49: MP 48.89 - 50.32 Ж SZ 51: MP 51.21 - 53.0 ЖӨ SZ 53: MP 52.9 - 53.65 Ж	63.77		MP 53.63 - 60.0.....49/49 MP 60.0 - 62.33.....49/59 MP 62.33 - 64.33.....35/49 MP 64.33 - 65.99.....30/35 MP 65.99 - 66.82.....25/25 MP 66.82 - 69.37.....30/30 MP 69.37 - 69.51.....25/25
55.0 55.7	Spencer/SPEN SDG 3054	▲, ⑩TO, ⑩ SDG, VSI						
63.8 64.3	Portage/PORT 2392*	Y, ⑩SHTTL Trk, EL, EL		63.0 B (04)	CP F120	63.77 CTC/PTC 64.33		
74.5 74.9	Girdwood/GIRD SDG 1855	▲▲, ⑩TO, ⑩SDG		75.0 C (04)	SZ 68: MP 67.17 - 68.17 Ж SZ 70: MP 69.22 - 70.15 ЖAD SZ 72: MP 71.18 - 72.64 ЖAD SZ 76: MP 75.6 - 80.27 ЖӨ SZ 78: MP 78.0 - 78.11 ЖӨ SZ 83: MP 82.39 - 83.72 Ж	64.33		
81.4 82.0	Brookman/BROO SDG 2511	▲▲, ⑩TO, ⑩SDG	CHCH MP 81 05/03		SZ 87: MP 86.71 - 87.41Ө	TWC/PTC		MP 85.0 - 85.69.....25/25 MP 85.69 - 89.54.....30/30 MP 89.54 - 93.11.....40/40
88.2 89.2	Indian/INDI SDG 4822	▲▲, ⑩TO, ⑩SDG		88.7 B (04)				MP 93.11 - 93.85.....35/35
93.0 93.3	Rainbow/RAIN SDG 792	▲▲, ⑩TO, ⑩SDG						MP 93.85 - 99.5.....40/40 MP 99.5 - 102.92.....49/59
100.2 100.7	Potter/POTT SDG 2179	▲▲, ⑩TO, ⑩SDG		104.6 B (04)		105.07		
105.0	Coastal/COAS SDG 27,742	②TO	05 or 00/03		CP 1051	CTC/PTC CP 1051		MP102.92 - 105.00.....45/45 MP105.00 - 110.56.....40/40 SDG MP 105.15 – 109.36...20/20

## 80.2 Kenai Subdivision, Seward Yard Instructions

Controlled track begins and ends at Seward Station Sign, MP 3.43, Kenai Subdivision. Rule 6.28 governs movement over all tracks south of MP 3.43.

Maximum authorized speed on Jesse Lee Main between Seward Depot and MP 3.43....20 MPH.

Passenger Dock Track 2 ends at a point 950 feet south of Port Avenue crossing.

### Designated Locomotive Servicing Track:

- Roundhouse Tracks

### CC:

- Gate at the north end of Seward terminal across from North 1 and 2 switches when the gate is closed.

### Passenger Trains Prohibited on:

- Tracks 1, 2, 3, 4 and 5 between the clearance points.

Freight trains must not be yarded in Track 8 and Upper 8 when it would interfere with a passenger train accessing the wye.

The two yard lights located on the east side of the north end of the yard are operated by separate manual on/off switches. These lights can be switched remotely by selecting radio Channel 04 and pressing 61 to turn lights on, or 62 to turn lights off.

Do not park running locomotive(s) near Alaska Vo-Tech Center.

### **Locomotive Daily Inspection:**

- The engineer that operates any locomotive(s) in yard service after midnight, will be responsible to ensure that a current daily inspection has been performed prior to using the locomotive in service unless relieved by proper authority, local instructions or operating plan.

**Car Restrictions:** Cars will not clear all building doors. Be sure opening has adequate height for bi-level dome car.

**ARR: 651, 652, 653, 654, 655, 656**

**HALX: 1050, 1051, 1052, 1053, 1054, 1055, 1056, 1057, 1058, 1059**

**MSEX: 7080, 7081, 7082, 7083, 7084, 7085, 7086, 7087, 7088, 7089**

**RCIX: 1001, 1002, 1003, 1004**

**DMU ARR 751**

## 80.3 Kenai Subdivision

### Divide

When performing a planned double of Divide Hill, rear portion of train may be left on main track at approximately MP 15.

### Crown Point

**MP 24.44**....SSW MP 24.44....337ft, ▲.

**MP 25.17**....NSW Propane Spur....218ft, ▲, spot propane cars to the unloading header on the Propane Spur.

### Jack Burton

**MP 29.45**....NSW Engineering Spur....156ft.

**MP 29.5**....Trail Lake Bridge, ABTH 104.8

### Grandview

Rail clamps will be placed on the downhill end of cars set out with defective hand brakes. When rail clamps are not in use, they must be returned, chained, and secured by switch lock to switch stand. **Doubling Grandview Hill:** Southward mixed freight trains exceeding 5,000 feet stretched length, exclusive of locomotive consist, must double Grandview Hill, unless authorized to single by the Superintendent, Transportation.

### Tunnel

Rail clamps will be placed on downhill end of cars set out with defective hand brakes. Crews picking up cars must remove rail clamps. When rail clamps are not in use, they must be returned, chained, and secured by switch lock to switch stand.

### Spencer

**MP 55.72**....NSW MP 55.72 Track....1111ft, ▲.

### Portage / CP F120

**MP 62.65**....SSW MP 62.65.....300ft, ▲.

**MP 62.67**....SSW New House Track....400ft.

**MP 63.78**....SSW SHTTL.... 2392ft, EL.

**MP 64.32**....NSW SHTTL....2392ft, EL, Shuttle Track (SHTTL): GCOR 9.18; ensure track circuit between outer opposing absolute signals is not occupied before operating, if occupied switch lock will run time. CC: Well-deck flat cars ARR 905574 and 905575, and cars in excess of nine feet in width, will not clear Shuttle Track Side Ramp. Instructions posted at both switches.

## 80.4 Whittier Branch; F Branch

Whittier Branch - Kenai Subdivision MP F 12.45 - MP F 2.55					
MP	S↓ Station ↑N	Call Code/ Channel	Slide Zone	Meth. Of Oper./ PTC	Speed....Freight /Passenger MPH
F 12.45	CP F 120	04/02	SZ F7: MP F 6.73 - F 6.89	CTC/PTC	Junction Switch Turnout MP F 12.45.....15/15
F 11.3	Coho				Junction Switch Turnout MP F 12.42.....15/15
F 8.35	CP F084				Wye Track (South Leg) and Turnouts
F 7.0	Portage Tunnels	ChCh MP F 7.0			MP F 12.32 - F 12.0.....10/10
F 5.5	Bear Valley	05 WIT/ MW15			MP F 12.42 - F 12.0.....20/20
F5.2 - F 2.55	CP F040 / Whittier Tunnel				MP F 12.0 - F 7.0.....49/59
					MP F 7.0 - F 2.55.....30/30

Switches, Tracks and Tunnels			
MP	Name	Feet	Special Characters
F 12.01	SSW Tail of Wye	1382	
F 11.98	NSW NLDDR	4617	EL, <del>FRA</del> , <del>MAC</del> , Ø, GCOR 7.6
F 10.96	SSW SLDDR	4617	EL, <del>FRA</del> , <del>MAC</del> , Ø, GCOR 7.6
F 6.73	Portage Tunnel - Door 4		
F 5.80	Portage Tunnel - Door 3		
F 5.72	NSW Bear Valley Track	2165	Ø, GCOR 7.6
F 5.25	SSW Bear Valley Track	2165	Ø, GCOR 7.6
F 5.19	NSW STDRL		▲
F 5.13	Whittier Tunnel - Door 2		
F 2.62	Whittier Tunnel - Door 1		
F 2.56	SSW STDRL		▲

### Whittier Yard:

Radio Channel: 07

Movements over slip 4 MPH

~~FRA~~: Sawmill Track

CC: Barges and Slip

### Whittier Yard Lights:

Enter the following tones on

Channel 04 to operate lights:

Slip lights ON: 61

Slip lights OFF: 62

Upper lights ON: 71

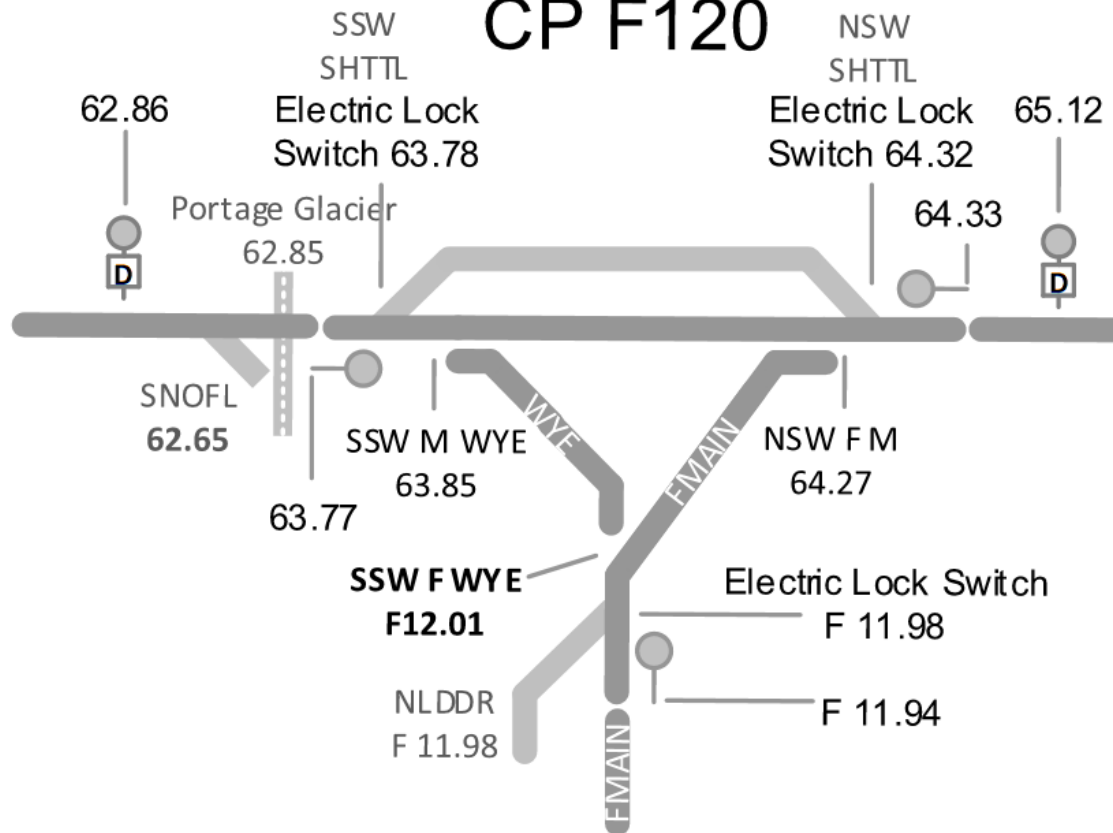
Upper lights OFF: 72

### Whittier Yard MP F 2.55 to end of Track:

- Method of operation GCOR 6.28.
- Do not exceed 20 MPH MP F 2.55 – MP F 1.3.
- Call code on is 03 on Whittier Yard channel 02.

# Portage PORT

## CP F120



**GCOR 7.6 at Bear Valley Track MP F 5.25 – MP F 5.72 & Coho Track MP F 10.96 – F 11.98:** When setting out cars or equipment on Bear Valley Track or Coho Track, acquire portable derails and switch locks. Before departing, any cars, or equipment that are left standing on these tracks will be protected with portable derails on both the North and South end of the equipment.

### **Equipment Restrictions:**

Train consists of 12 axles or less must advise the Train Dispatcher before initiating movement at Whittier Tunnel.

DMU ARR 751 – Do not exceed 4 MPH between MP F 6.27. - MP F 6.16.

### **Barge Switching Instructions:**

No more than two DC locomotives will be online. All AC locomotives will be isolated. The use of air brakes is prohibited on the slip.

Before starting any switching operation, crews must participate in a safety briefing with the on-duty supervisor. Initial job briefing will be documented on the prescribed form and conducted:

- Prior to initiating barge unloading activities.
- Prior to initiating rail back-loading activities.
- Any time conditions, operating plans, or crew changes.

### **GCOR Rule 7.12 Application at Whittier:**

- Unloading operations: the safety stop will be made prior to occupying the slip.
- Stow Operations:
  - Safety stop will occur on the barge.

- Approaching the slip, warm brakes with the automatic brake applications to remove contamination between the wheels and brake shoes.

### **Whittier Tunnel, CP F040**

Wheel sensors are located at each end of the Whittier Tunnel. The same number of wheels that enter the tunnel must match the number of wheels that exit the tunnel, otherwise an occupancy will remain within the tunnel that will prevent both vehicle and train movements. Hy-rails must not set on, or set off, within CP F040, and all on-track movements must complete movement through CP F040, unless prior arrangement has been made with the signal department.

### **Emergency Telephones in Whittier and Portage Tunnels**

Whittier Tunnel Signal System emergency phones are located approximately every 300 feet within the tunnel. These phones are connected to the tunnel operator's work station which is normally only occupied while the Tunnel Control Center is in operation. When used while Tunnel Control Center is closed, the call will be routed to Alaska General Alarm.

ARRC Telephones in Portage tunnel are located just inside Door 3 and Door 4 portals. The phone number for these phones is extension 2364.

### **Train Movements**

Southbound trains approaching CP F040 must attempt to notify the Tunnel Control Center ext 2306, either by radio or by telephone, fifteen minutes prior to arrival.

### **On-Track Movements**

Unless otherwise provided on-track vehicles must request track and time to perform maintenance on or foul the main track inside the Whittier Tunnel and must inform the Train Dispatcher of what movements will be made.

If Tunnel Control Center is in operation, all movements will be coordinated with the Tunnel Control Operator. ARRC movement windows are on the 20/50 of every hour. If the Tunnel Control Center is not in operation use the maintenance roads located at each end of the control point. Entry to the maintenance road is through swing gates secured with 05 locks. These gates must be re-secured after passage. If access to the maintenance road is blocked contact the Train Dispatcher for further instructions.

In the event the Train Dispatcher is unable to open the tunnel doors follow this procedure:

After track and time authority is obtained, use the control button at the traffic island to open both portal doors. Control buttons to close each portal door are located just inside each portal. Each door must be closed after passage: the entering door at the portal, the leaving door either at the portal or from the traffic island. However, whenever the door open control button at a traffic island is used to open the portal doors, the door close control button at a traffic island must be pressed, even if the doors were closed at the portals.

Release track and time authority to the Train Dispatcher when movement is clear of the control point.

## **Highway Vehicle Crossing Gates**

Vehicle crossing gates must not be lifted to gain access to the Whittier Tunnel. Lifting the gates after normal operating hours locks up the signal system, preventing movement of both rail and highway traffic, and must be reset by a Tunnel Control Operator. After operating hours contact the Train Dispatcher and access must be through the maintenance gate.

## **Portage Tunnel**

Portage Tunnel Doors: There is a white light on the control box at each portal that illuminates when the applicable tunnel door is fully opened and tripping the door sensor. Employees opening the tunnel doors for train movements must observe that these white lights have illuminated before advising the Train Dispatcher the doors are open. Under no circumstances will a train, other than a company work train under the direction of an engineering supervisor, be allowed to enter the tunnel until both doors have been opened. After a train has entered the tunnel the door must not be closed until after the train has cleared the opposite end of the tunnel.

During the period doors are closed, (normally November 1 through April 15) unless trains have been advised that the tunnel doors are open, crew will contact the Train Dispatcher from Girdwood for position of Portage Tunnel doors.

## **Coho**

Coho Track switches, MP F 10.96 and MP F 11.98, are equipped with electric locks, and their use is prescribed by Rule 9.18. Instructions governing the use of these electrically locked switches are posted at the switch unlock boxes.

**Additional instructions:** To enter SSW SLDDR (SSW Coho), and avoid the electric lock from running time, stop the leading end of train, or any equipment capable of shunting the track circuit, between 50 feet and 125 feet from the switch points before operating the electric lock unlock lever. To exit SSW SLDDR (SSW Coho), movement must be stopped before the fouling point of the switch before operating the electric lock unlock lever.

To enter or exit NSW NLDDR (NSW Coho) request a switch unlock from the Train Dispatcher or press the switch unlock push-button located on the bungalow before operating the electric lock unlock lever. Note that re-pressing the switch unlock push-button resets the unlock timer.

81.1 Central Subdivision MP 105.07 - MP 194.91								
S↑ ↓N	Station/ Abbr. Length	Special Characters	Control Point	Call Code/ Channel	TWD & Type (Channel)	Method of Oper. /PTC	Track Layout	Speed....Freight /Passenger MPH
105.0  107.3  109.4 109.7  110.1 110.6	Coastal/COAS SDG 27742	②⑩TO, ⑮TO,  25TO, ⑩TO,  25TO, Y 25TO, Y	CP 1051  CP 1072  CP 1095 CP 1097 SDG  CP1102 SDG CP 1107	05 or 00/03		105.7		MP 105.00 – 110.56.....40/40 SDG MP 105.15 - 109.36..20/20 SDG MP 109.36 - 110.39..25/25  MP 110.56 – 112.01.....25/25  MP 112.01 – 113.82.....15/25  MP 113.82 – 115.59.....20/20  MP 115.59 – 117.47.....35/35 MP 117.47 – 119.75.....45/45 MP 119.75 – 126.84.....60/60  MP 126.84 – 127.42.....40/40 MP 127.42 – 127.52.....25/25 <hr/> MP 127.52 – 132.51.....60/60  MP 132.51 – 133.0.....50/50 MP 133.0 – 133.62.....35/35 MP 133.62 – 136.45.....45/45 MP 136.45 – 137.37.....40/40 MP 137.37 – 146.0.....50/50 MP 146.0 – 147.64.....30/30 MP 147.64 – 148.51.....45/45 MP 148.51 – 152.32.....55/55 MP 152.32 – 153.81.....40/40 MP 153.81 – 154.08.....25/25 MP 154.08 – 156.79.....35/35 MP 156.79 – 157.56.....25/25 MP 157.56 – 159.62.....30/30 MP 159.62 – 159.88.....49/49 MP 159.88 – 159.88 N HER...25/25 MP 159.88 – 172.0.....49/49 MP 172.0 – 181.07.....49/59 MP 181.07 – 183.57.....40/40 MP 183.57 – 193.2.....49/59  MP 193.2 – 193.51.....49/49 MP 193.51 – 194.91.....49/59
113.8 114.7 115.5	Anchorage/ANCH	②⑩TO, ②⑩TO, Y ⑮TO	CP 1130 CP 1140 CP 1147 CP 1154	00/03		CTC/PTC		
117.0 119.7 121.3	Elmendorf SDG 23,533	⑮TO 25TO, 30SDG, 25TO	CP 1170 CP 1198 CP 1213	00 or 02/03	121.3 B (04), 121.3 WILD (03)			
127.9  129.2	Reves/REVE SDG 5748	⑩TO, ⑩SDG, ⑩TO	CP 1280 CP 1292	02/03	128.0 D(04)			
135.0  136.2	Birchwood/BIRC 6163	⑮TO, ⑮SDG, ⑮TO	CP 1350 CP 1362					
140.9  142.1	Eklutna/EKLU SDG 5531	⑩TO, ⑩SDG, ⑩TO	CP 1409 CP 1421		145.5 B (04)			
150.5  151.5	Matanuska/MATA 4566 SDG 3889 MT	⑩TO, ⑩SDG, ⑩TO, Y	CP 1506  CP 1515					
159.8	Wasilla/WASI		CP 1589					
165.0  166.2	Pittman/PITT SDG 6183	⑩TO, ⑮TO, ⑮SDG ⑮TO	CP 1644 (QAP) CP 1650 CP 1662	02 or 01/03	162.2 B (04)			
173.0 175.9	Houston/HOUS SDG 13,569	25TO 25TO, 30SDG 25TO, Y	CP 1730 CP 1742 CP 1757	01/03				
186.5	Willow/WILL 3928*	⑩WILL Trk, ▲ ⑩TO	CP 1865	06/03	182.7 C (4)	194.91		
192.8 194.9	Kashwitna/KASH 10,519*	②⑩TO, ②⑩KASH Trk, ⑮TO	CP 1928  CP 1949					



## 81.2 Central Subdivision

### Coastal SDG

Northward trains will contact the Anchorage Operations Center for yarding instructions in Anchorage Yard at the Diamond Blvd. Overpass MP 107.74.

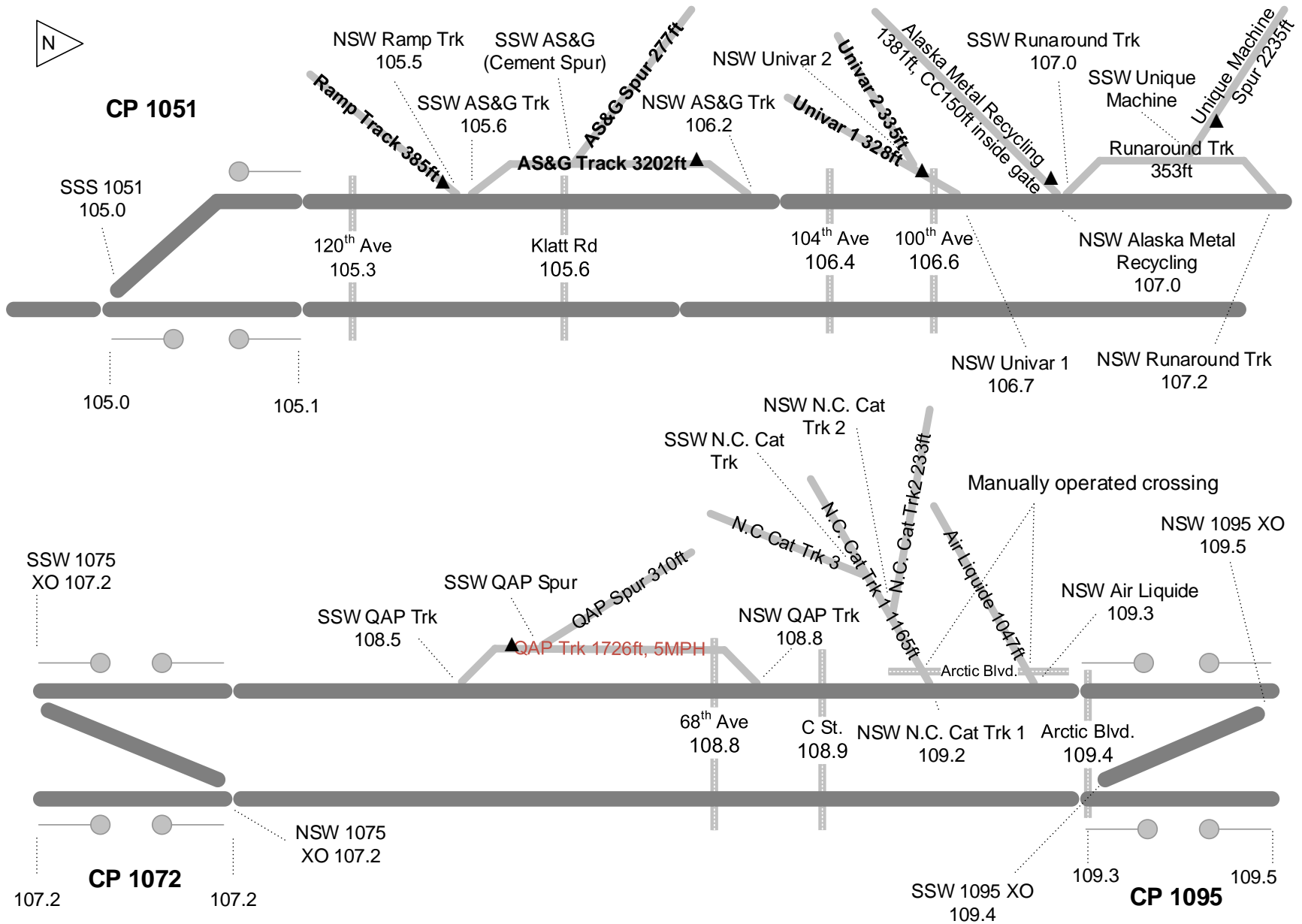
Locomotives and equipment must not stop or be left standing with engine running between MP 107.70 and MP 108.20 from 22:00 until 06:00.

**MP 108.52...**QAP Track, do not exceed 5 MPH over QAP dump pit.

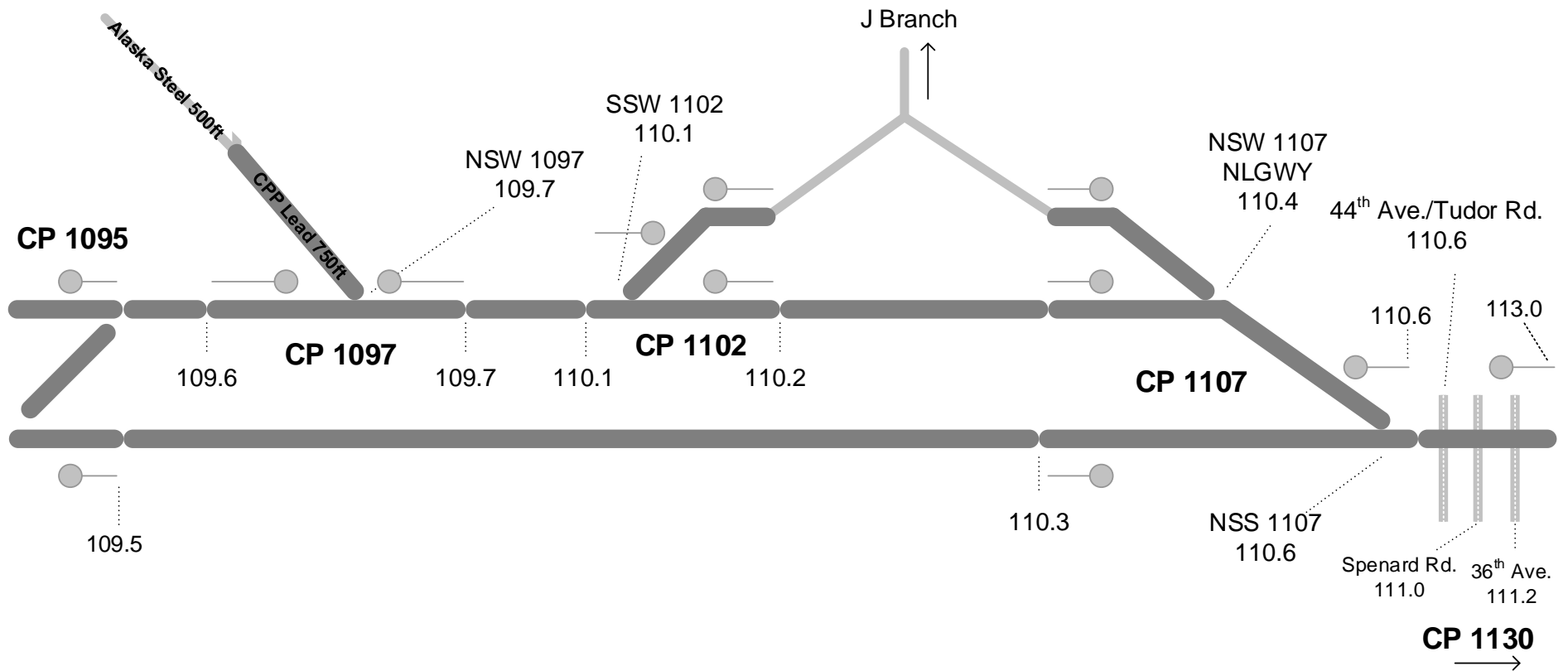
Symbol	Explanation
Q	Whistle Quiet Zone GCOR 5.8.4
X	Look for Automatic Whistle System (AWS) Confirmation Signal per TTSI 83.2
[ ]	Industry Track Crossing circuit is within approx 30ft of crossing.

MP	Crossing Name	QZ or AWS	Notes
104.61	Oceanview Dr.	Q	
105.40	120th Ave.	Q	
105.65	Klatt Rd.	X	[ ]
106.42	104th Ave.	X	
106.68	100th Ave.	X	[ ], only east gate will activate
108.81	68th Ave	X	[ ]
108.92	C St.	Q	
109.40	Arctic Blvd.	X	
110.64	44th Ave. /Tudor Rd	X	
111.02	Spenard Rd.	X	
111.21	36th Ave.	Q	
112.99	Sewer Pump Station	GCOR 5.8.2 (7), not required between 22:00 & 07:00	

## 81.3 Central Subdivision



# 81.4 Central Subdivision



## 81.5 Anchorage International Airport Branch (AIABR); J Branch

AIABR - Central Subdivision MP J 0.0 - MP J 2.45					
MP	S↑ Station ↓N	Call Code/ Channel	TWD&Type Channel	Meth. of Oper.	Speed....Freight/Passenger MPH
J 0.0	Coastal SDG/ CP 1102	00/03	<u>J 1.2D</u> 04	GCOR 6.27	North Leg of Wye and Turnouts.....25/25
J 2.45	AIA Depot				MP J 0.00 - J 1.23.....25/25 MP J 1.23 - J 2.45.....15/15

Switches & Tracks			
MP	Name	Feet	Special Characters
J 0.32	NSW North Leg of Wye (Tail)		
J 0.35	NSW Anchorage School District	970	Ø
J 1.60	NSW & SSW Airport Runaround	800	
J 2.33	SSW Terminal Track	520	
J 2.45	Airport Terminal Platform between J 2.45 and Terminal track		CC

Anchorage International Airport Branch begins at MP J 0.00 at CP 1102 (MP 110.13) South Leg of Wye and may also be accessed via CP 1107 (MP 110.49) North Leg of Wye.

Engines stenciled “**Not Airport Qualified**” will not clear the airport terminal platform.

### Car Restrictions:

Will not clear TSIA Depot Platform:

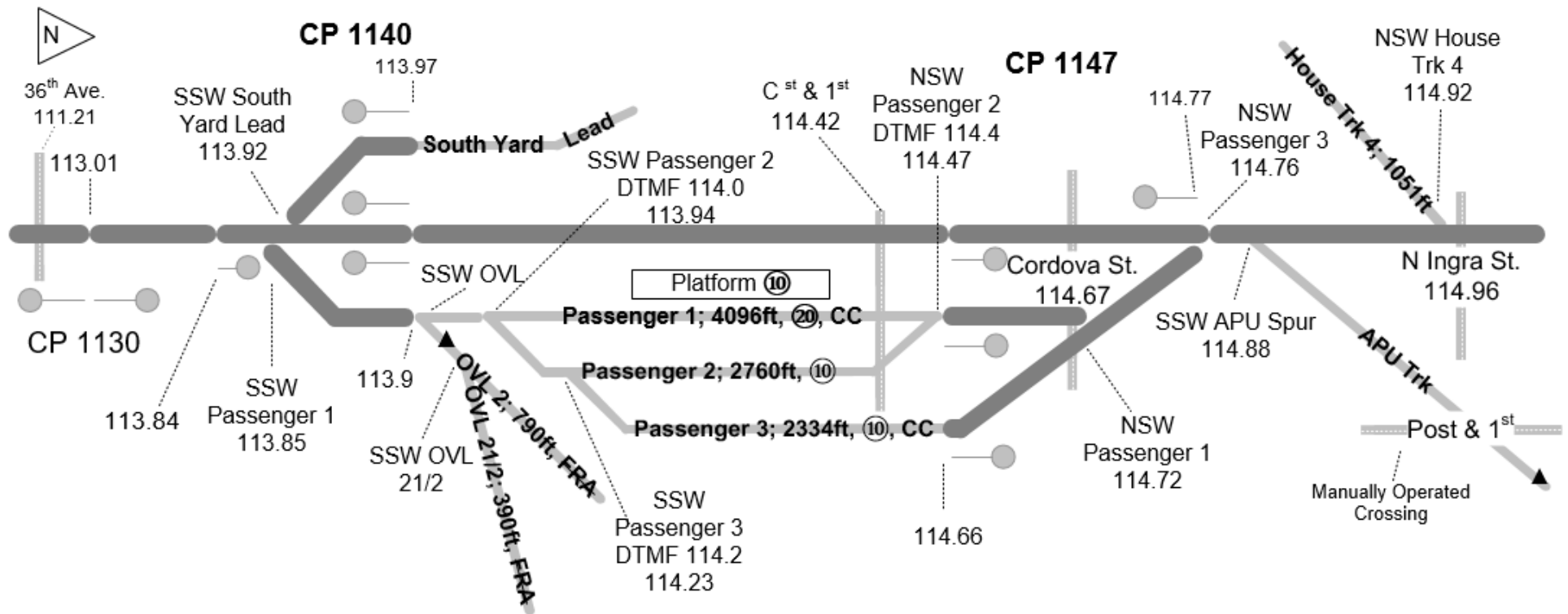
HALX 1050, 1051, 1052, 1053, 1054, 1055, 1056, 1057, 1058, 1059,  
MSEX 7080, 7081, 7082, 7083, 7084, 7085, 7086, 7087, 7088, 7089,  
RCIX 1001, 1002, 1003, 1004.

## 81.6 Central Subdivision

### Anchorage Depot

DTMF Power Switches MP 114.0, 114.2 and 114.4. Select radio channel 04, press 1140, 1142, or 1144 for switch at corresponding mile location.  
GCOR 8.10.1

**MP 113.9 - MP 114.47** Passenger Track 1 (20), by platform (10).



## 81.7 Central Subdivision, Anchorage Yard Instructions

**Anchorage Yard Channels:** 05, 06, 07, 08, 10, 16 (TOFC).

### Anchorage

**MP 114.3 (Steel Bridge)**...All inbound interchange trains from Whittier are restricted to 4 MPH over the Steel Bridge on the South Yard Lead.

**MP 114.67**....N. Cordova St. On industry track, crossing will activate when train or engine is within 30ft and will only lower east crossing.

### **Designated Car Servicing Track:**

- Car Shop Repair Track Area, defined as all leads and tracks railroad north of the diamond where the Roundhouse Lead crosses the Warehouse track and south of where the Ready Track(s) and Roundhouse Lead connect to the freight main (excluding the Open Rip).

**Car Restrictions:** Cars will not clear all building doors. Be sure opening has adequate height for bi-level dome car.

**ARR:** 651, 652, 653, 654, 655, 656

**HALX:** 1050, 1051, 1052, 1053, 1054, 1055, 1056, 1057, 1058, 1059

**MSEX:** 7080, 7081, 7082, 7083, 7084, 7085, 7086, 7087, 7088, 7089

**RCIX:** 1001, 1002, 1003, 1004

**DMU ARR** 751

### **Designated Locomotive Servicing Track:**

- The Locomotive Servicing Track Area, which exists within the Car Shop Repair Track Area, and is defined as all leads and track railroad north of where the roundhouse lead connects to the Shed Lead, and south of where the Roundhouse Lead connect to the Doll House Tracks (excluding the Ready Tracks).

### **FRA:**

- |              |   |                                    |
|--------------|---|------------------------------------|
| • OVL 2, 2 ½ | • Doll House  | • CEA Outside                      |
| • Ash Track  | • Back Shop Lead and Back Shop Tracks 1 and 2           | • Heavy Equipment Tracks 6 ½ and 7 |
| • CEA Inside | • Electric Bay 1 and 2, Roundhouse Tracks 3, 4, 5 and 6 | • Warehouse 1 & 3                  |

Do not handle loaded scrap cars over Steel Bridge within Anchorage Yard unless a clearance has been issued for the car, or the car has been scaled and found to be less than 263,000 pounds with an evenly distributed load.

### **Locomotive Daily Inspection:**

- The engineer that operates any locomotive(s) in yard service after midnight, will be responsible to ensure that a current daily inspection has been performed prior to using the locomotive in service unless relieved by proper authority, local instructions or operating plan.

- Any time an engineer is unable to comply with these instructions a notation must be entered on the Locomotive Daily Inspection and Trip Report indicating the reason the inspection was not performed.

### Anchorage

**MP 114.89....**APU Spur, 6-Axle locomotives prohibited. GCOR 10.2 Trains may clear, Post & 1<sup>st</sup> Ave crossing manually operated.

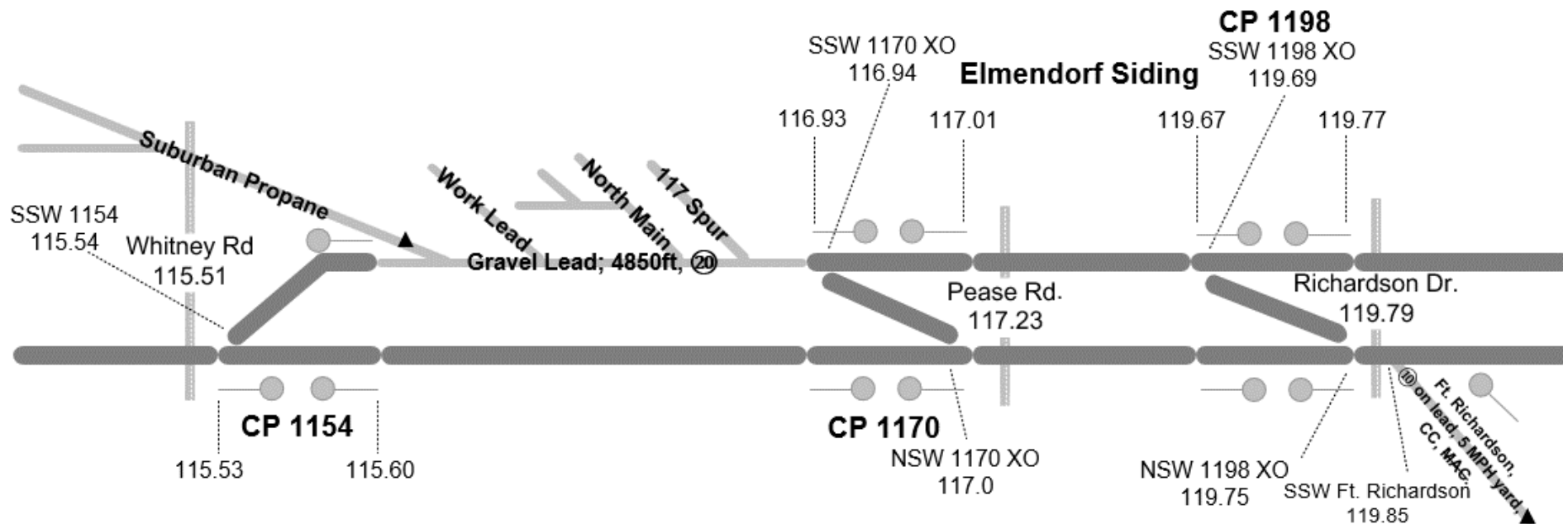
**MP 114.92....**House Track, GCOR 10.2: Trains may clear.

**MP 115.51....**Post Rd. & Whitney Ave. On industry track, crossing will activate when train or engine is within 30ft and will only lower east crossing.

**MP 115.6 – MP 116.93** Gravel Lead GCOR 6.28, (20).

Elmendorf Crossing			
MP	Crossing Name	QZ or AWS	Notes
117.23	Pease Ave.	X	

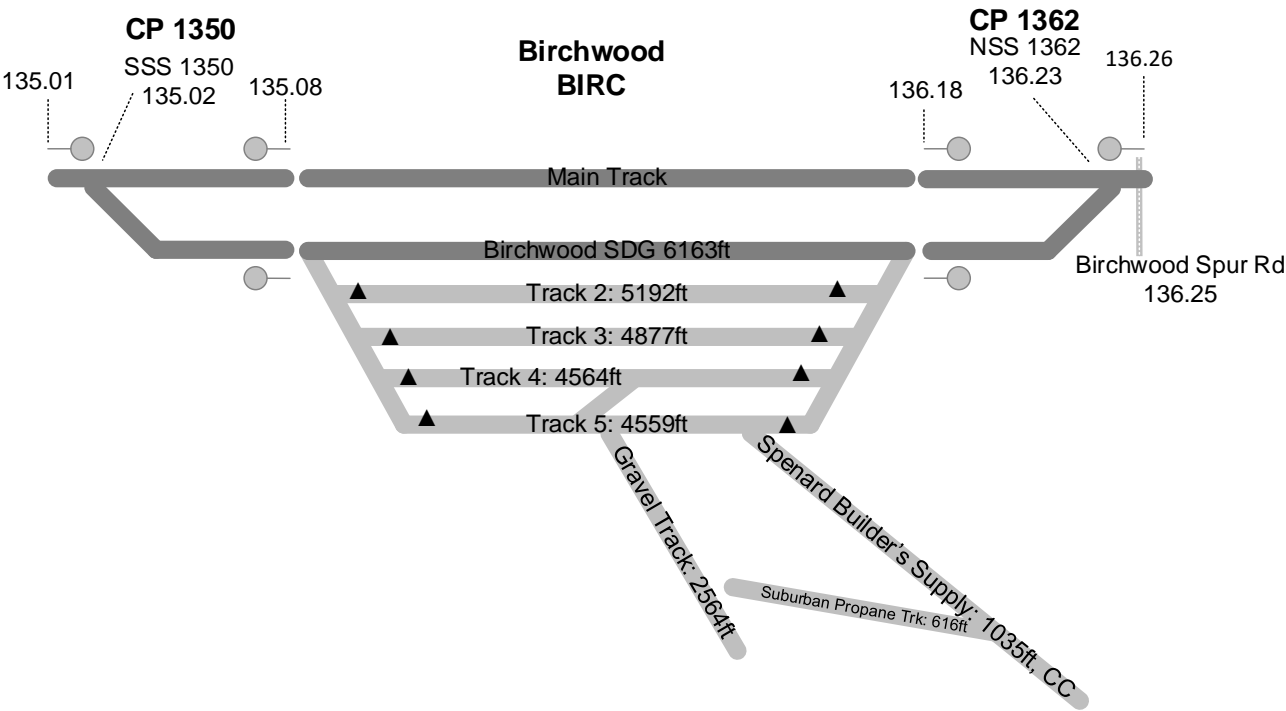
**MP 119.85....**During switching operations on JBER, air brakes must be cut in and operative. CC, MAG, 5MPH in yard.



# 81.8 Central Subdivision

## Powder Spur

MP 131.02...SSW PWDSP....2896ft, ▲, FRA, MAG. Ø





## 81.9 Central Subdivision

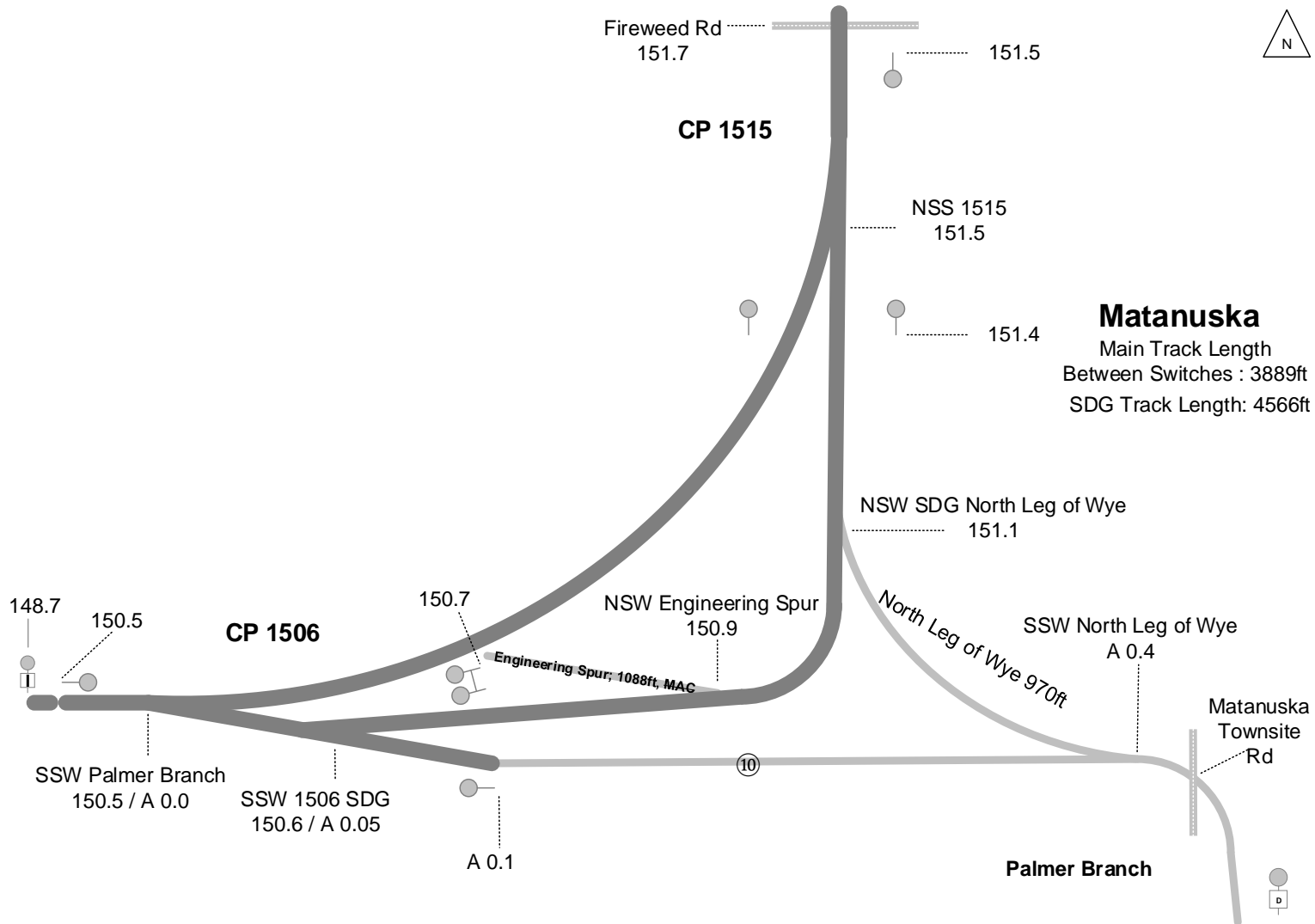
### Eklutna

**MP 141.50**....NSW Engineering Spur....1000ft. **GCOR 10.2: Trains may clear.**

**MP 145.62**....NSW Ramp Track....227ft

### Wasilla

**MP 158.78**....SSW ARRC Spur (Kenai Supply)....378ft; **MAC.**



## 81.10 Palmer Branch; A Branch

MP	S↑ Station ↓N	Special Characters	Call Code/ Channel	Meth. of Oper. /PTC	Speed...frt/psg MPH
A 0.0	CP 1506	Y	02/03	<b>CTC/PTC</b>	A 0.0 - A 6.2.....10/10
A 6.2	Palmer			GCOR 6.27	

Switches & Tracks			
MP	Name	Feet	Special Characters
A 0.00	SSW Palmer Branch		TO
A 0.47	SSW North Leg of Wye	970	
A 1.44	SSW QAP Switch to Gravel Loop	387	Ø (A 1.44 - A 2.46), CC
A 2.46	SSW Wilder Switch to Gravel Loop	387	CC
A 4.48	A 4.48 and track beyond		<del>MAC</del>
A 4.95	SSW Armco	586	<del>MAC</del>
A 4.99	A 4.99 to end of track		<del>MAC</del> , Ø
A 5.02	SSW Industrial Park Lead ( Airport Spur)	109	<del>MAC</del> , Ø
A 5.02	SSW Big 3, off Industrial Park Lead	1053	<del>MAC</del> , Ø
A 5.02	SSW Track 2, off Industrial Lead	506	<del>MAC</del> , Ø
A 6.20	SSW & NSW House Track	1150	<del>MAC</del> , Ø
A 6.20	NSW Ramp Track, Off House Track	195	<del>MAC</del> , Ø
A 6.24	NSW Mat Maid	977	<del>MAC</del> , Ø

### Palmer Branch Special Instructions:

Palmer Branch begins at MP A 0.0 SSW Palmer branch at CP 1506 MP 150.55.

Structures at the tipple on the Gravel Loop at MP A 2.43 with not clear a person on side of car.

Cars exceeding (10'8" width and 15'9" height) are prohibited on Gravel Loop Track.

Industrial Park Lead switch, MP A 4.99, is lined and spiked for movement on Industrial Park Lead.

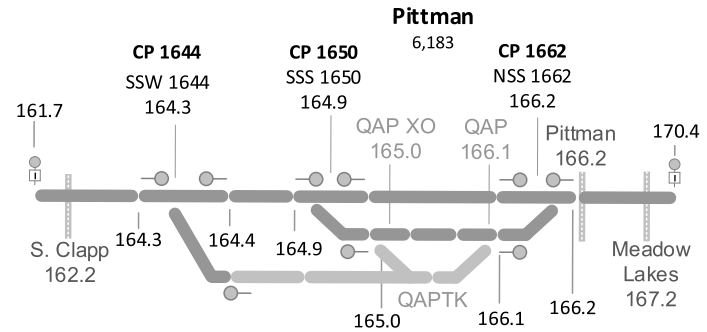
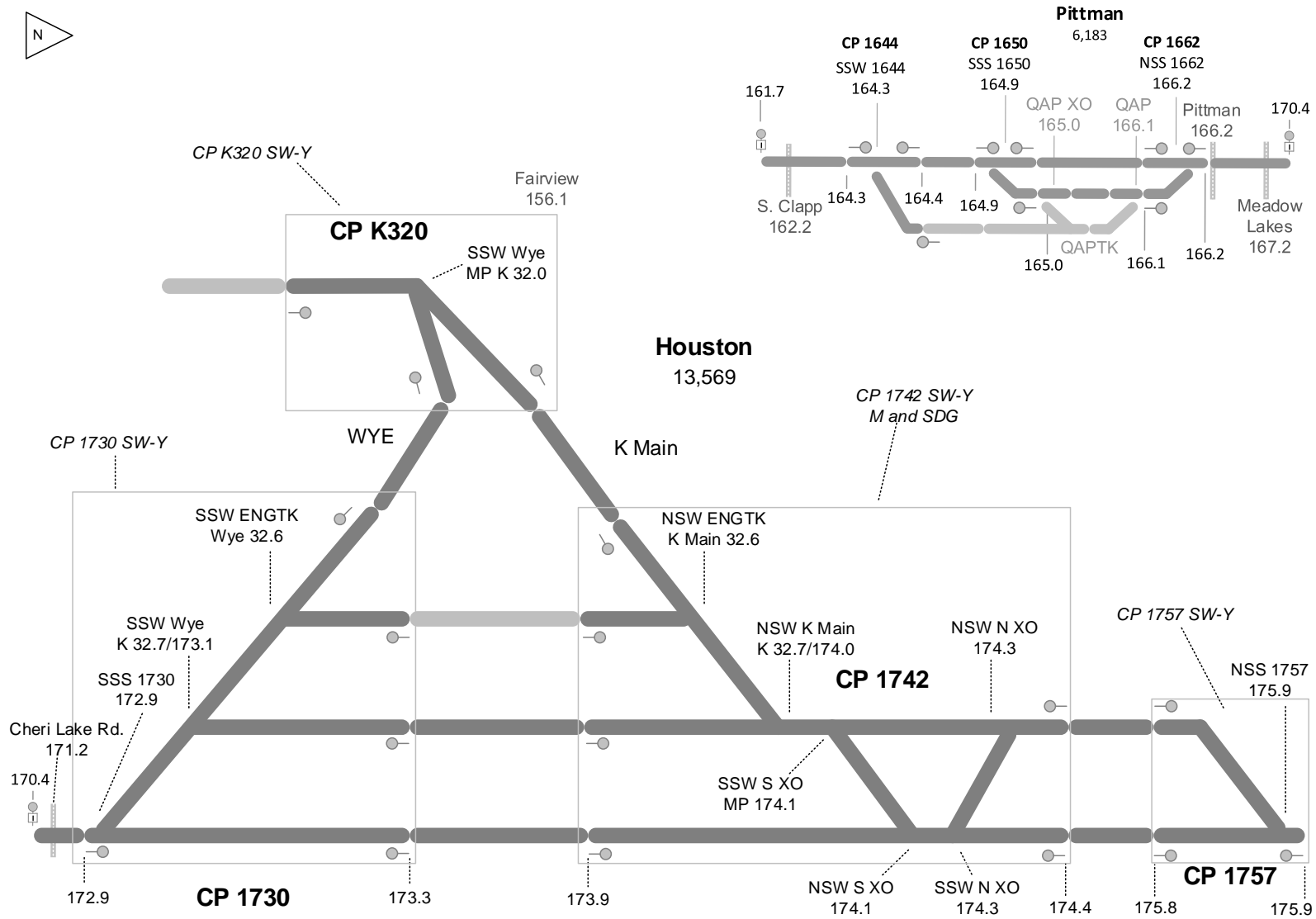
GCOR 8.20: A portable derail is in service just south of Cope Industrial Way crossing on Industrial Park Lead which must be set in the derailing position except when changed to permit immediate movement.

## 81.11 Central Subdivision

### QAP

**MP 166.14....** A northward crossover from Pittman Siding to QAP Track is located at south end of Pittman Siding, MP 165.07.

**MP 164.38....**SSW 1644 Track....8897ft, north switch located off north end of Pittman Siding,

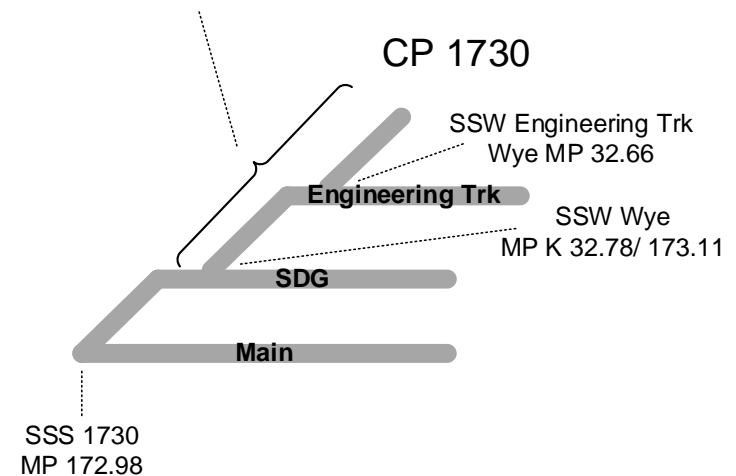


## 81.12 Port Mackenzie Branch; K Branch

Port Mackenzie Branch - Central Subdivision MP K 32.0 - MP K 0.0				
MP	S↓Station/Abbr. ↑N	Call Code/ Channel	Meth. of Oper	Speed...frt/psg MPH
K 32.73	Houston SDG/HOUS	01/03	CTC/PTC	South Leg of Wye & Turnouts.....25/25
K 31.99	CP K320/K320			Engineering Track & Turnouts (GCOR 6.28).....10/10
K 0.00	Port Mackenzie/MACK		GCOR 6.27	MP K 32.72 - K 31.99.....25/25 MP K 31.99 - K 0.00....GCOR 6.28 Max Speed 20/20

Switches & Tracks			
MP	Name	Feet	Special Characters
K 32.66	NSW Engineering Track off K Main	2904	
K 32.66	SSW Engineering Track off Wye	2904	
K 32.00	SSW Tail of Wye	2904	
K 31.78	K 31.78 and track beyond		Ø

In order to differentiate between tracks within CP 1730 for the purpose of track bulletin restrictions only, that portion of the south leg of the wye found within CP 1730 will appear as track type WYE in track bulletins.



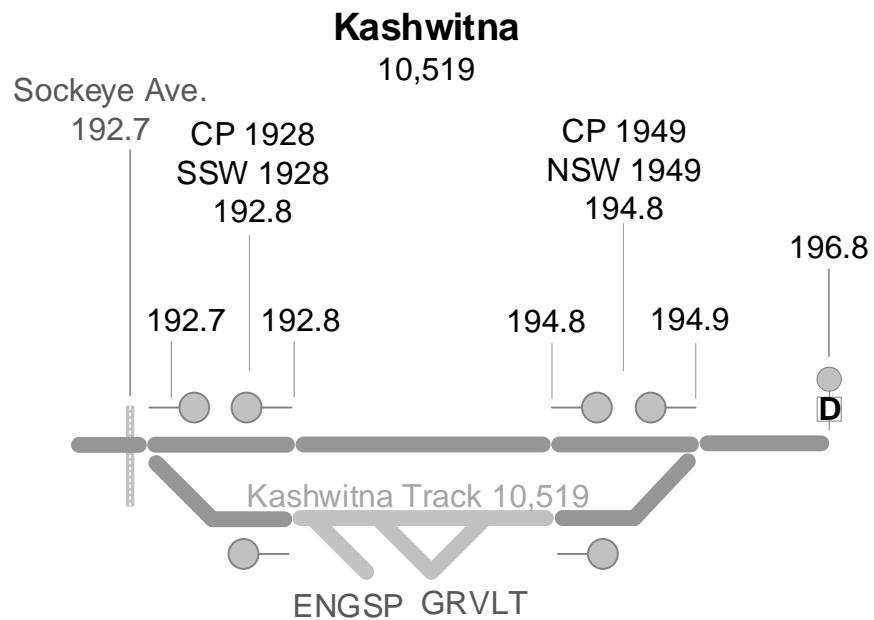
## 81.13 Central Subdivision

### Kashwitna

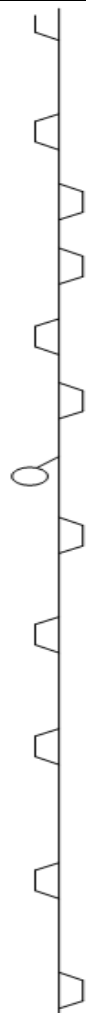
MP 192.99....SSW Engineering Spur....850ft, ▲.

MP 193.72....SSW Gravel Tipple Track....850ft; ⑩; CC at loading tipple.

MP 193.94....NSW Gravel Tipple Track....850ft....⑩; CC at loading tipple.



## 82.1 Mountain Subdivision MP 194.91 - MP 466.78

S N	S↑ Station/ Abbr. ↓N Length	Special Characters	Call Code/ Channel	TWD & Type (Channel)	Method of Oper. /PTC	Slide Zone / CP's	Track Layout	Speed....Frt/Psg MPH	
194.9	Kashwitna/KASH 10,519*	⑮TO, ⑳KASH Trk	06/03 ChCh MP 194.91		CTC/PTC 194.91	CP 1949		MP 194.91 - 207.28....49/59	
201.9	Wolf/WOLF SDG 1322	⑩TO, ⑩SDG	06/01	206.2 B (04)	194.91	SZ 224: MP 224.57 - 224.91 ✕Θ SZ 233: MP 232.75 - 233.10 ✕Θ SZ 236: MP 236.45 - 236.98 ✕Θ SZ 237: MP 237.00 - 238.00 ✕Θ SZ 238: MP 238.00 - 239.00 ✕Θ SZ 239: MP 239.76 - 240.00 ✕Θ SZ 240: MP 240.00 - 241.17 ✕Θ SZ 241: MP 241.43 - 241.57 ✕Θ SZ 244: MP 243.68 - 244.11 ✕Θ SZ 246: MP 246.24 - 247.00 ✕Θ SZ 247: MP 247.00 - 247.87 ✕Θ SZ 254: MP 253.40 - 254.35 ✕Θ SZ 255: MP 255.51 - 255.82 ✕Θ SZ 259: MP 258.66 - 260.11 ✕Θ SZ 266: MP 266.08 - 266.31 ✕Θ SZ 269: MP 269.22 - 269.94 ✕Θ		MP 207.28 - 207.50....49/49 MP 207.50 - 210.80....49/59 MP 210.80 - 213.54....45/45 MP 213.54 - 223.45....49/59 MP 223.45 - 224.61....49/49 MP 224.61 - 224.91....40/40 MP 224.91 - 226.00....49/49 MP 226.00 - 227.65....40/40 MP 227.65 - 236.45....49/59 MP 236.45 - 240.00....49/49 MP 240.00 - 243.06....40/40 MP 243.06 - 244.2.....35/35 MP 244.20 - 246.24....40/40 MP 246.24 - 247.49....30/30 MP 247.49 - 249.15....40/40 MP 249.15 - 252.36....49/59 MP 252.36 - 255.00....40/40 MP 255.00 - 258.00.....35/35 MP 258.00 - 261.00.....30/30 MP 261.00 - 266.00.....40/40 MP 266.00 - 266.48.....35/35 MP 266.48 - 266.89.....25/25 MP 266.89 - 269.17.....35/35 MP 269.17 - 270.31.....20/20 MP 270.31 - 277.12.....30/30 MP 277.12 - 278.47.....25/25 MP 278.47 - 283.96.....35/35	
202.3									
214.4	Sunshine/SUNS SDG 5823	▲, ⑮TO, ⑮SDG	02 or 06/01		TWC/PTC				
215.6									
223.1	McKinley/MCKI SDG 2322	▲, ⑩TO, ⑩SDG	ChCh MP 223 02 or 06/01	223.5 B (04)					
223.6									
226.6	Talkeetna/TALK SDG 1518	⑩TO, ⑩SDG	02 or 03/02						
227.0									
235.1	Chase/CHAS SDG 6235	▲, ⑮TO, ⑮SDG	02 or 20/02		281.15				
236.4									
248.0	Curry/CURR	▲, L, ⑩TO	20/02						
250.2	Deadhorse/DEAD SDG 6758	▲, ⑮TO, ⑮SDG		252.0 D (02)					
251.5									
262.4	Gold Creek/GOLD SDG 5223	▲, ⑩TO, ⑩SDG	04/02	258.5 D (02) 261.2 B (04)					
263.4									
273.6	Chulitna/CHUL SDG 2105	▲, ⑩TO, ⑩SDG		270.4 D (02) 276.0 D (02)					
274.1									
281.2	Hurricane/ HURR SDG 5976	⑮TO, ⑮SDG, ⑮TO	05/02	281.1 B (04) 286.5 D (02)	281.15 CTC/PTC 282.38	CP 2812  CP 2824			
282.4									MP 283.96 - 284.27.....10/10 MP 284.27 - 288.21.....25/25
288.4	Honolulu/HONO SDG 5338	⑩TO, ⑩SDG		290.5 A (04)	282.38 TWC/PTC	SZ 286: MP 285.88 - 287.00 ✕Θ SZ 288: MP 287.88 - 288.07 ✕			
289.5									

## 82.2 Mountain Subdivision

### Montana Creek Bridge

**MP 211**....Warning bells are installed on bridge as a warning of an approaching train. Bells are activated when a train is approaching the bridge. A white strobe light is located on the south end of the bridge to indicate the bells are operating. This system is in use June 1 through September 30. Report any malfunction to the Train Dispatcher.

### McKinley

**MP 223.52**....NSW Pit Track....1722ft; Max speed 4 MPH, ~~FRA~~, ~~MAG~~, Ø.

### Talkeetna

**MP 226.88**....NSW House Track...672ft; ▲, do not leave unattended equipment running on north end of House Track.

**MP 226.88**.... NSW Engineering Spur...800ft.

### Curry

**MP 248.06**....SSW Curry Loop Track....6015ft, ▲▲, 2.5% grade.

**MP 248.13**....SSW End Ramp....378ft, ▲.

**MP 248.19**....SSW Engineering Track...950ft, CC at ramp.

**MP 248.44**....NSW Engineering Track...950ft, CC at ramp

**MP 248.26**....NSW Fuel Track....167ft, ▲, when spotting fuel tank cars at Curry, cars must be positioned to the end of the Fuel Track to take advantage of a buried fuel spill liner.

### Gold Creek

**MP 263.38**....NSW Rudd Spur....1735ft; 5 MPH, ~~MAG~~, CC.

**MP 266.0 – MP 269.2:** Southbound trains, except passenger trains, 100 tons, or greater, per operative brake must not exceed 25 MPH. Trailing tons ÷ # of operative control valves = tons per operative brake.

**MP 270.3 – MP 279.7:** Southbound trains, except passenger trains, 100 tons, or greater, per operative brake must not exceed 25 MPH. Trailing tons ÷ # of operative control valves = tons per operative brake.

### Hurricane

**MP 281.41**....NSW Ramp Track....940ft; ~~MAG~~, CC on side ramp, **GCOR 10.2: Trains may clear.**

**MP 281.39**....NSW Engineering Spur...831ft.

**MP 284.20**....Hurricane Gulch Bridge, ABTH 104.8.

82.3 Mountain Subdivision MP 194.91 - MP 466.78									
S N	S↑ Station/ Abbr. ↓N Length	Special Characters	Call Code/ Ch	TWD & Type Channel	Method of Oper. /PTC	Slide Zone	Track Layout	Speed....Frt/Psg MPH	
288.4	Honolulu/HONO SDG 5338	⑩TO, ⑩ SDG	05/02	290.5 A (04)	282.38	SZ 294: MP 293.11 - 294.36 ЖΘ		MP 283.96 - 284.27.....10/10	
289.5									<u>MP 284.27 - 288.21.....25/25</u>
296.5	Colorado/COLO SDG 10,074	▲, ⑮TO, ⑮SDG		294.8 D (02)				MP 288.21 - 292.22.....40/49	
298.5								MP 292.22 - 294.53.....30/30	
303.6	Broad Pass/BROA SDG 7530	▲, ⑮TO, ⑮SDG			TWC/PTC	MP 294.53 - 305.72.....49/59			
305.1						MP 305.72 - 306.11.....49/49			
318.4	Cantwell/CANT SDG 6200	▲, ⑮TO, ⑮SDG	06/02	320.21 B (04), 322.51 D (02)		MP 306.11 - 308.18.....49/55			
319.6						MP 308.18 - 313.61.....49/59			
325.8	Windy/WIND SDG 5470	▲, ⑩TO, ⑩SDG	06 or 03/02	328.1 D (02), 332.9 D (02)	359.9	SZ 321: MP 320.83 - 321.95 Θ  SZ 325: MP 325.65 - 325.81 Θ SZ 327: MP 327.21 - 327.71 Θ SZ 328: MP 328.79 - 329.02 Θ SZ 332: MP 332.50 - 332.81 ЖΘ SZ 334: MP 334.02 - 334.13 Θ SZ 336: MP 335.93 - 336.18 Θ SZ 341: MP 340.83 - 341.61 Θ		MP 313.61 - 316.32.....49/49	
								MP 316.32 - 316.52.....45/45	
							<u>MP 316.52 - 321.46.....49/49</u>		
							MP 321.46 - 322.21.....25/25		
341.6	Oliver/OLIV SDG 6202	▲, ⑩TO, ⑩SDG	01/02	339.7 D (02), 345.1 D (02), 348.02 B (04), 348.9 D (02)	MP 322.21 - 327.05.....30/30				
342.8					MP 327.05 - 327.81.....25/25				
355.82	Garner/GARN	▲	00/02	350.4 A (04), 351.3 D (02), 353.1 A (04), 353.51 D (02), 353.9 D (02), 355.0 D (02)	MP 327.81 - 331.42.....30/30				
							MP 331.42 - 332.82.....25/25		
							MP 332.82 - 339.75.....30/30		
							MP 339.75 - 341.65.....25/25		
358.8	Healy/HEAL SDG 5881	▲, Y, ⑩TO, ⑩SDG		356.4 A (04), 358.0 D (02)		MP 341.65 - 347.16.....30/30			
359.9						MP 347.16 - 352.71.....25/25 MP 352.71 - 357.48.....15/15 <u>MP 357.48 - 358.00.....20/20</u> MP 358.00 - 361.15.....45/45			



## 82.4 Mountain Subdivision

### Colorado

**MP 292.1 – MP 297.0**.... Southbound trains, except passenger trains, 100 tons, or greater, per operative brake must not exceed 25 MPH. Trailing tons / # of operative control valves = tons per operative brake.

**MP 298.28**....NSW Engineering Spur....1000ft.

### Broad Pass

**MP 304.46**....NSW Engineering Spur....1260ft.

### Cantwell

**MP 319.26**....SSW Engineering Track....1314ft; ▲.

**MP 319.57**....NSW Ramp Track....249ft; ▲, ~~MAG~~, CC.

**MP 319.61**....NSW Engineering Track....177ft; ▲, track passes through section building. On-track vehicle weight must not exceed 25 tons per axle or 75 tons total inside the section building. 177ft represents the clear length between the section building and switch. The section building is 62ft long.

### Windy

**MP 326.01**....SSW Engineering Spur (Outfit Track)....1165ft; ~~FRA~~, ~~MAG~~.

**MP 347.40**....Riley Creek Bridge, ABTH 104.8.

### Healy Canyon between Denali Park Depot and Healy

**MP 350.52**....NSW MP 350.52....682ft; ▲, ~~FRA~~, ~~MAG~~.

**MP 355.82**....NSW MP 355.82....724ft; ▲, ~~MAG~~, Ø from a point 400ft from the switch to end of track.

Dynamic brakes must be restricted to one-half of maximum on trains operating northbound between Denali Park Depot and Healy.

82.5 Mountain Subdivision MP 194.91 - MP 466.78								
S N	S↑ Station/ Abbr. ↓N Length	Special Characters	Call Code/ Channel	TWD & Type (Channel)	Method of Oper. /PTC	Slide Zone	Track Layout	Speed....Frt/Psg MPH
358.8  359.9	Healy/HEAL SDG 5881	▲, Y, ⑩TO, ⑩SDG	00/02	356.4 A (04) 358.0D (02)	358.82	SZ 371: MP371.35 – 371.71 Θ  SZ 383: MP 382.43 - 383.10 Θ  SZ 384: MP 384.13 - 384.49 Θ  SZ 415: MP 414.46 - 415.00 Θ		MP 358.00 - 361.15.....45/45
361.4 362.9	Usibelli/USIB 8479*	⑩TO	ChCh MP 361					MP 361.15 - 363.12.....49/49
371.3	Ferry/FERR 834*, VSI	▲	00/03	370.1 B (04)				MP 363.12 - 369.68.....49/59
373.9 375.2	Grizzly/GRIZ SDG 6197, VSI	▲, ⑩TO, ⑩SDG						MP 369.68 - 371.67.....49/49
381.3	Browne/BROW 624*, VSI	⑩TO, ⑩BROW Trk	05/03					MP 371.67 - 377.49.....49/59
391.6 392.9	Clear Site/CLEA SDG 6212, VSI	▲, Y, ⑩TO, ⑩SDG		395.2 C (04) 395.2 WILD (04)				MP 377.49 - 378.93.....49/49
411.8 412.6	Nenana/NENA SDG 3195, VSI	▲, ⑩TO, ⑩SDG	02/03					MP 378.93 - 379.54.....35/35
415.1 416.0	Harding/HARD SDG 4172, VSI	▲, ⑩TO, ⑩SDG		417.8 B (04)				MP 379.54 - 385.61.....40/40
420.0 421.2	Manley/MANL SDG 6088, VSI	⑩TO, ⑩SDG						MP 385.61 - 388.75.....49/59
430.4 431.7	Dunbar/DUNB SDG 6230, VSI	⑩TO, ⑩SDG	03/03					MP 388.75 - 390.76.....49/49
439.2	Standard/STAN, VSI							MP 390.76 - 393.89.....49/59
450.2 451.4	Saulich/SAUL SDG 6374, VSI	⑩TO, ⑩SDG						MP 393.89 - 411.07.....49/49
458.2 459.7	Ester/ESTE SDG 6727, VSI	⑩TO, ⑩SDG		456.2 B (04)				MP 411.07 - 411.55.....20/20
466.78	Fairbanks/FAIR	Y	03/07					MP 411.55 - 415.09.....25/25
								MP 415.09 - 416.0.....40/40
								MP 416.00 - 431.76.....49/49
								MP 431.76 - 452.86.....40/40
								MP 452.86 - 463.05.....30/30
								MP 463.05 - 466.78.....40/40

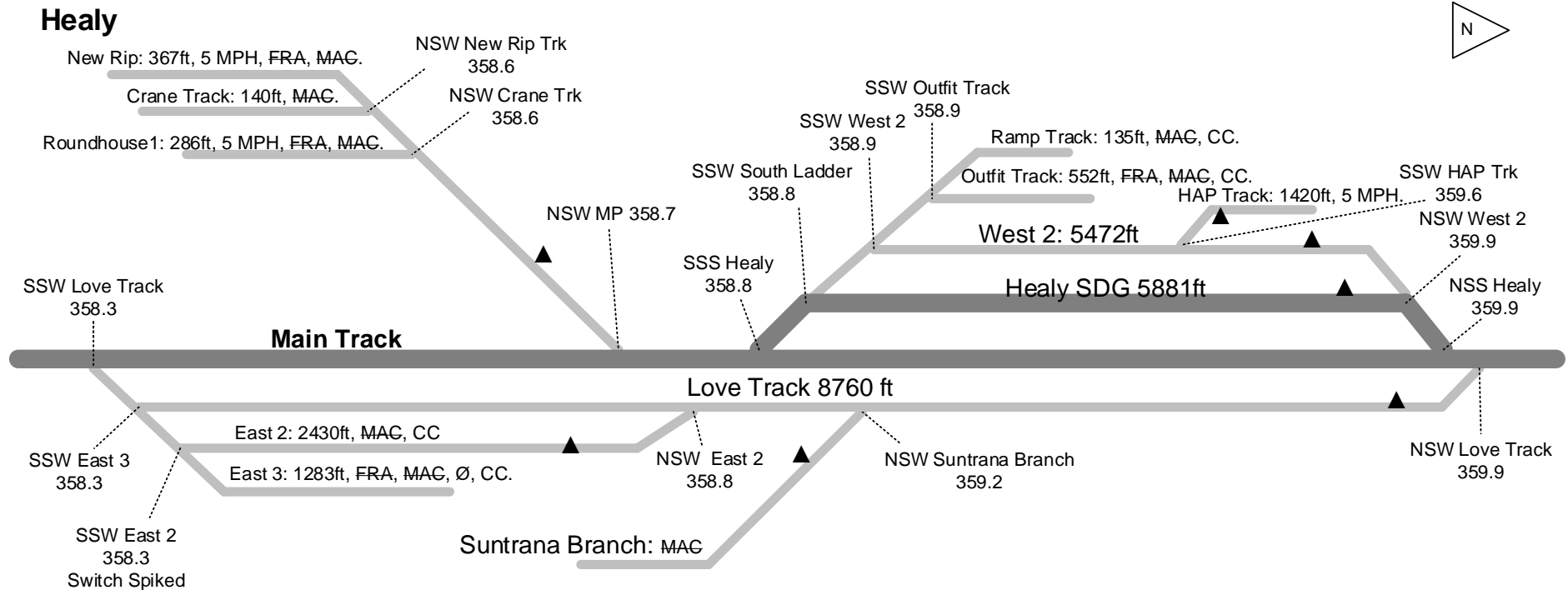
## 82.6 Mountain Subdivision

### Healy

Yard Radio Channel: 05

Tail of the wye, Spring Switch....2008ft; GCOR 8.9; Healy Wye may not be used for setout or storage of cars or on-track equipment.

This switch is to be used as a spring switch ONLY between May 1 and September 30. During the rest of the year this switch must be operated as a hand-operated switch.



## **Usibelli**

Usibelli Track, ⑩, and 5 MPH through the tipple tunnel. CC: North end of tunnel.

Length of track from clearance point of south switch to south portal of tipple is 4,247 ft. The small road crossing may be blocked when necessary. Length of track from clearance point of north switch to north portal of tipple is 4,010 ft.

Safety standards require hard hats to be worn when inside the loading facility.

Notify the Train Dispatcher when the train is 30 minutes from being ready to depart, and any time circumstances arise that may increase expected departure time.

Running locomotives must not be left standing in the tunnel or within 50 ft. (outside) of either portal. The amount of time a locomotive is in the tunnel must be kept to a minimum.

Conductors of trains operating in this area will be required to coordinate all movements with the tipple operator. A crew member must contact the tipple operator prior to releasing any hand brakes, coupling locomotives to the empty train, or releasing the train air brakes on the train being prepared for loading.

A green light is located across from the tipple operator's control station. When illuminated, it indicates the loading chute is in its fully raised position. In absence of this signal, the crew must confirm the loading chute is in its fully raised position before proceeding. Loading speed is approximately 0.34 MPH.

The speed is to be increased or decreased as loading operations dictate. If the movement speed exceeds 1 MPH it may be necessary to stop the movement and back the train south of the scale and begin the scaling process again. Engineers working trains through the tunnel must control the speed of the train to prevent making an air brake application during scaling.

When the entire train has been loaded and the last car clears the track scale, a reverse movement may be made over the track scale.

Signs reading "No motor vehicles past this point" indicate the limits of the scale and are located on the east wall of the tunnel. These signs may be used for reference points when it is necessary to clear the scale.

Cars will not be set out or left standing on Usibelli Track without permission of the Train Dispatcher.

The use of Usibelli Track is restricted to coal loading only.

### Ferry

**MP 371.32**....NSW MP 371.32....834ft; ▲. Check with Train Dispatcher before tying up cars or equipment.

### Browne

**MP 381.31**....NSW MP 381.31.... 624ft.

### 388 Pit

**MP 388.05**....SSW Ramp Track....312ft; FRA, Ø.

**MP 388.17**....NSW Pit Track (Tail)....2087ft; FRA, MAC, Ø.

**MP 388.27**....NSW MP 388.27 (388 Pit)....855ft; FRA.

### Clear Site

**MP 392.09**...SSW Engineering Spur....665ft

**MP 392.63**....SSW MP 392.63....605ft, ▲, FRA.

**MP 392.65**....SSW Short Siding....781ft.

**MP 392.82**....Main Base (Tail); FRA.

**MP 392.88**....NSW Short Siding....781ft, ▲.

**MP 392.89**....NSW MP 392.89....732ft; ▲, FRA.

**MP 394.3 & MP 394.7**....Track realignments resulted in adding these MP's. Distance between MP 394 to MP 395 is 14,970 feet.

### Nenana

**MP 411.08**....SSW MP 411.08...440ft; MAC, Ø, only 1 locomotive on track.

SSW Track 1 (Lower Yard)....1146ft; MAC, Ø.

SSW Track 2 (Lower Yard)....890ft; MAC, Ø.

SSW Track 3 (Lower Yard)....846ft; MAC, Ø.

SSW New Ramp....397ft; FRA, MAC, Ø.

SSW Old Ramp....509ft; FRA, MAC, Ø.

SSW Hi-line....198ft; MAC, Ø.

**MP 411.34**....SSW MP 411.34....; Max speed 4 MPH, MAC from the new ramp to the clearance point at north end of track, Ø, CC by side ramp, end ramp is end of track. Non-articulated cars exceeding 65 feet are prohibited.

**NSW House track**....1240ft; MAC, Ø, at clearance point to end of track.

**MP 411.79**....NSW MP 411.79....See Instructions for SSW 411.34.

**MP 411.92**....Union Oil Spur....233ft; Ø, CC 300ft south of switch.

**MP 413.7**....Tanana River Bridge, ABTH 104.8.

**Harding**

**MP 415.49**....SSW Engineering Spur....230ft; Max speed 4 MPH, ~~MAC~~, Ø end 70 feet of the engineering spur.

**Manley**

**MP 420.47**....NSW Engineering Spur....240ft.

**Dunbar**

**MP 430.94**....SSW Engineering Spur....140ft.

**Standard**

**MP 439.21**....SSW MP 439.21....1778ft; ~~MAC~~, Ø 300ft from clearance point to end of track,

**Saulich**

**MP 451.03**....NSW Engineering Spur....900ft.

Northward trains contact the Fairbanks Manager on Duty via radio telephone, ext. 6016, for yarding instructions in Fairbanks Yard.

**Ester**

**MP 459.59**....SSW Engineering Spur....499ft.

## 82.7 Suntrana Branch, D Branch

Suntrana Branch - Mountain Subdivision MP D 0.0 - MP D 1.7				
MP	S↓ Station ↑N	Call Code/ Channel	Meth. of Oper.	Speed....frt/psg MPH
D 0.0	Healy	00/02	GCOR 6.27	D 0.0 - D1.7...10/10
D 1.7	MP D 1.7			

Switches & Tracks			
MP	Name	Feet	Special Characters
D 0.5	D 0.5 and track beyond		<del>MAG</del>
D 1.2	SSW & NSW Run Around Track	465	<del>MAG</del>

Suntrana Branch begins at MP D 0.0 at MP 359.24 off Love Track.

### Usibelli Prill Silo

When spotting more than one railcar at MP D 1.5, spot north car under silo with any additional loads toward end of track.

Do not leave any railcars attached to cars on spot.

## 82.8 Mountain Subdivision, Fairbanks Yard Instructions

**Fairbanks Yard Radio Channels:** 05, 06, 07, and 10 (zone 2).

If unable to contact the on-duty transportation supervisor (ext. 6016) each train, engine, track car or employee working on or near a track, will announce its intention to move within, or enter into, the Fairbanks terminal on an appropriate Fairbanks yard radio channel.

Controlled track begins and ends at MP 466.78, Mountain Subdivision.

Maximum Speed between MP 466.78 and MP 467.51.....40MPH  
Maximum Speed MP 466.78 .....(HER 20 MPH)  
Maximum speed between MP 467.51 and MP 469 (on Old Main Track).....20 MPH  
Golden Heart Lead..... 20 MPH

### **Locomotive Daily Inspection:**

The engineer that operates any locomotive(s) in yard service after midnight, will be responsible to ensure that a current daily inspection has been performed prior to using the locomotive in service unless relieved by proper authority, local instructions or operating plan.

Any time an engineer is unable to comply with these instructions a notation must be entered on the Locomotive Daily Inspection and Trip Report indicating the reason the inspection was not performed.

**Car Restrictions:** Cars will not clear all building doors. Be sure opening has adequate height for bi-level dome car.

**ARR 651, 652, 653, 654, 655, 656**

**HALX 1050, 1051, 1052, 1053, 1054, 1055, 1056, 1057, 1058, 1059**

**MSEX 7080, 7081, 7082, 7083, 7084, 7085, 7086, 7087, 7088, 7089**

**RCIX 1001, 1002, 1003, 1004**

**DMU ARR 751**



## 82.10 Eielson Branch; G Branch

Eielson Branch - Mountain Subdivision MP G0.0 - MP G 28.0					
MP	Station S↑ SDG Length ↓N	Call Code/ Channel	TWD Chanl	Meth. of Oper.	Speed....frt/psg MPH
G 0.0	Fairbanks	03/03		GCOR 6.27	MP G 0.0 - G 3.20.....15/15
G 3.2	Ft. Wainwright		G 3.6 D 07		MP G 3.2 - G 6.20.....10/10
G 15.9	Spirit of North Pole SDG 1496				MP G 6.2 - G 17.7.....15/15
G 16.4	Chapados SDG 5525				
G 28.0	Eielson Branch				MP G 17.7 - End of Track...10/10

Switches & Tracks			
MP	Name	Feet	Special Characters / Notes
G 4.9	SSW Building 3030 Spur	350	5 MPH
G 5.0	SSW Fort Wainwright Power Plant	1197	CC, 5 MPH (outside track)
G 5.4	SSW & NSW Bob Small Runaround	1131	
G 6.0	SSW Fairbanks International Airport		DTMF #4060
G 7.4	SSW Stryker Ramp Track 1	4209	
G 7.4	Stryker Ramp Track 2, <i>off Track 1</i>	1676	
G 7.4	Stryker Ramp Track 3, <i>off Track 4</i>	2159	
G 7.4	Stryker Ramp Track 4, <i>off Track 1</i>	1885	
G 9.9	SSW K & K	1390	
G 12.4	NSW Green Construction	299	
G 16.6	SSW North Pole Refinery Main	4282	DTMF #4166
G 17.8	G 17.8 track and beyond		<del>MAC</del>
G 24.1	NSW Bluff Spur	422	
G 24.5	ARRC Maintained track ends		

Eielson Branch MP G 0.0 begins at switch off north end of work lead.

Train crews picking up or setting out at North Pole will leave cars to provide clear passage of vehicle traffic over either 5<sup>th</sup> or 8<sup>th</sup> Avenue.

**GCOR 8.19.1 Radio Controlled Switches**  
DTMF Power Switch MP G 6.0, Fairbanks  
International Airport Branch:

Select radio channel 05, and press #4060 to change the switch alignment.

DTMF Power Switch MP G 16.6, North Pole Refinery:

Select radio channel 07, and press #4166 to change the switch alignment.

## 82.11 Fairbanks International Airport Branch (FIABR); H Branch

FIABR - Mountain Subdivision MP H 0.0 - MP H 10.0				
MP	S↑ Station ↓N	Call Code/ Channel	Meth. of Oper.	Speed....frt/psg MPH
H 0.0/G 6.0	Eielson Branch	03/03	GCOR 6.27	MP H 0.0 - H 10.0...10/10
H 10.0	FIA			

Switches & Tracks			
MP	Name	Feet	Special Characters
H 0.0	Airport Branch Switch		DTMF #4060
H 0.5	H 0.5 and track beyond		<del>MAG</del>
H 1.0	NSW FS&G Spur		
H 2.8	NSW North Star Terminal		<del>FRA</del>
H 2.9	SSW Northland Wood		
H 3.6	NSW Alaska West Track 1		
H 3.6	NSW Alaska West Track 2		
H 3.7	SSW Brenntag		
H 4.1	NSW & SSW Parker Runaround	1800	
H 4.9	NSW & SSW Metro SDG	1143	
H 5.5	H 5.5 and track beyond		Ø
H 9.3	SSW Tesoro		Ø
H 9.5	SSW Chevron		Ø
H 9.6	NSW & SSW Runaround	800	Ø

Fairbanks International Airport Branch begins at MP 0.0 at DTMF Power Switch MP G 6.0 off the Eielson Branch.

## Item 83, Track Speeds & Signs

### 83.1 Maximum Speeds Permitted

MAXIMUM SPEED unless otherwise provided:

Main Track.....	60 MPH
Locomotive and car servicing tracks .....	4 MPH
Sidings, turnouts, & auxiliary tracks.....	10 MPH
Branch Lines.....	10 MPH

### 83.2 Fixed Signals, Signs, and Markers

Fixed signals and other railroad markers such as mileposts must not be moved or removed without authorization. When a fixed signal or railroad marker is missing, or determined not to be in the correct location, comply with Rule 1.1.3, Accidents, Injuries, and Defects. The Change Control Board must also be notified to arrange repair.

The following fixed signals shall convey information as follows:

#### Flanger Sign

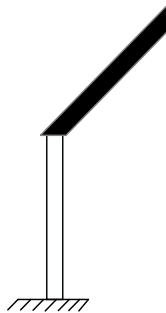
Indicates 100 feet beyond is a guard rail, road crossing, switch, frog, etc., that will not clear flangers and snow plows.

Note: Sign may have the following identifiers:

DD - Defect Detectors

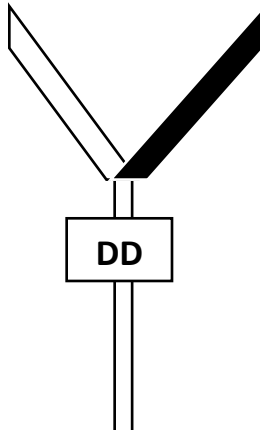
BB - Battery Box

CL - Curve Lubricator



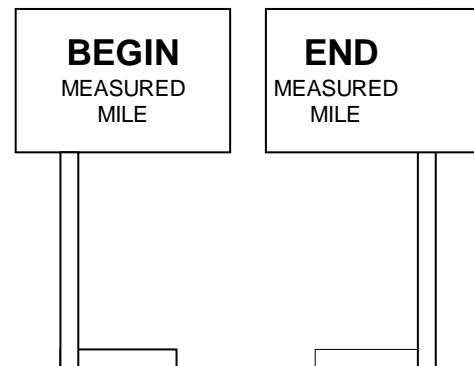
#### Flanger Sign (immediate)

Indicates the immediate location of a significant object that will not clear flangers and snow plows, usually detectors.



#### Measured Mile Signs

Placed 1 mile apart at designated locations along main track to check accuracy of speed indicator. See Appendix for measured mile locations.



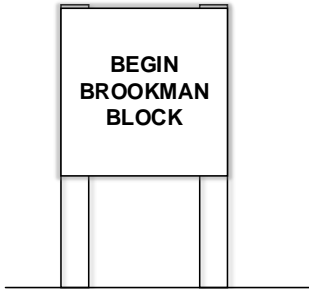
#### Facing Point Sign

White with black lettering, found at the facing point of a main track Designated Switch.



### Legacy DTC Block Sign

Legacy DTC begin and end block signs have been left in place at the ends of sidings in TWC territory to aid in situational awareness. These signs also designate the clearance point on the siding track.



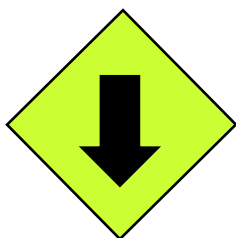
### AWS Confirmation Signal

When flashing, indicates that Automatic Whistle System devices are functioning properly. This signal flashes near the top of the crossing mast and is visible from approximately 1/4 mile away. In the absence of this signal the Locomotive Engineer must sound whistle signal GCOR 5.8.2 (7), Sounding Whistle. Flashing Orange "X" on black background.



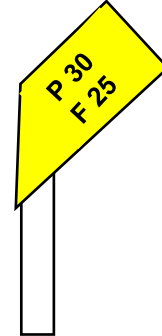
### Significant Speed Reduction Sign

Fluorescent yellow green sign with black markings, placed on Advance Warning Speed Control Signs when the upcoming speed reduction is in excess of 20 MPH. All passenger train movements approaching these locations shall be made with a second qualified crew member in the cab of the controlling locomotive. Job briefing about these speed restrictions.



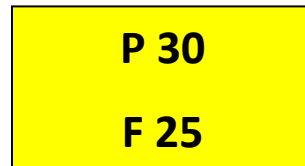
### Advance Warning Speed Control Sign

Placed approximately 1/2 mile in advance of a permanent speed restriction. Black numbers on yellow sign.



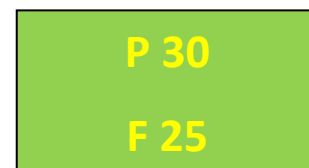
### Speed Control Sign

Indicates the beginning of a permanent speed restriction. Train or engine must not exceed speed specified once front of train or engine has passed this sign. Black numbers on yellow sign.



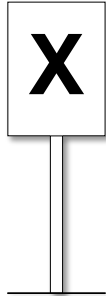
### Resume Speed Sign

Indicates end of a permanent speed restriction. Speed must not be increased until entire train has passed this green signal. Yellow numbers on green sign.



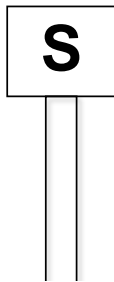
### Road Crossing Warning Sign

Placed approximately  $\frac{1}{4}$  mile in advance of road crossings. Sound engine whistle as directed by GCOR 5.8.2 (7), except in designated quiet zones. Sound engine bell as directed by GCOR 5.8.1.



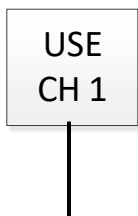
### Station Warning Sign

Placed, in non-signaled territory, approximately 1 mile in advance of first switch of a station or approximately 1 mile in advance of station sign if no siding. Sound one long engine whistle signal while passing this signal.



### Radio Channel Change Sign

White sign with black writing, used to mark locations where the channel used to contact the Train Dispatcher changes.



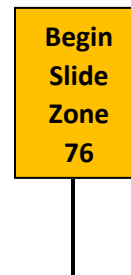
### Advance Warning Slide Zone Sign

Placed approximately  $\frac{1}{2}$  mile in advance of slide zone.



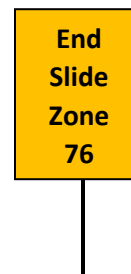
### Slide Zone Sign – Front

Displayed on right side of track to indicate beginning of slide zone. Speed of train must be controlled as per Timetable Special Instructions.



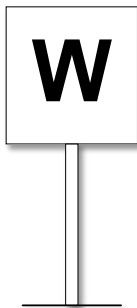
### Slide Zone Sign – Back

Displayed on left side of track to indicate end of slide zone.

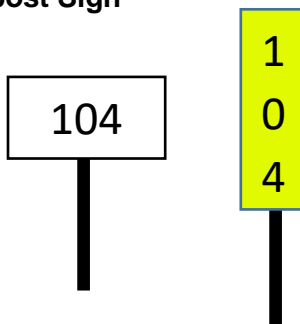


### Bridge and Tunnel Warning Sign

Placed approximately ¼ mile in advance of bridges and tunnels. Sound engine whistle as directed by GCOR 5.8.2(7).

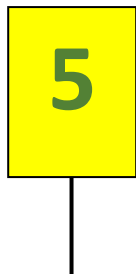


### Milepost Sign

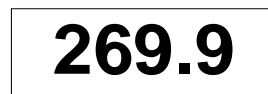


### Temporary Speed Restriction Sign Used on Auxiliary Tracks

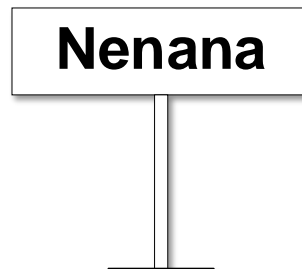
A yellow signal with green numbers displayed on the right-hand side of the track as viewed from an approaching train or engine indicates the beginning of a temporary speed restriction. Do not exceed speed specified until rear car has passed the back side of this same signal displayed on the left-hand side of the track. This sign is an addition to GCOR 5.4.1.



### Bridge Sign

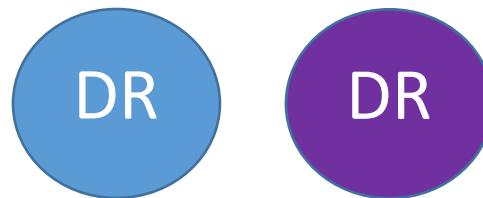


### Station Sign



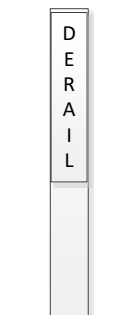
### Derail Sign for Switch Stand

Attached to derail. When sign is facing movement, derail is in derailing position and must be changed to the off position to permit movement.



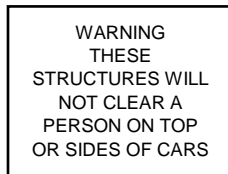
### Derail Post

Displayed where short stand derail is located.



### Advance Restricted Clearance Sign

Placed in advance of condition which will not clear an employee on top or side of a car.



### Restricted Clearance Sign

Placed at the point where clearance is restricted.



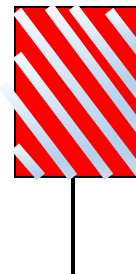
### End of Track Sign



### Malfunctioning Automatic Crossing Warning Signal Sign

White signal with red stripes. When displayed, this sign indicates that Automatic Warning Devices located between these signs may not function properly. Movements must stop and protect the crossing. This sign will only be displayed on other-than-controlled tracks.

Note: Either rectangular or diamond-shaped signs may be used.

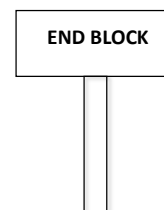
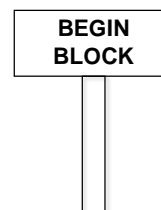


### Crane Movement Sign



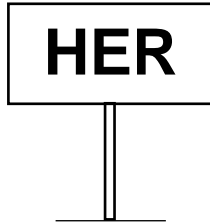
### Begin and End Block Signs

Indicates the limits of block signal system.



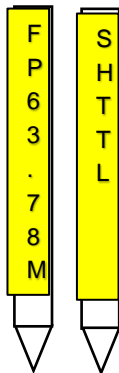
### Head End Restriction Sign

Indicates beginning of a permanent head end speed restriction. Train must not exceed speed specified while front of train is passing this sign. Once the leading wheels have passed this sign, train may resume maximum authorized speed. Black numbers on white sign.



### Fouling Point (FP) Sign

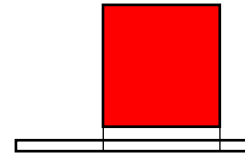
Indicates the fouling point (clearance point) of an uncontrolled track where it connects to or enters controlled track. When placed at the clearance point of an uncontrolled track that connects to controlled track, the track between this sign and the controlled track must not be occupied without authority or protection on the controlled track at that location. When placed on uncontrolled track in advance of or at an absolute signal, it is a reminder that authority is required to enter the controlled track. Black lettering on yellow sign.



### Red Flag

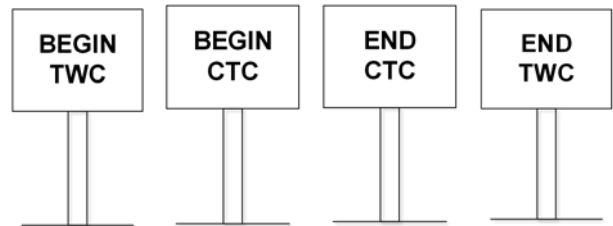
Used when conducting operational monitoring testing (Red flag, reflective red at night). This signal is displayed between the rails, and is considered a Stop Signal, GCOR 5.4.7, when encountered while moving in compliance with GCOR 6.27 or GCOR 6.28.

This signal is also considered a Stop Signal when placed between the rails at a switch required to "Protect against open switch" in compliance with GCOR 8.3 or MOM 8.3.



### Begin and End CTC/TWC Signs

Indicates the beginning or ending of Centralized Traffic Control or TWC.



**VSI Switch Target** – White lettering on red sign. Used to mark switches to which Virtual Switch Indication (VSI) rules apply.





## Item 84, System Standards

### 84.1 Mechanical Standards:

#### 84.1.1 Train Make-up:

- Unless otherwise authorized, cabooses, including unoccupied cabooses and rail diesel cars, must be handled only as the rear car of the train. This restriction does not apply to trains consisting of less than 20 cars and not exceeding 2,500 tons.
- Do not place any freight car 80 feet or longer next to any car 45 feet or shorter. Loaded wheel cars are considered open top loads.
- Geometry Test Car: The ARR 902021 can only be placed in a train as the first car behind locomotives.
- Passenger coaches must not be coupled to cars equipped with double-shelf couplers.
- Locomotive Cranes o Locomotive cranes must have an 'OK TO MOVE IN TRAIN' sign affixed to the operator's cab prior to movement in a train (Crane Movement Sign).
  - o Locomotive Cranes must have their booms trailing when handled in a train, unless otherwise authorized by a MOW Supervisor.
  - o Locomotive Cranes must be handled at the rear of the train and when practical followed by a caboose for accompaniment by a locomotive crane operator.
  - o Locomotive Crane 112 should never be coupled directly to a locomotive or overweight car for transport. Buffer car is to be used when handled directly behind a locomotive or overweight car (refer to A.R.R.C. Clearance Bulletins for clarification.)
- If train's total trailing tonnage exceeds 4,500 tons; (except between Anchorage and Whittier), then the following must apply:
  1. Do not place blocks of 15 or more continuous empty cars anywhere ahead of 15 or more continuous loaded cars.
  2. The following must not be within the first 10 cars:
    - Articulated flat cars
    - Any car weighing less than 45 tons. Exception: When the train does not have 10 loaded cars the above restriction does not apply.
    - Any 80 foot or longer flat car empty or with a single trailer or container regardless of weight.

#### 84.1.2 Equipment Speeds:

The maximum speed for trains handling equipment indicated below will be as follows, unless otherwise provided:

Locomotive Cranes No. ....25 MPH

Locomotive Cranes must have their booms trailing when handled in trains, unless otherwise authorized.

Spreaders No. 7, 8, and 9 .....35 MPH

Spreaders must face in direction of travel when handled in trains. Spreaders in work train service may be handled in either direction. If handled with plow backwards, wings must be secured and movement authorized by Maintenance of Way operator.

ARR plow cars when not engaged in spreading ballast must be inspected before moving to ensure plow is in the upright and secured position.

Welded rail equipment, cars ARR 97800 through 97822.....35 MPH

Note: These cars will not clear side ramps.

### **84.1.3 Loading and Handling Heavy Equipment**

Trains handling cranes, shovels, and similar equipment set up with or without boom attached, must be handled under instructions issued by the Customer Service Department.

Equipment with boom attached must be loaded with boom in trailing position unless approval from a Transportation Supervisor is obtained for movement in forward position. Conductors handling loads with boom in forward position, except on work trains, will be authorized by a Transportation Supervisor.

When equipment as specified above is picked up at other than inspection points or terminal, train crew will take precautions to ensure safe handling to destination or next inspection point.

Dozers loaded to depressed center cars should be centered on car and must have the blade of the dozer placed on elevated portion of the car and blade properly secured for movement in train.

### **84.1.4 Clearance of High Wide and Excessive Weight Cars**

For clearance of the following types of cars and loads, contact Alaska Railroad Corporation clearance coordinators.

- Cars exceeding the dimensions shown in *Maximum Loading Diagram*.
- Loaded railcars with truck center distance exceeding 66 feet.
- Loads beyond the truck centers for flat cars in interchange.
- Double or triple loads.
- Loads with overhangs beyond the end or side sills of railcar.
- Loads with unequal distribution (exceeding 131,500 lbs.) of weight on trucks.
- Railcars exceeding the gross weight limits prescribed in *84.1.5 Heavy Loads*, or the stenciled capacity of the car.
- Shipments having a combined center of gravity of car and lading exceeding 98 inches above top of rail

### **84.1.5 Heavy Loads**

The maximum gross weight of car and lading on all Branch Lines and Subdivisions is 263,000 lbs.

Maximum gross weight of car and lading based upon uniformly loaded 4-axle spacing with combined center of gravity not more than 98 inches above top of rail. Gross weight of 263,000 pounds applies to 4-axle cars with truck centers of 28 feet or greater.

Four-axle cars with truck centers less than 28 feet are restricted to 240,000. Cement hopper cars with truck centers less than 28 feet, and with gross weights not exceeding 263,000 pounds may be moved with the following restrictions:

- Do not couple to a SD70MAC locomotive.
- Do not couple to a car with truck centers less than 28 feet and loaded in excess of 240,000 pounds. Do not couple to an excessive weight car.
- Do not couple to cars 75 feet or longer.

Loads of greater dimensions or weights may be moved by special arrangement coordinated through the clearance coordinator.

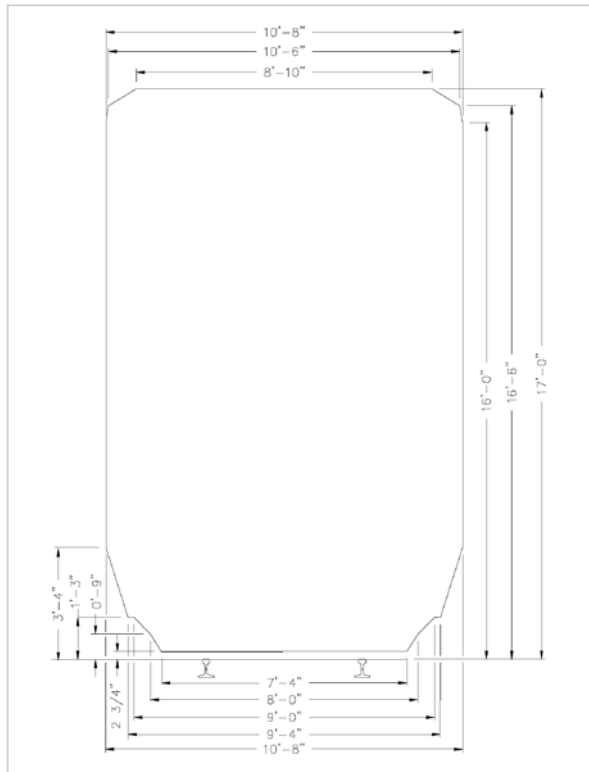
### 84.1.6 Loading Capacity of Hopper Cars

#### A. Coal Service

- No overloaded hopper car can exceed 268,000 pounds.
- No more than five overloaded hopper cars in the train can exceed 263,000 pounds.

#### B. Aggregate Service

- Aggregate material **MUST** be evenly distributed throughout the car.
- No hopper car can be loaded with more than 100 tons of aggregate.
- No hopper car can exceed 268,000 pounds.
- Aluminum hoppers are not to be used in aggregate service (for example ARR 16200 – 16255)



Maximum Load Diagram.

### 84.1.7 Alaska Railroad Maximum Loading Diagram

Any carload exceeding the dimensions shown in the following diagram requires a clearance before it can be moved.

This diagram is for single carloads moving without overhangs beyond end of car and is based on cars with a length not exceeding 90 feet over end sills, with truck centers not exceeding 66 feet, and overhangs not exceeding 12 feet.

All loads exceeding the above limits must be cleared and coordinated through the Customer Service Department.

Note: This diagram does not supersede restrictions imposed by connecting carriers nor existing contract requirements.

### 84.1.7 En Route Loss of Electrical Power for TOFC Service

If an en route failure of electrical supply to the trailers/ containers occurs, immediately notify the Train Dispatcher.

If power is being provided by the 480V HEP from the locomotive consist, make one attempt to reset the power before inspecting the train. If the HEP will not restart nor give a train line complete, stop and inspect the train for physical defects, e.g., dragging electrical cord or other defect that could cause damage. Correct any potential risks, but do not restore power to the trailers/containers regardless of whether or not any problems were found.

If power was being provided by a 480V Generator Van, immediately stop and inspect the train for physical defects, e.g., dragging electrical cord or other defect that could cause damage. Correct any

potential risks, but do not restart the GV or otherwise restore power regardless of whether or not any problems were found.

Commodities in trailers/containers will not freeze or thaw in less than twelve hours, and excessive train delays attempting to restore power increases the risk of losing a load entirely. Report to the Train Dispatcher which trailers/containers are affected and approximate time equipment was off power.

## **84.2 Certified Transportation Employees**

The following responsibilities apply to Conductors and Locomotive Engineers, including Student Engineers.

- Engineers and Student Engineers must be certified according to Alaska Railroad certification requirements and programs, as well as federal regulations defined in Chapter 49, Part 240 of the Code of Federal Regulations (CFR).
- Conductors must be certified according to Alaska Railroad certification requirements and programs, as well as federal regulations defined in Chapter 49, Part 242 of the Code of Federal Regulations (CFR).
- Certified Employees must keep their certificate with them at all times while on duty and display it at the request of a company manager or Federal Railroad Administration (FRA) representative.
- Employees must promptly report the loss, damage, or destruction of their certificate to the Road Foreman of Engines or a Designated Supervisor of Locomotive Engineers (DSLE).

Certified employees must report convictions for any of the following violations to their supervisors responsible for engineer certification **no later than 48 hours** after the conviction:

- Operating a motor vehicle while impaired by, or under the influence of, alcohol or drugs.
- Refusing to undergo testing by a law enforcement officer who wants to determine whether the engineer is operating a motor vehicle while under the influence of alcohol or drugs.
- State-sponsored diversion programs, guilty pleas, and completed state actions to cancel, revoke, suspend, or deny a driver's license are considered violations and must be reported.
- Certified employees must immediately report to the Road Foreman of Engines or a DSLE hearing or vision has deteriorated or significantly changed (including corrective surgery) since their last physical exam.

### **84.2.1 Engineer Certification Requirements for Operating Locomotives**

Engineers must not allow unauthorized or uncertified persons to operate the locomotive.

Certified engineers may operate locomotives under the following conditions:

Train service engineers may operate a locomotive coupled to cars.

Student engineers may only operate locomotives under the direct and immediate supervision of a certified engineer.

### **84.2.2 Territory Qualifications**

Engineers are considered qualified on an assigned territory when they have operated over the territory in at least one of these capacities:

- As a train service engineer without a pilot.
- As a train service engineer completing familiarization trips with a qualified train service engineer pilot.

As a crew member on board the controlling locomotive over the assigned territory.

### **84.2.3 Engineer Familiarization Trips**

A certified train service engineer who has not worked an assigned territory in any capacity must make a familiarization trip with a qualified train service engineer pilot. The purpose of a familiarization trip is for engineers to familiarize themselves with the physical characteristics of the territory and/or new equipment.

A certified train service engineer who has not worked the assigned territory in any capacity during the previous 24 months are required to contact a Designated Supervisor of Locomotive Engineers (DSLE or Road Foreman of Engines) who will determine the following:

- The number of, or need for, familiarization trips.
- The DSLE or other supervisor will then authorize the certified train service engineer to perform service on that territory and/or with new equipment without a pilot.
- If a Locomotive Engineer Pilot is used, the pilot shall be a person qualified and certified and called as a locomotive engineer, who is not an assigned crew member.
- When an engineer is requalifying on the territory where he or she was previously qualified, another member of the same crew who is currently qualified on that territory and called as a Locomotive Engineer or a pilot is required.

### **84.2.4 Conductor Territory Familiarization**

#### **A. Main Track**

- Conductors that have not been over the territory before must make a familiarization trip the assistant must be a person who is certified as a conductor, and is not an assigned crew member.
- For a conductor who was previously qualified on main track physical characteristics, but who has not been over the territory in a year and who regularly traversed the territory prior to the expiration of the qualification, you must make a familiarization trip. The assistant may be any person, including an assigned crewmember.
- For a conductor who was previously qualified on main track physical characteristics of the territory over which he or she is to serve as a conductor, and whose qualification has been expired for one year or more you must make a familiarization trip. The assistant may be any person, including an assigned crewmember other than the locomotive engineer so long as serving as the assistant would not conflict with that crewmember's other safety sensitive duties.

## B. Other Than Main Track

If the conductor has not worked a segment of track (other than main track) in the prior 24 months, the conductor will be provided with a job aid that includes the radio channels, location of close clearances and derails. The job aid may be another qualified employee on the crew or be provided in a job briefing by a person familiar with the segment.

Topic	Engineer	Conductor
Signal to Stop	§240.117(e)(1)	§242.403(e) (1)
Train Speed	§240.117(e)(2)	§242.403(e) (2)
Air Brake Tests	§240.117(e)(3)	§242.403(e) (3)
Main Track Authority	§240.117(e)(4)	§242.403(e) (4)
Tampering with Safety Devices	§240.117(e)(5)	§242.403(e) (5)
Alcohol and Drugs	§240.117(e)(6)	§242.403(e) (12)
Shoving or Pushing Movements	n/a	§242.403(e) (6)
Leaving Equipment in the Foul	n/a	§242.403(e) (7)
Hand Operated Switches including Crossover Switches	n/a	§242.403(e) (8)
Hand Operated Main Track Switches	n/a	§242.403(e) (9)
Hand Operated Crossover Switches	n/a	§242.403(e) (10)
Hand Operated Fixed Derails	n/a	§242.403(e) (11)

## Revocation Events

Incidents or accidents that meet any of the above CFR criteria could result in the suspension or revocation of a certification, see table.

### 84.2.5 Individual's duty to furnish data on prior safety conduct as motor vehicle operator.

CFR 240.111 & CFR 242.111 Prior to 60 days but not sooner than 180 days from the expiration of their Engineer and/or Conductor certification(s), each person seeking recertification must request that their licensing agency provide to the railroad their driving record. This includes any international driving record you have had from out of country within the last 5 years. Failure to deliver required driving records prior to expiration date on your Engineer and/or Conductor card will cause your certification to lapse. It's the employee's responsibility to provide the information to the railroad

Each person seeking recertification of their conductor certificate only must provide in writing a State Driving Record and any international record. Each person seeking recertification of their engineer (and conductor for those dual qualified) certificate must provide in writing a State Driving Record, a check of the National Driver Registry, and any international record. Such data must be sent directly to the railroad from the state and or federal agency emailed to RoadForemanEngines@akrr.com, or mailed to: Road Foreman Engines, Alaska Railroad, 825 Whitney RD, Anchorage, AK 99501

Those with an Alaska State driver license, can see Matt Shaw or crew dispatch for a release request for multiple driving records form and the ARRC will send the request. Those who possess a state driver license from a state other than Alaska must themselves request the driving records from that state. A check of the National Driver Register must be sent for those seeking Engineer recertification.

## Item 85, Radio Communication

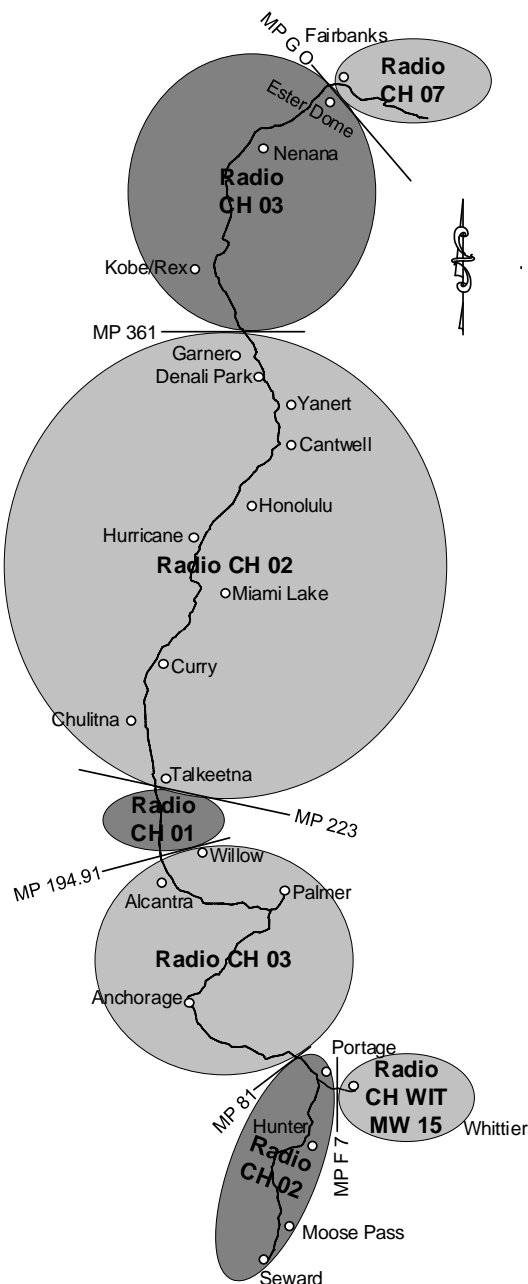
### Emergency Calls:

To make an emergency call to the Train Dispatcher key microphone (not all locomotive radios need to be keyed) and dial 911 on any ARRC radio touch pad on the dispatch channel appropriate for your location.  
Example: if you are in Talkeetna dial 911 on channel 2.

A short tone will sound, acknowledging the call has been received.

To make an emergency call to the Anchorage Police Department key microphone and dial \*1(wait for dial tone)-911 on any ARRC radio touch pad on the applicable radio telephone channel for your physical location.

### Approximate Radio Channel Coverage:



All employees working on controlled track must monitor the applicable dispatch channel; GCOR 2.7.

To use call codes (see subdivision pages) on dispatch channels or make a radio telephone call the microphone must be keyed.

### Radio Telephones:

Radio telephones time-out after 12 minutes of continuous use. Enter \* within this time period, or after hearing a short beep, to reset the timer.

### Dialing from a Radio Telephone:

Set radio to proper channel for applicable physical location (See Radio Table).

To dial an ARRC telephone number, key mic (locomotive radios N/A) \*1 - four-digit extension.

Enter \* 1-9 then dial the number (for non ARRC numbers).

To disconnect, hold # for one second on locomotives radios, for mobile unit's key mic and hold #.

### Dialing into a Radio Telephone Channel:

Dial the 4-digit extension of the applicable location from radio table (preceded by 265 if calling from a non-ARRC phone). After one ring, instruct the person you are trying to contact to pick up on the appropriate channel for that radio.

Report any radio issues to the Train Dispatcher with as much details as possible. If applicable note issues on the locomotive daily inspection and trip report.

## 85.1 Radio Communication

### All Radio Channels

Mobile/Handheld		Train	
Channel Zone 1	Channel Zone 2	Position	Locomotive Channel
Disp 1		01	Disp 1
Disp 2		02	Disp 2
Disp 3		03	Disp 3
Disp 4		04	Disp 4
Yard 5		05	Yard 5
Yard 6		06	Yard 6
Yard 7		07	Yard 7
Yard 8		08	Yard 8
R Tel 9	Yard 9	09	Yard 9
R Tel 10	Yard 10	10	Yard 10
R Tel 11	RP Yard 10	11	RP Yard 10
RP MW 12	MW 12	12	RP MW 12
RP MW 13	MW 13	13	RP MW 13
RP MW 14	MW 14	14	RP MW 14
WIT/MW 15	MW 15	15	WIT/MW 15
TOFC 16		16	TOFC 16
<b>Disp:</b> Dispatcher Road Channels, location specific, see Subdivision pgs. <b>R Tel:</b> Radio telephone <b>RP:</b> Repeater <b>MW:</b> Maintenance of Way <b>WIT:</b> Whittier Tunnel		17	MW 12
		18	MW 13
		19	MW 14
		20	MW 15
		21	R Tel 9
		22	R Tel 10
		23	R Tel 11

- Mobile units (locomotive, handheld, hy-rails, equipment, etc.) if working closely enough can work on channels 1-16 (**RP** and **R Tel** channels won't work unless in applicable coverage area). If units are further or communication is poor use a channel with a repeater.
- All channels preceded by an **RP** or **R Tel** have a repeater option.

Disp. 4 is **for monitoring defect detectors and DTMF switch control**. It is not monitored by the Train Dispatch office.



## 85.1 Radio Communication

### Radio Channels for Specified Location

Location	Disp. Channel	R Tel Channel (Zone 1)	R Tel Number	MW Channels	Yard Channels
Seward	02	R Tel 10	2627	RP MW 14	05
Jack Burton	02	R Tel 09	2406		
Hunter	02			RP MW 12	
Tunnel	02	R Tel 11	8710		
Portage	02	R Tel 10	2667	RP MW 13	
Inside Portage/ Whittier Tunnels	15				
Whittier	02	R Tel 09	2307	RP MW 14 (Zone 2)	07
Anchorage	03	R Tel 09	2668	RP MW 12	05, 06, 07, 08, RP 10,16 (TOFC)
Wasilla	03	R Tel 10	2335		
Houston	03	R Tel 10	2223	RP MW 13	09
Willow	03, 01	R Tel 11	2629	RP MW 14	
Talkeetna	01, 02	R Tel 09	2331	RP MW 12	
Curry	02	R Tel 10	3996	RP MW 15	
Hurricane	02	R Tel 11	2633	RP MW 14	
Honolulu	02	R Tel 09	2343	RP MW 12	
Cantwell	02	R Tel 10	2637	RP MW 13	
Denali Park	02			RP MW 13	
Garner	02			RP MW 12	
Healy	02, 03	R Tel 09	2332		05
Nenana	03	R Tel 10	2654	RP MW 14	
Ester	03			RP MW 13	
Fairbanks	03	R Tel 11	2333	RP MW 13	05, 06, 07, RP 10, 16 (TOFC)

## Item 86, Avalanche Detection System

Avalanche detection systems are in place at Slide Zones 70 and 72. The primary detectors are located near the top of the avalanche paths at 69.9, 71.2 and 71.4 Mile. Various instruments are used by these detectors to determine if an avalanche has released. Once an avalanche is detected the detector sends a signal via radio to the base station located at Portage. Radio channel 02 will then broadcast an emergency warning message – “Alaska Railroad Avalanche Detector MP XX has been tripped, possible avalanche down.”

It takes between 40 seconds and 3 minutes once an avalanche has been detected and the warning message begins broadcasting for the avalanche to potentially reach the main track.

- Trains and on-track equipment receiving this emergency broadcast must stop movement (if possible) before entering Slide Zone 72 or Slide Zone 70.
- Trains and on-track equipment receiving this emergency broadcast which cannot stop movement before entering the avalanche chutes (between MP 71.2 - 71.5, and at 69.9) must take action to prevent an occupied locomotive, coach, caboose or on-track equipment from stopping under the avalanche chute.

Once you are stopped notify the train dispatcher, who will contact the Avalanche Program Manager or District 1 Road Master for further instructions. There are no detection systems for the avalanche paths at MP 71.8 and MP 72.5, these are located on the north end of Slide Zone 72.

## Avalanche Hazard Rating

The Avalanche Hazard Rating (AHR) system is a five-level scale with corresponding color codes. The particular AHR is determined by the ARRC’s Avalanche Forecasters (Avalanche Program Manager and District 1 Road Master). The AHR is based on local/regional snow, weather, avalanche observations and historical data. The Avalanche Forecasters shall be responsible for managing the AHR, putting Snow Slide Zones (X) into effect and notifying the Train Dispatcher.

Each level of avalanche hazard identified in the AHR contains specific operational restrictions. Both the AHR and operational restrictions may be edited at any time by the Avalanche Forecasters.

The current AHR will be delivered via track bulletin Form F. Trains and track car operators will receive the AHR and notification of slide zones that are in effect by TGBO.

When the AHR changes, the change will be conveyed by the Train Dispatcher to any trains or track car operators holding authority in the area affected using normal track bulletin procedures.

### Level 1 (Green) – Unrestricted

**Avalanche Forecast:** Chances for avalanche activity above the rail are low. Avalanche debris impacting the rail is unlikely.

**Restrictions:** None

### Level 2 (Yellow) – Avalanche Statement

**Avalanche Forecast:** Moderate avalanche danger above the rail. Resulting avalanche debris reaching the rail is possible but not likely. Intermittent explosive testing may occur in certain areas to clean out starting zones in order to minimize future avalanche impacts.

**Restrictions:**

**Avalanche Qualified Track Car Operators (completed ARRC avalanche training):** Utilize safe travel and working procedures.

Call in and out of side zones that are in effect.

Expose only one vehicle/piece of equipment at a time when traveling through all identified slide zones.

Avalanche transceivers must be worn and access to rescue gear is required if stopped and working in an identified slide zone.

**Non-Avalanche Qualified Track Car Operators:**

If travel through an identified slide zone is necessary, approval is first required from an Avalanche Forecaster.

**Train Crews:**

Avoid stopping trains in identified slide zones. Have Dispatch notify the Avalanche Forecasters so they are aware of any prolonged stops in slide zones.

Avalanche transceivers must be worn and access to rescue gear is required if outside of a locomotive in an identified slide zone.

### Level 3 (Orange) - Avalanche Watch

**Avalanche Forecast:** Considerable avalanche danger above the rail. Avalanche activity above the rail is likely resulting avalanche debris reaching the rail is probable. Personnel restrictions are in effect. Train restrictions can be expected. Explosives mitigation may allow for continued train operations in certain areas.

**Restrictions:**

**Avalanche Qualified Track Car Operators:**

Same as Level 2 plus:

Each crew member is required to wear a functioning avalanche transceiver and have access to an avalanche probe and shovel.

Avoid travel through identified slide zones when possible. If work in an identified slide zone is required, contact an Avalanche Forecaster for approval.

Work in a minimum crew size of two crew members utilizing two vehicles for separate transportation if possible.

Call in and out of all identified slide zones.

Each work group should carry at least one hand-held radio.

Crews need to protect against operating in remote slide zones with delayed rescue response.

**Non-Avalanche Qualified Track Car Operators:**

Not qualified to enter identified slide zones under this restriction level.

**Train Crews:**

Same as Level 2 Plus:

Must have at least one person with avalanche training to operate in identified slide zones.

Must get approval from Avalanche Forecaster to exit locomotive in an identified slide zone.

**Level 4 (Red) – Avalanche Warning**

**Avalanche Forecast:** High avalanche danger. Widespread large magnitude avalanche activity is expected. Avalanche debris impacting rail safety and rail travel is likely. Avalanche mitigation efforts are ongoing. No avalanche cleanup without the approval of the Avalanche Program Manager.

**Restrictions:**

**Train Dispatcher:** Train traffic suspended. Direct all trains in avalanche territory to move to the closest safe destination (Seward, Portage, Whittier, and Anchorage) and tie up until hazard level goes back to Level 3.

Issue authority in avalanche territory only to avalanche mitigation crews.

**All On-Track Equipment Operators:** No travel into/through identified Slide Zones without the permission of an Avalanche Forecaster.

Personnel engaged in avalanche mitigation work will be under the direction of the Avalanche Forecasters. These personnel may travel as directed provided someone in the work group has  $\geq 5$  years' experience operating in avalanche territory.

**Train Crews:** All train traffic is required to travel to nearest safe destination. Cease train operations until rating goes back to Level 3.

**Level 5 (Black) – Avalanche Track Closure**

**Avalanche Forecast:** Extreme avalanche danger. Large magnitude avalanche activity above the rail is occurring. Numerous avalanches have deposited avalanche debris on or near the rail. Additional large magnitude avalanches reaching the rail grade can be expected.

**Restrictions:**

All avalanche mitigation work suspended until hazard decreases to Level 4.

**Train Dispatcher:** Full track closure. No authority issued except for emergency response.

**All On-Track Equipment Operators:** Rail access in avalanche territory closed to all personnel and equipment.

**Train Crews:** Same as Level 4.

## Item 87, Trackside Warning Detectors

Train speed through detector must be 8 MPH or greater otherwise the detector will give an error message. If train will be at less than 8 MPH through a detector and given an error message then follow applicable flow chart.

**Trackside Warning Detector Flow Charts** Flow charts are specific to a trackside warning detector type and Key Train designation

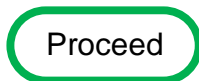
All detector flow charts start with a black oval:



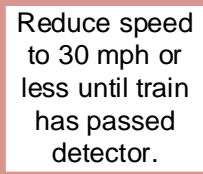
Decision points are yellow diamonds:



"Proceeds" are in green:



Instructions are red squares



If train receives an event message or a defect is detected ("Dragging Equipment", "Hot Wheel", "Hot Box", "Wide Load", "High Load", or "Excessive Alarms") or a Detector Error message ("Integrity Failure", "Detector Malfunction", incomplete message, or no message when one is expected, follow applicable pathway for instruction. **Do not stop for an inspection while within an active slide zone. If required to stop and inspect, pull clear of the slide zone prior to stopping and inspecting.**

If train has received an error message from a detector and is allowed per the flow chart to proceed but will not encounter a detector before it enters a terminal it must get a roll by inspection before it arrives the terminal or get a roll by inspection while entering the terminal.

For track side warning detectors (TWD) with replay capability, switch to the applicable TWD radio channel within 10 minutes of passing the TWD and dial the first three digits of the TWD location from the TWD & Type Channel column in applicable station page, e.g. dial 1 2 1 for MP 121.3.

### Inspection Procedures (when prompted by flow chart):

**Report to the dispatcher when a train is delayed due to the flow chart instructions. Provide the dispatcher with the detector message and expected car number.**

If setting out any passenger equipment, crew must consult with the Train Dispatcher first. If by cutting-out the control valve on a car can allow for free movement, the car may continue.

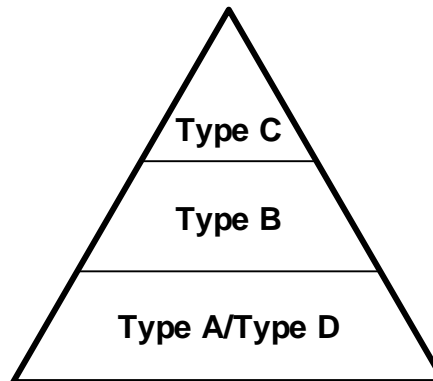
### Detector Hierarchy table:

Type A and D detectors monitor for dragging equipment only.

Type B monitor for heat (hot wheels or bearings) and dragging equipment.

Type C monitor for high/wide, heat, and for dragging equipment.

WILD Detectors only monitor for wheel impacts (flat spots). They are adjacent to other detectors, but are separate, and need to be addressed independently of the A/B/C/D detectors.



#### **Detector Glossary:**

**Bulk Commodity:** Train composed entirely of a single product, ie; coal, gravel, gas...etc. This DOES NOT include Intermodal Trains.

**Hot Wheel:** a car has an elevated temperature.

**Hot Bearing or Hot Box:** a car has a bearing of approximately 195° F or more.

**Excessive Alarms:** the detector has detected more than four of the same type of defect in train i.e. 5 or more hot wheels. Inspect from last given location to rear of train.

**High Load (H/L):** car that is 19'6" high or greater.

**Wide Load (W/L):** car that is 13'6" wide or greater.

**Error Message:** can include one or more of the following; "Integrity Failure", "Detector Malfunction", no message (only with type A, B, or C's), or incomplete message. The detector itself is malfunctioning and not accurately reading the train.

**Type A Detector:** only detects dragging equipment on top of the ties.

**Type B Detector:** can detect dragging equipment, hot bearings, and hot wheels. EXCEPTION: MP 18.4 and MP 261.2 do not detect for hot wheels.

**Type C Detector:** can detect dragging equipment, hot bearings, hot wheels, high loads, and wide loads. Use photo optic sensors to detect for H/W. These detector also protecting significant railroad structures: Tunnels on the Whittier/F Branch, Montana Creek Bridge, and the Nenana River Bridge.

**Type D Detector:** only detects dragging equipment on top of the ties. No message indicates no defects.

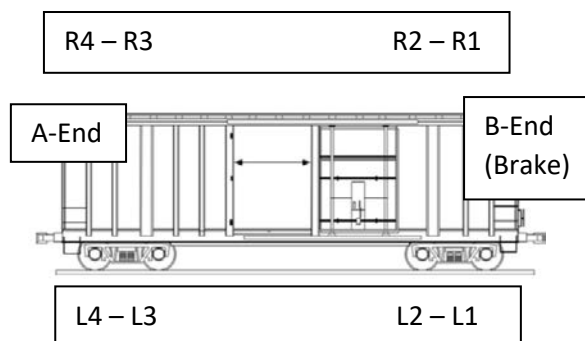
**Wheel Impact Detector Equipped (WILD):** The detector will transmit total high impact wheels.

**S/O:** Set Out

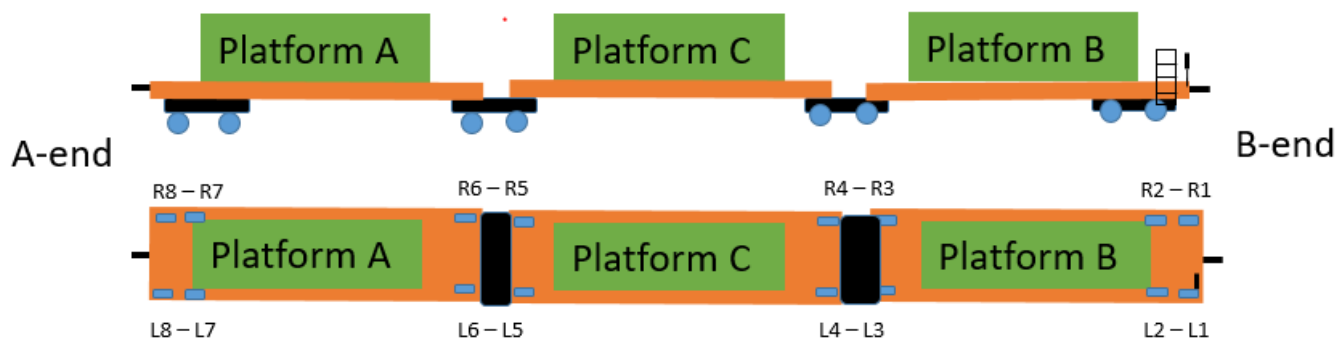
**C/O:** Cut Out

To determine the correct wheel numbers, follow these steps:

- 1). Face the Brake end of the car. This is the B-end.
- 2). Count the axles from the B-end. The closest axle is #1.
- 3) The wheels/journals are identified as Left or Right from the perspective of the B-end.



Articulated car:



Main TWD's		
MP	Channel	TWD Type
14.3	2	D
18.4	2	B
29.4	4	B
42.2	4	A
63	4	B
75	4	C
88.7	4	B
104.6	4	B
121.3	3	WILD
121.3	4	B
128	3	D
145.5	4	B
162.2	4	B
182.7	4	C
206.2	4	B
223.5	4	B
252	2	D

Main TWD's		
MP	Channel	TWD Type
258.5	2	D
261.2	4	B
270.4	2	D
276	2	D
281.1	4	B
286.5	2	D
290.5	4	A
294.8	2	D
320.21	4	B
322.51	2	D
328.1	2	D
332.9	2	D
339.7	2	D
345.1	2	D
348.2	4	B
348.9	2	D
350.4	4	A

Main TWD's		
MP	Channel	TWD Type
351.3	2	D
353.1	4	A
353.51	2	D
353.9	2	D
355	2	D
356.4	4	A
358	2	D
370.1	4	B
395.2	4	WILD
395.2	4	C
417.8	4	B
456.2	4	B

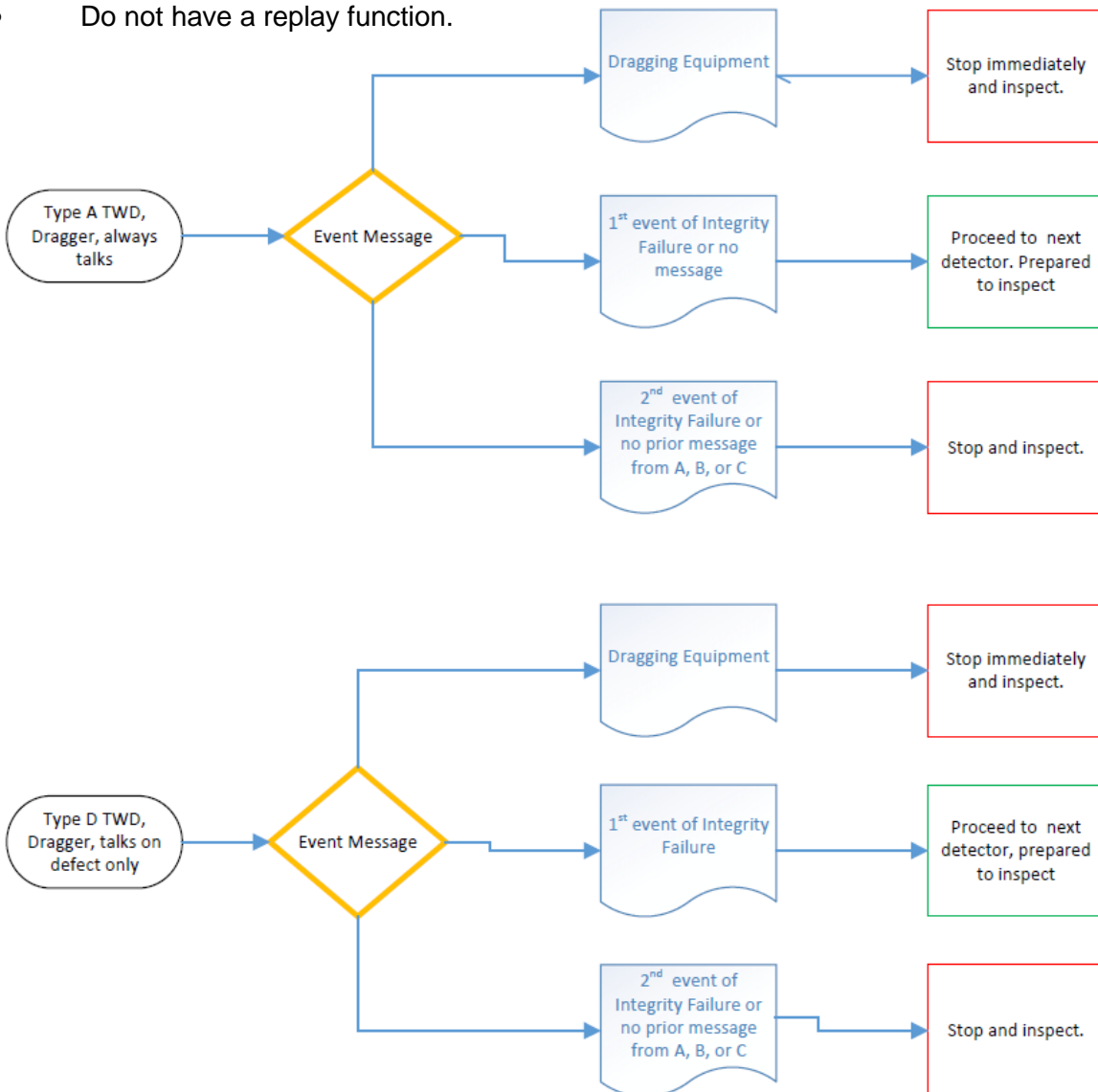
### 87.1.1 Wheel Impact Detector (WILD)

**Talk On Defect Only:** The detector announces only when it detects a Level 3 defect. The detector announces defects approximately 30-45 seconds after the entire train has passed the detector. The detector will transmit total high impact wheels detected for the entire train followed by each individual impact including the Level of each impact. Car initial and number (when available) along with total car count from head end of train including the locomotives will follow. For Level 3 impact defects, the specific wheel location on the indicated car may be announced.

For Level 3 impacts, stop the train and inspect indicated car for damaged wheel. If safe to move, limit train speed to 10 MPH and set indicated car out at next available location, unless a different location is specified by the train dispatcher. If the transmission is not clearly understood, reduce train speed to 10 MPH and contact the train dispatcher for defective equipment identification.

### 87.1.2 Dragging Equipment Detectors:

- Detect dragging equipment on top of ties.
- Do not give an axle location if a defect is detected.
- Do not have a replay function.





**Type A: Always give an after-train announcement:**

- “Dragging Equipment” if detected.
- “No Defects”
- Or an error message which can include one or all of the following “Integrity Failure”, “Detector Malfunction, no message, or an incomplete message.

**Type D: Only announce when a defect is detected for trains**

- “Dragging Equipment” or an
- Error message which can include one or all of the following “Integrity Failure”, “Detector Malfunction, or an incomplete message.

Will remain silent if there is no defect present within train.

On track equipment of 4 axles or less passes the detector a message of “Detector Working” should be heard. **If no message is broadcast: notify the Train Dispatcher.**

**Dragging Equipment Defect Procedure:**

**Inspect** train to announcing detector, then pull train through detector. Then inspect remainder of train. Report findings to Train Dispatcher.

**Defect found:** try to correct defect. If not able to correct defect, and the car(s) can still move, C/O (see ABTH 101.18 & 103.10) car brake. If car cannot be moved, S/O car(s) per the dispatcher instructions.

**87.1.3 Hot Bearing and High-Wide Detectors**

**Type B Detectors** Type B detectors detect for dragging equipment, hot wheel(s), and hot bearing(s).

- Detector will give an axle location of detected defect. Axle locations are given from the head end of the train (including the locomotives).
- Some will announce car initials and axle.
- Have a replay function.
- Always give an after-train announcement:
  - “Dragging Equipment”, “Hot Wheel, or “Hot Box” if detected.
  - “No Defects”
  - “Excessive Alarms”or
  - An error message which can include one or all of the following “Integrity Failure”, “Detector Malfunction, no message, or an incomplete message.

**Critical Structure Location:** TWDs that require an inspection for movement in a certain direction if given an error message. These TWDs are protecting bridges.

Detector	Direction	Asset	
223.5	NB	Talkeetna River Bridge	MP 227.1
281.1	NB	Hurricane Bridge	MP 284.2
417.8	SB	Tanana River Bridge	MP 413.7
348.2	SB	Riley Creek Bridge	MP 347.4

**Type C Detectors** Type C detectors detect for dragging equipment, hot wheel(s), hot bearing(s), High loads, and Wide loads. They use photo optic sensors to detect high or wide loads.

- Detector will give an axle location of detected defect. Axle locations are given from the head end of the train (including the locomotive axles). It will announce car initials and axle.
- Have a replay function.
- Always give an after-train announcement:
  - “Dragging Equipment”, “Hot wheel”, “Hot Box”, “High Load”, or “Wide Load” if detected.
  - “No Defects”
  - “Excessive Alarms”
  - Or an error message which can include one or all of the following “Integrity Failure”, “Detector Malfunction,” no message, or an incomplete message.

#### Key Trains:

If no defect found at a B or C detector, the train is restricted to 30 MPH until passes the next B or C detector. Once any defect is corrected OR car is C/O (see ABTH 101.18 & 103.10) and/or S/O, train may proceed.

#### Hot Bearing or Hot Wheel Defect Procedure:

**Inspect** indicated axle(s) and/or defects reported. If a hot bearing is found use a 200° F temperature stick or infrared thermometer on the alerted bearing. If stick melts on contact with journal sleeve (see figure 1 & figure 2), S/O car.

If no defect found at location(s) indicated, inspect both sides of train 12 axles forward, and 12 axles rearward, regardless of whether a defect is found before reaching the 12<sup>th</sup> axle.

If a hot wheel defect is detected, and inspection confirms elevated temperature on a car, and its determined handbrake is fully released and the retainer is in the exhaust position:

Inspect wheels thoroughly (flange, rim, tread, and plate) for discoloration, thermal cracking, flat spots or shelling. Car must be moved so the entire wheel can be inspected.

If train receives a defect message and either an error message or “excessive alarms”, inspect given locations and then inspect to the end of train.

**Defect found:** Try to correct defect (release hand brake/set and release/let wheel cool etc.). If unable to correct defect and the car(s) can still move C/O (see ABTH 101.18 & 103.10) car brake. If car cannot be moved (hot bearing/flat spot to large etc.) S/O car(s) per dispatcher instructions. Once the defect is corrected, C/O or S/O, the train may proceed. **If a car trips a second bearing or wheel detector it must be S/O.**

Bearing Journal



Roller Bearing, Figure 1.

Place temp stick here  
on bearing housing  
cover.

Bearing Journal

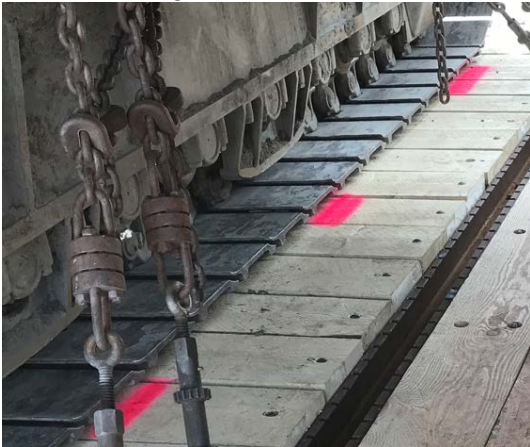


Bearing, Figure 2.

### High-wide Defect Procedure:

**Inspect load.** If load is shifted set it out, and if present observe registration marks to determine if load is shifted.

Good markings



Shift from original placement:



No inspection required for defects detected within locomotive consist, passenger trains, or bulk commodity trains (coal/gravel).

If train receives a defect message and either an error message or “excessive alarms”, inspect given locations and then inspect to the end of train.

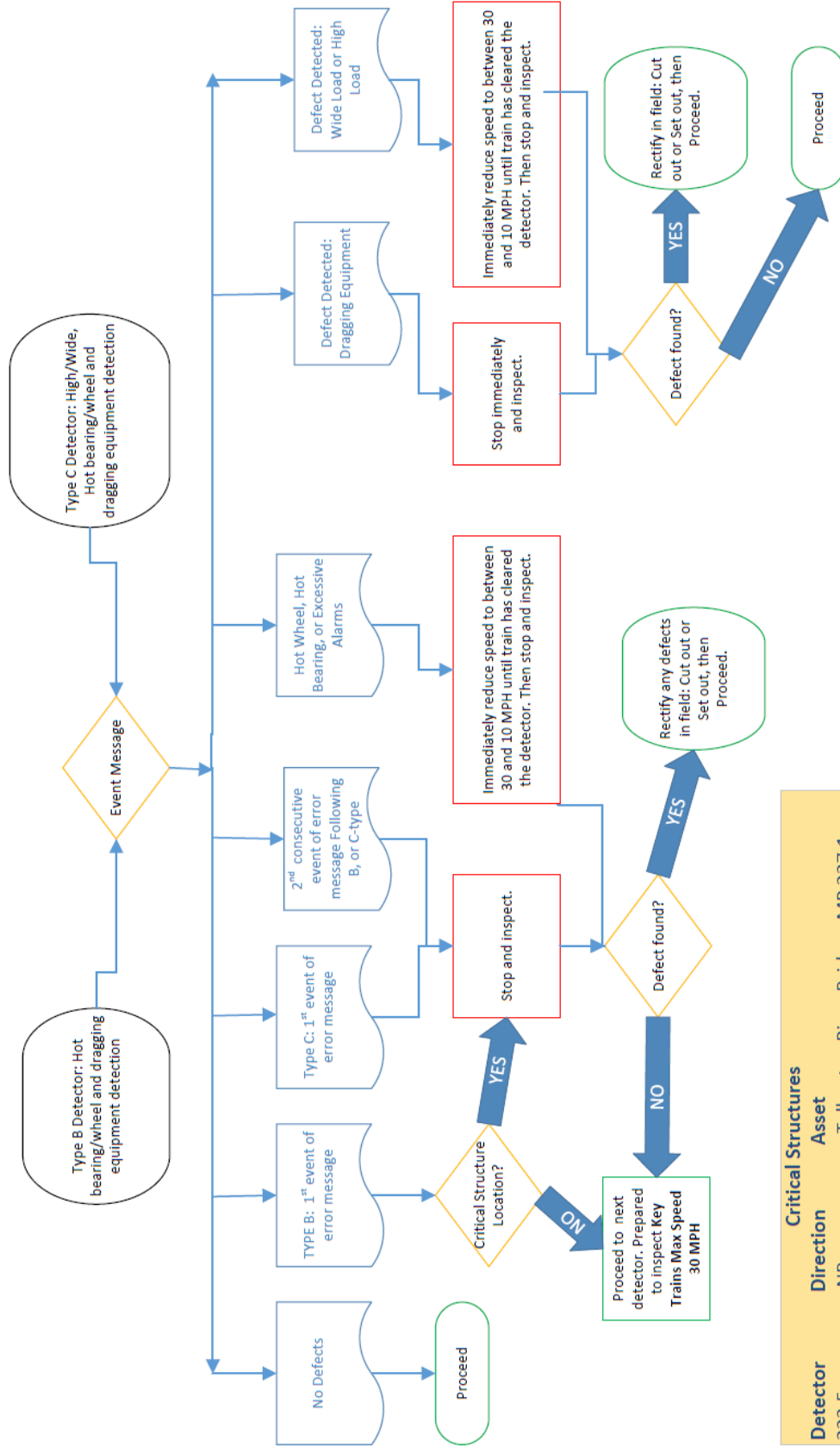
### Error Message Procedure:

**Inspect** entire train both sides, a roll by is appropriate not exceeding 5 mph. Report findings to Train Dispatcher.

Detector that indicates a defect in train and also gives an error message, inspect entire train.

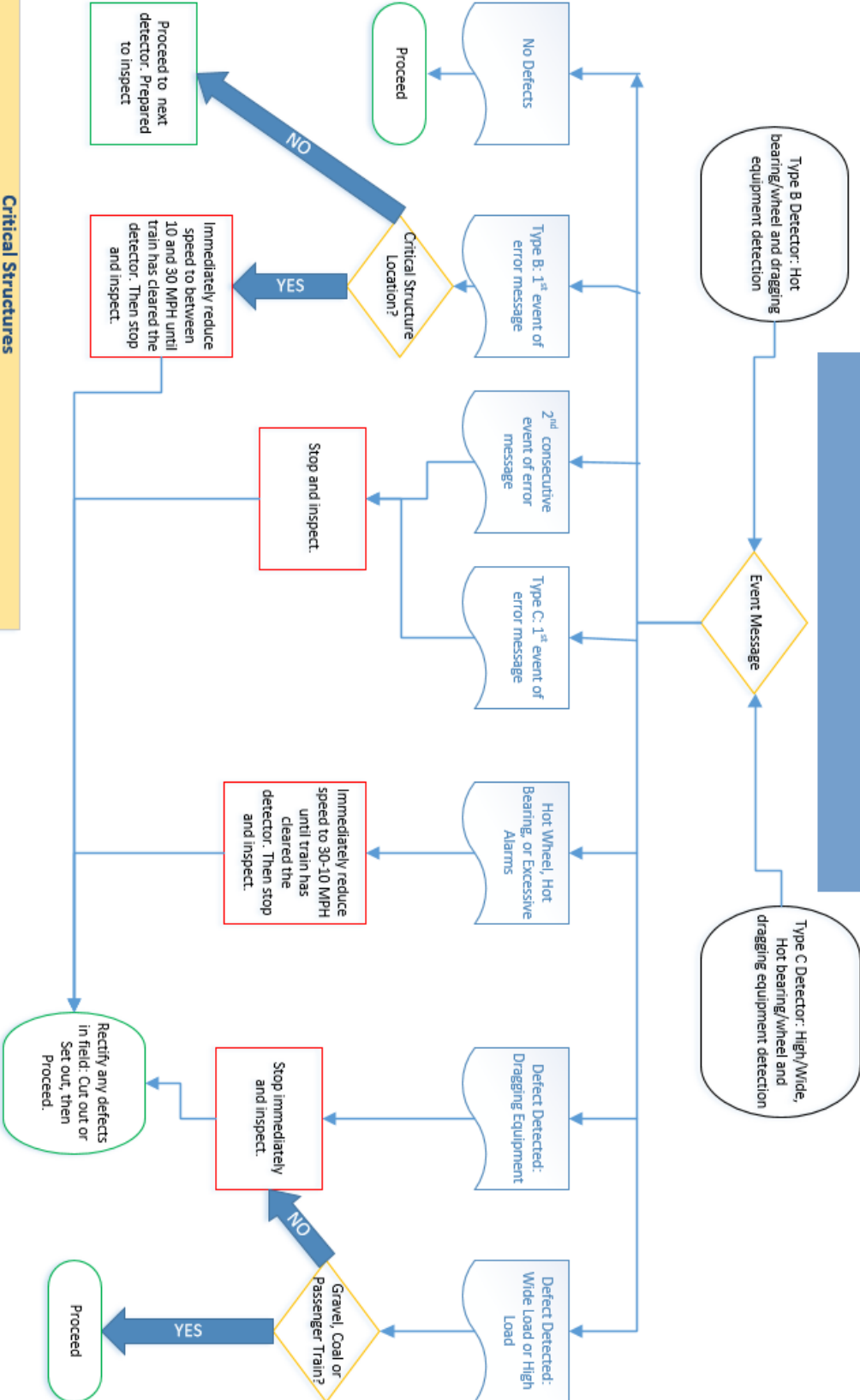
**Defect found:** try to correct defect. If not able to correct defect and the car(s) can still move S/O car(s) per dispatcher instructions

## B and C Detector Flow Chart for Trains that are designated as KEY Trains.



Critical Structures			
Detector	Direction	Asset	
223.5	NB	Talkeetna River Bridge	MP 227.1
281.1	NB	Hurricane Bridge	MP 284.2
417.8	SB	Tanana River Bridge	MP 413.7
348.2	SB	Riley Creek Bridge	MP 347.4

B and C Detector Flow Chart for Trains that are not designated as KEY Trains.





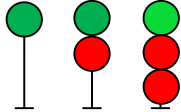

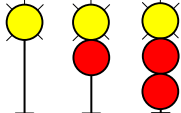
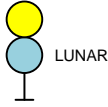
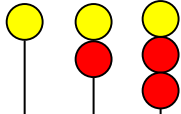
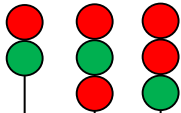
Critical Structures		
Detector	Direction	Asset
223.5	NB	Talkeetna River Bridge
281.1	NB	Hurricane Bridge
417.8	SB	Tanana River Bridge
348.2	SB	Riley Creek Bridge


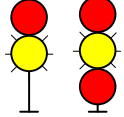
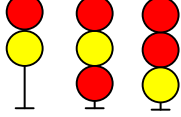
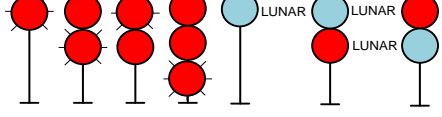
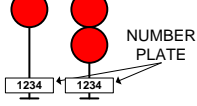
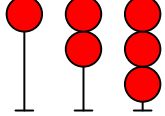


## Item 88, Signals

### GCOR 9.1 Signal Aspects and Indications

Aspects shown with a corona indicate the light will flash. Any signal aspect more favorable than Restricting may be qualified with a **D** marker on the signal mast to identify the signal as a Distant Signal.

Rule	Name	Indication	Aspect
9.1.1	DISTANT SIGNAL CLEAR	PROCEED. If delayed-in-block between this signal and next block signal, PROCEED prepared to stop at next signal.  Note: DOES NOT CONVEY BLOCK OR TRACK INFORMATION	
9.1.2	DISTANT SIGNAL APPROACH	PROCEED prepared to stop at next signal.  Note: DOES NOT CONVEY BLOCK OR TRACK INFORMATION	
9.1.3	CLEAR	PROCEED.	
9.1.4	APPROACH DIVERGING	PROCEED prepared to advance on diverging route at next signal not exceeding prescribed speed through turnout.	
9.1.6	APPROACH MEDIUM	PROCEED prepared to pass next signal not exceeding 30 MPH.	
9.1.7	APPROACH RESTRICTING	PROCEED prepared to pass next signal at Restricted Speed. Trains exceeding 30 MPH must immediately reduce to that speed.	
9.1.8	APPROACH	PROCEED prepared to stop at next signal. Trains exceeding 30 MPH must immediately reduce to that speed.	
9.1.9	DIVERGING CLEAR	PROCEED on diverging route not exceeding prescribed speed through turnout.	

9.1.10	DIVERGING APPROACH DIVERGING	PROCEED on diverging route not exceeding prescribed speed through turnout prepared to advance on diverging route at next signal not exceeding prescribed speed through turnout.	
9.1.11	DIVERGING APPROACH MEDIUM	PROCEED on diverging route not exceeding prescribed speed through turnout prepared to pass next signal not exceeding 30 MPH.	
9.1.12	DIVERGING APPROACH	PROCEED on diverging route not exceeding prescribed speed through turnout prepared to stop at next signal. Trains exceeding 30 MPH must immediately reduce to that speed.	
9.1.13	RESTRICTING	PROCEED at Restricted Speed.	
9.1.14	RESTRICTED PROCEED	PROCEED at Restricted Speed. Trains may pass this signal at Restricted Speed without stopping.	
9.1.15	STOP	STOP.	

## Item 89, GCOR Changes

GCOR Eighth Edition (2020) is adopted with the following changes:

### GCOR 1.3.2 General Orders

**ADD:** Crew members are required to carry a copy of the General Orders while on duty. General Orders can be found at <https://insidetrack.akrr.com/References/Job-Aids-Reference/All-Operations-Job-AidsReferences/Timetable-General-Orders>

### GCOR 1.3.3 Circulars, Instructions, and Notices

**ADD:** Employees are required to read the Rule of the Week, those publications may be found on bulletin boards at their on-duty location. In lieu of a bulletin board, or if the bulletin board at the on-duty location has not been updated, the Rule of the Week is posted on the ARRC website. The Rule of the Week can be found at <https://insidetrack.akrr.com/Resources/Safety/Safety-Messages-Metrics/Rules-of-the-Week>

### GCOR 1.12: Weapons

**ADD:** Crew members that have current training (biannual) in the use of the company issued firearm are authorized to checkout for use only on wildlife wounded or suffering caught within rail equipment.

### GCOR 1.30.1 (ADD Rule) Riding Passenger Train:

A minimum of two crew members (excluding students) must be in the cab of the controlling locomotive on moving passenger trains to ensure compliance with maximum speed and other restrictions.

### GCOR 1.33 Inspection of Freight Cars:

Cars to be checked for: **ADD:** -Kinked air hoses

### GCOR 1.36, Excessive Dimension and Excess Weight Loads:

**CHANGED to Read:** 1.36, Excessive Dimension and **Excess Weight** Loads

Place excessive dimension loads on or near the head end of trains. Instructions will be issued to trains handling excessive dimension and **excessive weight** loads. If no instructions have been issued regarding handling the car, the conductor will immediately notify the Train Dispatcher.

Crew members handling excessive dimension equipment must ensure that the equipment will clear nearby objects, including equipment on adjacent tracks. If the train cannot reach a point with enough clearance, crew members must make sure protection is provided against movements on adjacent tracks.

### GCOR 1.37 Open Top Loads:

**CHANGE:** third bullet by deleting “engine” and replace with: Occupied Locomotive

**GCOR 1.41 Engines Coupled to Occupied Passenger Cars:** Delete rule, not used on the Alaska Railroad.

**GCOR 1.42 Trains Detoured:** Delete rule, not used on the Alaska Railroad.

### GCOR 1.47 C All Crew Members’ Responsibilities:

**Change Item 2:** Second sentence: As soon as signals become visible or audible, crew members must communicate clearly to each other the name and indication of signals affecting their train.

**ADD Item 4:** Sterile Cab: A Sterile Cab exists during the following critical safety sensitive times:

- Copying mandatory directives.
- Within 2 miles from checked box 9 (protect against open switch).



- Within 2 miles from the end of the train's authority.
- Within 2 miles from and traversing a Form B.
- Within 2 miles from a form X.
- Within slide zones in effect.
- While operating on a signal that requires the train to stop at next signal, except when actively switching.
- While operating on a signal that requires the train to pass the next signal at restricted speed, except when actively switching.
- While operating at restricted speed, except when actively switching.

During a Sterile Cab condition, an environment must be created in the controlling compartment that focuses exclusively on controlling the train and compliance with the rules. The following restrictions must be met:

- The communication in the controlling cab is restricted to immediate responsibilities for safe train operations and compliance of the rule(s).
- Radio communication must be limited to the train's immediate movement and complying with the rules.
- If proper action is not being taken, crewmembers must remind each other of the Sterile Cab condition.

#### **GCOR 1.48 Time:**

Compare time with the ARRC Intranet → T & E page → GPS Time Check → Time Check.

#### **GCOR 2.7 Monitoring Radio Transmissions:**

**ADD:** If crews are to utilize another channel, a job briefing must be held with the Train Dispatcher to select a channel that can be monitored by the Dispatch office.

#### **GCOR 2.14 Transmission of Mandatory Directives:**

##### **Change last bullet to read:**

- Before a mandatory directive is acted upon, the engineer must have a written copy and each crew member must brief and understand it.

#### **GCOR 2.14.1 Verbally Transmitted and Repeating Mandatory Directives:**

**Change first bullet to read:** State and spell single digit numbers by number and digit, except for identifying the box number in the Mandatory Directive Authority Form.

#### **GCOR 2.21 Electronic Devices:**

**Remove** this language from section B second paragraph: ...provided train is stopped...

##### **Personal Electronic Devices**

**Insert** this language, following the second paragraph:

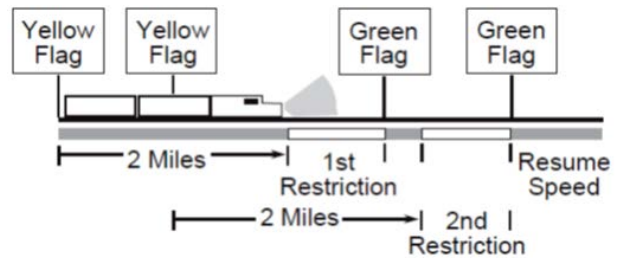
A railroad operating employee may use a personal cell phone for data receipt and transmission (for example: text or email) in breakrooms when:

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

#### GCOR 5.4.5 Display of Green Flag:

##### Second bullet, changed to read:

- Place a green flag at the end of each speed restriction.



#### 5.4.7 Display of Red Flag

**Change to read:** A red flag is displayed where trains must stop. A train moving at a speed that requires stopping in half the range of vision must stop before passing the red flag.

##### A. Restriction Is In Effect

When approaching a red flag specified by track bulletin, track warrant, or general order, the train must stop short of the red flag and not proceed unless the employee in charge gives instructions, including the milepost location of the red flag. A crew member must attempt to contact the employee in charge to avoid delay, giving the location of the red flag and the track being used. If instructions to proceed are received before the train stops, the train may pass the red flag without stopping.

##### B. Restriction Is Not In Effect

When a red flag is displayed and no restriction is in effect as specified by track warrant, track bulletin, or general order, the train must stop immediately, consistent with good train handling. A crew member must attempt to contact the employee in charge to avoid delay, giving the location of the red flag and the track being used.

When instructions are received from the employee in charge, instructions must include speed and distance. This speed must not be exceeded until the rear of the train has passed the specified distance from the red flag, unless otherwise instructed by the employee in charge. If unable to contact employee in charge, notify the train dispatcher or control operator of the delay.

##### C. Displayed Between Rails

When a red flag is displayed between the rails of a track, the train must stop and not proceed until the flag has been removed by an employee of the class that placed it.

#### GCOR 5.8.1 Ringing Engine Bell:

**4th bullet: Change** “engine” to “controlling engine.”

##### ADD:

- While passing passenger stations.
- While switching in shop areas.

#### GCOR 5.8.2(7) Sounding Whistle

**Change** “engine” to “controlling engine.”

**GCOR 5.9.6 Displaying Oscillating White Headlight:** Delete rule, not used on the Alaska Railroad.

**GCOR 5.9.7 Display Oscillating or Flashing Red Light:** Delete rule, not used on the Alaska Railroad.

### **GCOR 6.5 Shoving Movements**

**Change** first paragraph to read: Rolling equipment shall not be shoved or pushed until the locomotive engineer participating in the move has been briefed by the employee who will direct the move. The job briefing shall include:

- Identification of the employee directing the movement,
- The means of communication, and
- How point protection will be provided.

Employee must be in position, provide visual protection of the equipment being shoved and must not engage in unrelated tasks while providing protection. Unless relieved from visual protection, it is prohibited for the employee protecting the shove to turn their back to the move. The employee must be actively watching the end of the equipment.

**GCOR 6.5.1 Remote Control Movements:** Delete rule, not used on the Alaska Railroad.

### **GCOR 6.5.2 (ADD Rule) Shoving Flange-ways:**

When making shoving movements, be aware of any debris or precipitation that may interrupt the function of the flange-way. If the car on the point is empty, first clear the flange-way with a broom or pick or with a locomotive prior to making the shove.

**GCOR 6.13 Yard Limits:** Delete rule, not used on the Alaska Railroad.

**GCOR 6.14 Restricted Limits:** Delete rule, not used on the Alaska Railroad.

**GCOR 6.15 Block Register Territory:** Delete rule, not used on the Alaska Railroad.

**GCOR 6.16 Approaching Railroad Crossings, Drawbridges, and End of Multiple Main Tracks:** Delete rule, not used on the Alaska Railroad.

**GCOR 6.21.3 Track Obstruction / Unusual Conditions (New Rule Application):** When advised by the Train Dispatcher of Firefighters in the area, proceed through the limits looking out for stop signals and signaling bell in accordance with GCOR 5.8.2 Sounding Whistle (8).

### **GCOR 6.21.4 (ADD Rule) Slide Zones and Avalanche Areas:**

Slide zones are identified in the station page of each subdivision. Permanently active slide zones are identified in **BOLD**. A track bulletin form "S" will be issued, advising which temporary slide zones are in effect. On active slide zones, speed of train must not exceed 15 MPH. This restriction is only applicable to the portion of the slide zone where visibility is restricted. This restriction ends when the leading end of the train reaches the end of slide zone sign, or no obstructions can be seen to the end of slide zone sign.

Only the on-duty Avalanche Forecaster or District 1 Roadmaster can permit a train to proceed through a downed avalanche.

**GCOR 6.23: Inspection of cars and units ADD:** A walking inspection of train is required on all Key Trains, whenever significant slack action is experienced or when air is not immediately restored. Inspection ensures that all wheels are properly positioned on the rail and the marker is in place on the rear car. If physical characteristics prevent a walking inspection, train may be moved no faster than 5 MPH. If excessive power is required to start movement, or maintain movement, train must be stopped immediately and inspected.

**GCOR 6.24 Movement on Double Track:** Delete rule, not used on the Alaska Railroad.

**GCOR 6.25 Movement Against the Current of Traffic:** Delete rule, not used on the Alaska Railroad.

**GCOR 6.28.1 Sidings of Assigned Direction:** Delete rule, not used on the Alaska Railroad.

**GCOR 6.30 Receiving or Discharging Passengers:**

**Add** the following to paragraph A, Passenger Crew Responsibilities:

Before allowing passengers to board or disembark, the conductor must contact the engineer to ensure that the brakes are set and the air pressure is equalized. The engineer will confirm the train is stationary, and will remain stationary, by sounding whistle signal 5.8.2 (2). Only after receiving this signal may the conductor begin boarding or discharging passengers.

**6.32.1 Providing Warning Over Road Crossings**

**Change rule to read:** An employee must be on the ground at the crossing to provide warning until crossing is occupied when shoving equipment (including non-controlling locomotives), kicking cars, or performing a gravity switch move over highway/pathway - rail grade crossings. Movement must only be made as directed by the employee providing warning at the crossing.

Within a yard, this only applies to crossings open to:

- Unrestricted public access.  
Or
- Persons other than railroad employees performing normal duties.

Warning is not required when crossing is equipped with:

- Gates that are in the fully lowered position.  
Or
- Flashing lights or passive warning devices (cross-bucks, stop signs, etc.) when it is clearly seen that no traffic is approaching or stopped at the crossing. Leading end of shoving movement must not exceed 15 MPH over crossings.

**GCOR 6.32.2 Automatic Warning Devices:**

**ADD:** F. When advised by the Train Dispatcher, the automatic warning devices are repaired or returned to service this restriction no longer applies.

G. Trains or equipment must not cause unnecessary activation of AWDs. If necessary to stop near a highway crossing, stop must be outside of the island circuit, approximately 100 feet on either side of the crossing. This will allow the signal to reset after approximately 18 seconds. Once the train begins to move again, the crossing must not be occupied until the crossing signal system has had sufficient time to reactivate and provide warning to highway traffic, and, if equipped, the crossing gates are fully lowered.

A white flashing light on the track side of the crossing bungalow will activate during electrical power outages. If this light is observed, sound whistle in compliance with Rule 5.8.2 (7), and notify the Train Dispatcher.

#### **New Rule: 6.32.7 Manually Operated Warning Devices**

Manually Operated Crossings are identified in the Timetable. Crossings equipped with a manually operated warning device must be manually activated before movement fouls the crossing, the movement must not foul the crossing until the warning devices have been operating long enough to provide warning and the gates, if equipped, are fully lowered. If warning devices are malfunctioning report to train dispatcher or proper authority by the first available means of communication. Do not occupy crossing until after a crew member is on the ground at the crossing to warn highway traffic, proceed over the crossing as directed by that crew member.

#### **GCOR 7.3 Additional Switching Precautions**

**Change rule to read:** The following equipment must not be unnecessarily switched or couplings made so as to damage the equipment or load: • Passenger or outfit cars. • Intermodal or TOFC cars. • Cabooses. • Multi-level loads. • Open top loads subject to shifting. • Geometry test cars

**GCOR 7.7 Kicking or Dropping Cars:** Delete rule, not used on the Alaska Railroad.

**GCOR 7.7.1 Gravity Switch Moves:** Delete rule, not used on the Alaska Railroad.

#### **GCOR 7.9 Switching Passenger or Occupied Outfit Cars**

**Change title and rule: 7.9 Switching Passenger, Occupied Outfit, or Geometry Test Cars**

Before switching passenger equipment, occupied outfit, or geometry test cars:

- Couple the air hoses.
- Fully charge the brake system.
- Use the automatic brake valve when switching.

When coupling these cars:

- Stop the movement approximately 50 feet before the coupling is made.
- Have an employee on the ground direct the coupling.
- Ensure couplers are fully compressed and stretched to ensure that knuckles are locked before making:
  - Air connections.
  - Steam connections.
  - Electrical connections.

#### **GCOR 7.12 Movements Into Spur Tracks**

**Change first bullet to read:** • Stop movement 150 feet from the end of the track, or prior to coupling to standing equipment that is within 100 feet from the end of track. Crewmembers must verify equipment is properly secured and can be coupled to and moved safely.

**GCOR 7.12.1 (ADD Rule) Passenger Train Movements into Spur Tracks:**

When spotting passenger equipment for loading or unloading in spur tracks, a transportation employee on the leading end of the movement other than the engineer at the controls will be providing cars counts to the controlling engineer to the end of the track. Locations where this procedure includes, but is not limited to: Ted Stevens International Airport, Seward, and Whittier Princess Track.

**GCOR 7.13 Protection of Employees in Bowl Tracks:** Delete rule, not used on the Alaska Railroad.

**GCOR 8.2 Switches:**

**ADD:** On auxiliary track, switches with red/green aspects (other than DTMF Switches) must be left lined in the normal (green) position after use; switches with yellow/green aspects may be left lined in either position after use.

**GCOR 8.3 Main Track Switches:**

**ADD:** Employees who use a switch or change the alignment of a switch on controlled track in non-signaled territory must comply with these instructions:

- Trains will release the authority to a section of controlled track containing a switch that was handled as soon as possible, reporting switch information to the Train Dispatcher.
- Any time authority is released, information about switches handled within the authority limits must be reported to the Train Dispatcher even if such information has already been given.

**New Rule: 8.3.1: Virtual Switch Indicator:**

VSI switches are designated by special instruction, and are marked in the field with VSI verbiage on the red switch stand target. Before operating a designated VSI switch, employees in the field must request and be granted permission to operate the switch by the train dispatcher.

**GCOR 8.10.1 (ADD Rule) DTMF Switch Point Indicator:**

- Green aspect indicates switch lined for normal movement.
- Yellow or red aspect indicates switch lined in reverse position.

Flashing or dark aspect indicates switch is in transition or will not line properly. Stop and inspect switch.

**GCOR 8.18 Variable Switches:** Delete rule, not used on the Alaska Railroad.

**GCOR 8.19.1 Radio Controlled Switches:****ADD: Dual Tone Multi-Frequency (DTMF) Switches**

Specific instructions will be found in Station Special Instructions. DTMF switch general instructions:

**A. Remote Control Operation:**

Sensors that detect track occupancy are located 120 feet in front of switch points, and at the clearance point. Prior to occupying the area between the sensors (presence detection loops), select radio channel and press (code for that switch) to change the switch alignment. Presence detection loops are marked with orange stakes. The switch cannot be remote controlled when the presence detection loop is occupied. Auto-restore function, if equipped, will engage after timer has run time for that location.

**B. Push Button Operation:**

The push button operation is similar to the remote control in that the presence detection loops will prevent the switch from throwing when a car or locomotive is on the loop. To operate the switch using the push button, remove the lock on the box marked PB and press the black button inside. Auto-restore function, if equipped, will engage after timer has run time for that location.

**C. Manual Operation:**

Switches with pump handles will have instructions on the pump box. Switches with hand lever operate per hand operated switch rules

**D. Maintenance:**

When necessary to perform maintenance on or around the switch points the maintenance box must be unlocked and the switch moved to the OFF position. This will prevent the switch from being thrown either remotely or by using the push button. With the maintenance switch in the off position, it is necessary to hand throw or manually pump the switch to the desired position

**GCOR 8.20 Derail Location and Position:**

**REPLACE, Entire Rule Changed to Read:** Employees in train, engine, and yard service must know the location of all fixed derails. A train or engine moving on or entering tracks where fixed derails are located must stop at least 100 feet away from any derail in derailing position. Movement must not continue until the derail is placed in the non-derailing position. However, the distance restriction will not apply in engine servicing areas. Do not make a movement over a derail in derailing position. Lock all derails equipped with a lock.

A. All derails identified as High-Risk Locations will have the derails in the derailing position except to permit movement. These High Risk areas are Whittier Slip, Whittier Tunnel, and Fairbanks SBS.

B. Derails that are used in conjunction with Rule 5.12 (Protection of Occupied Outfit Cars), Rule 5.13 (Blue Signal Protection of Workmen), or roadway worker protection must be in the derailing position only when their use is required for such protection. When their use is not required for protection, remove portable derails and lock fixed derails in non-derailing position with an effective locking device.

C. For all other derails not identified as High-risk or for Blue Signal, the normal position is in the non-derailing position except when equipment is left unattended in that track.

**GCOR 9.9 B CTC or Manual Interlocking Limits:**

**Change to the following:** Proceed prepared to stop at the next signal, not exceeding 30 MPH, until the next signal is visible and that signal displays a proceed indication. When operating in PTC territory with PTC cut in and active, a train may operate in accordance with the PTC display.

**GCOR 9.11 Movement from Signal Requiring Restricted Speed:**

**ADD:** If the signal is the last signal leaving CTC, movement at restricted speed is required to the distant signal governing movement from the opposite direction, as indicated by a sign reading "End Block."

**GCOR 9.12.4 ABS Territory:** Delete rule, not used on the Alaska Railroad.

**GCOR 9.14 Movement with the Current of Traffic:** Delete rule, not used on the Alaska Railroad.

**GCOR 9.14.1 Reporting Clear of a Track Having Current of Traffic:** Delete rule, not used on the Alaska Railroad.

**GCOR 9.15 Track Permits:** Delete rule, not used on the Alaska Railroad.

**GCOR 9.15.1 Issuing Track Permits:** Delete rule, not used on the Alaska Railroad.

**GCOR 9.15.2 Clearing Track Permits:** Delete rule, not used on the Alaska Railroad.

**GCOR 9.16 Stop and Proceed Indication:** Delete rule, not used on the Alaska Railroad.

**GCOR 9.17.1 Signal Protection in ABS by Lining Switch:** Delete rule, not used on the Alaska Railroad.

**GCOR 9.24 Call Lights:** Delete rule, not used on the Alaska Railroad.

**GCOR 10 Rules Applicable Centralized Traffic Control (CTC):** “All references to ‘Track and Time’ mean ‘Work Between’ within CTC.”

**GCOR 10.1.1 (ADD Rule) Single Light Engine Movements:**

Single Light engine operations must advise the Train Dispatcher of this condition before initiating movement in CTC.

Employees must be alert for insulating substances, such as oil, grease, sand, and rust on top of rail. These substances can insulate the tracks, possibly causing loss of shunt. Such conditions must be promptly reported to the Train Dispatcher.

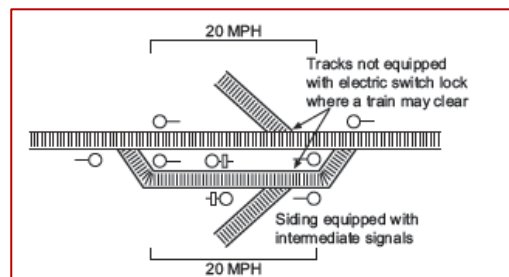
**GCOR 10.2 Clearing through Hand – Operated Switches:**

DELETE first bullet and graphic:

- Where the permanent maximum authorized speed does not exceed 20 MPH on the main track or controlled siding.

ADD:

- Where identified in TTSI as a track that allows clearing.



**GCOR Chapter 11 Rules Applicable in ACS, ATC, and ATS Territories:** Delete chapter, not used on the Alaska Railroad.

**GCOR Chapter 12 Rules Applicable Only in Automatic Train Stop System (ATS) Territory:** Delete chapter, not used on the Alaska Railroad.

**GCOR Chapter 13 Rules Applicable only in Automatic Cab Signal System (ACS) Territory:** Delete chapter, not used on the Alaska Railroad.

**GCOR 14.2 Designated Limits:** Delete rule, not used on the Alaska Railroad.

**GCOR 14.4.1 Radio Blocking:** Delete rule, not used on the Alaska Railroad.



### **GCOR 14.9 Copying Track Warrants:**

**Change first sentence to read:** The engineer must have a copy of the track warrant issued to their train, and each crew member must brief and understand it.

### **GCOR 15.1.1 Track Bulletins:**

In addition to Track Bulletin Forms A and B, the following track bulletin forms are authorized for use:

- Form C: High, wide or restricted car notification.
- Form F: Free-form text (such as Avalanche Hazard Rating, TTSI changes, etc.)
- Form O: Track out of service or track blocked with equipment.
- Form S: Slide Zone activation.
- Form X: Automatic Warning Devices malfunctioning.

### **GCOR 15.2 Protection by Track Bulletin Form B:**

**ADD:** C. Form B bulletins do not expire, with or without an expiration time, until voided.

**GCOR 15.3 Authorizing Movement against the Current of Traffic:** Delete rule, not used on the Alaska Railroad.

### **GCOR 15.12.1 Relief of Engineer or Conductor during Trip:**

**ADD:** Report to the Train Dispatcher arrival time before end of Hours of Service.

**GCOR Chapter 16 Rules Applicable Only in Direct Traffic Control (DTC) Limits:** Delete chapter, not used on the Alaska Railroad.

**GCOR Chapter 17 Rules Applicable Only in Automatic Train Control (ATC) Territory:** Delete chapter, not used on the Alaska Railroad.

### **GCOR 18 Rules Applicable Only In Positive Train Control (PTC) Territory**

#### **GCOR 18.2 Taking Charge of PTC Equipped Trains:**

**ADD:** 2...and prepared to provide enforcement.

#### **GCOR 18.5 PTC Trip Completion:**

**Changed to read:** At the completion of the trip, the conductor or engineer must log out of PTC unless authorized by proper authority or special instructions.

### **18.9 Use of Restricted Mode**

**Change Rule to Read:** Restricted Mode must be turned on before performing work events such as:

- Switching.
- Making pickups and/or setouts, etc.
- During work train operations (loading, unloading, etc.) while under the supervision of the MW employee in charge.

Restricted Mode must be turned off after work event has been completed and when moving between locations.

### **New Rule: 18.10 Working with Manned Helpers**

When a manned helper is added to the head end of a train in PTC territory and becomes the controlling locomotive, the PTC system on the helper must be initialized.

When a manned helper is added to the rear end of a train in PTC territory, the PTC system on the helper must be cut out. No changes are required to the PTC system on the controlling locomotive when a manned helper is added to the rear of a train.

### **New Rule: 18.12 Movements with Inoperative PTC System**

Immediately notify the train dispatcher when the controlling locomotive's PTC system becomes inoperative, except when operating where PTC is suspended by Mandatory Directive.

When the PTC System on the controlling locomotive becomes inoperative while enroute, the following speeds will govern:

In non-signaled territory: ·

- Trains transporting one or more loaded cars containing TIH/PIH ..... 30 MPH
- All other trains ..... 40 MPH

In signaled territory: ·

- Freight trains transporting one or more loaded cars containing TIH/PIH ..... 40 MPH ·
- Freight trains not transporting loaded cars containing TIH/PIH ..... 49 MPH ·
- Passenger trains ..... 59 MPH

Where the PTC system is the exclusive method for delivering authorities and restrictions, the train must not exceed Restricted Speed until advised by the train dispatcher that an absolute block has been established in advance of the train.

When a PTC device on the controlling locomotive becomes defective, the train may continue to the next forward location where repairs can be made.

### **New Rule: 18.13 Movements without PTC**

A train may operate in PTC territory without the controlling locomotive being PTC equipped or initialized, provided the movement is engaged in freight switching, transfer train service (including yard, local, and industrial), hostling, work train service, or the assembling or disassembling of trains, under all of the following conditions:

- a) The movement originates in a yard, or within 20 miles of a yard with the yard as the final destination point.
- b) The movement does not travel in excess of 20 miles from the point of entry onto PTC-equipped main track.
- c) The movement must not exceed Restricted Speed

### **Glossary:**

#### **Abbreviations**

#### **Add:**

PTC – Positive Train Control

PIH – Poisonous Inhalation Hazard

TIH – Toxic Inhalation Hazard

**Add:**

**All Tracks:** When used within a track bulletin line item, this indicates the bulletin applies to all controlled tracks within the specified limits.

**Auxiliary Track:** Other than controlled track.

**Controlled Track:** Main tracks, sidings, and specified portions of branch lines identified in the timetable and must not be occupied without authority or protection.

**Designated Siding:** A siding located in TWC territory where the siding is a separate TWC track that requires authority to occupy and in CTC territory it is a siding where a signal indication authorizes the siding's use. Locations of sidings are shown in the Timetable Station Column.

**Designated Switch:** A controlled track switch that may be authorized to be left in other than the normal position in TWC territory, or a dual control switch in CTC territory.

**Industry Track:** A track not located in a Car Shop Repair Area or an Engine Servicing Area, where cars and equipment may be moved on the tracks for loading or unloading by someone other than a railroad train service employee. The owner of the track has no bearing on this definition, which includes team and ramp tracks.

**Manned Helper** - Occupied locomotive(s) added to a train to assist movement.

**PTC Equipped** – A locomotive equipped with an operable PTC system.

**PTC Inoperative** - A condition when PTC is not providing enforcement while occupying designated PTC limits

**Qualified Employee:** An employee instructed and examined on the rules applicable to their duties.

**Restricted Mode** - A mode where the only function provided by PTC is enforcement of the maximum speed indicated on the PTC display.

**Switching Lead:** An auxiliary track from which two or more auxiliary tracks diverge, used for classification or storage of cars, assembling, or breaking up of trains.

This does not include tracks within an engine servicing area or car shop repair area.

**Tabular General Bulletin Order (TGBO):** A collection of bulletins, created and addressed specifically to each train, that contains **restrictions on** all subdivisions the train will traverse.

## **Item 90, Safety Book Changes**

### **Item 90.1 Transportation Safety Rules 2023**

No current changes

## **Item 91, Air Brake and Train Handling Changes**

### **Item 91.1 Air Brake and Train Handling Rules of the Alaska Railroad, 2023**

No Current changes

## Item 92, MOM Changes

### MOM Rule 5.4.8

**Change first paragraph to read:** Flags will be displayed only on the track affected. However, when yellow, yellow-red, or red flags are used for protection without a track bulletin, track warrant, or general order, these flags must be placed to protect all possible access to the restricted area.

### MOM Rule 8.3 Main Track Switches:

**Add the following:** Employees who use a switch or change the alignment of a switch on controlled track in non-sigaled territory must comply with these instructions:

- Unless requested by the Train Dispatcher, employee ID number need not be reported.
- Unless otherwise provided, trains will release the authority to a section of controlled track containing a switch that was handled as soon as possible, reporting switch information to the Train Dispatcher.
- Additionally, any time authority is released, information about switches handled within the authority limits must be reported to the Train Dispatcher even if such information has already been given. If no switches were handled in the authority, that information will be included in the briefing with the Train Dispatcher.

### New Rule: MOM 8.3.1: Virtual Switch Indicator:

VSI switches are designated by special instruction, and are marked in the field with VSI verbiage on the red switch stand target. Before operating a designated VSI switch, employees in the field must request and be granted permission to operate the switch by the train dispatcher

**MOM Rule 8.3.3 Switch Position Awareness Form Delete Rule** (Remove all references to SPAF form)

### MOM Rule 10.3.4 Track and Time Acknowledgement

**Change entire rule to read:** The employee requesting track and time will state:

- Name
- Occupation
- Exact location
- Train and/or other identification

Track and Time authority must be recorded and repeated to the Train Dispatcher.

Before acting on Track and Time authority:

- OK time must be received from Train Dispatcher and recorded on proper Mandatory Directive form.
- Job briefing must be held and authority must be understood by crewmembers.
- Track and Time authority must be marked void when released or made void and be retained until the end of that tour of duty unless otherwise instructed by the Train Dispatcher

### Chapter 21, Roadway Worker Protection

**Replace** all mentions of "EIC" or "Employee in Charge" throughout this chapter and the Roadway Worker Protection Manual with "RWIC" or "Roadway Worker in Charge."

### MOM Rule 21.2

**Change to read:** On-Track Safety training must be conducted annually once every calendar year for all roadway workers.

### **MOM Rule 22.1**

**Change to read:** Track Car Operator. In this chapter, the term track car operator (or operator) applies to the following employees:

- Operator of a track car
- Operator of equipment operating within 20 feet of a controlled track
- ~~Employee providing On-Track Safety (RWP) to a contractor.~~
- Employee providing On-Track Safety through the use of Exclusive Track Occupancy

### **MOM Rule 22.7 Having Proper Signal Equipment**

~~The track car operator must make sure the car has the proper flagging equipment readily available.~~ Each track car shall have flagging kit readily available if:

- The equipment is not part of a roadway workgroup  
Or
- The equipment is the lead or trailing piece of equipment in a roadway workgroup operating under the same authority/protection

### **MOM 22.8 Having a Copy of the Timetable**

Delete Rule

### **MOM Rule 22.10.2**

**Add:** The following Highway Crossing Signals may be activated by on-track equipment operators using Dual Tone Multi-Frequency (DTMF) radio codes on Alaska Railroad radio Zone 01, Channel 04:

- 100th Ave, MP 106.68
- 104th Ave, MP 106.42
- Rifle Range, MP 102.89
- Portage Glacier Rd, MP 62.85
- Birchwood Spur Rd, MP 136.25
- Abby Rd, MP 155.3
- Fairview Loop, MP 156.18

### **MOM Rule 22.14 Watching for Back up Train Movements Delete Rule**

### **Glossary Change:**

**Track Car Operator** – The term track car operator (or operator) applies to the following employees:

- Operator of a track car
- Operator of equipment within 20 feet of a controlled track
- ~~Roadway worker providing On-Track Safety (RWP) to a contractor.~~
- Employee providing On-Track Safety through the use of Exclusive Track Occupancy

## Item 93, Hazmat Changes

### Key Trains

#### Changed to Read:

A train or vehicle containing both the type and quantity of material listed below, specifically:

- 1.) Any loaded **tank car** containing a material poisonous by inhalation as defined in 49CFR171.8, including anhydrous ammonia (UN 1005) and ammonia solutions (UN 3318);
- 2.) Twenty (20) or more loaded **tank cars** or loaded intermodal portable tanks of any one, or any combination of hazardous materials, excluding boxcars, trailers, or containers carrying mixed loads.
- 3.) One (1) car load of Spent Nuclear Fuel (SNF) or high-level radioactive waste. A tank car containing residue of a hazardous material as defined in 49CFR171.8 shall not be considered a loaded car.

#### Instructions for Operating Key Trains:

The maximum authorized speed for Key Trains is 50 MPH, unless further restricted.

A Key Train will hold the main track, when practicable.

Only cars equipped with roller bearings will be allowed in a Key Train.

When a defect in a Key Train is reported by a wayside/trackside warning detector, and a visual inspection fails to confirm evidence of a defect, the train must not exceed 30 MPH until it has passed over the next wayside detector or is delivered to a terminal for a mechanical inspection. If the same cars sets off the next detector, or is found to be defective, it must be set out from the train.

Detector stops for H/W may continue at authorized track speed after inspection to confirm no shifted load.

#### ADD: Securement Requirements:

Before equipment may be left unattended on a main track or siding outside of an ARRC yard or terminal, such equipment shall be secured as follows:

- The controlling locomotive cab shall be locked and, unless protecting the locomotive from freezing, the reverser on the controlling locomotive cab shall be removed from the control stand.
- Except for equipment connected to a locomotive, prior to leaving equipment unattended the brake pipe shall be reduced to zero at a rate that is no less than a service rate reduction, and the brake pipe vented to atmosphere by leaving the angle cock in the open position on the first unit of the equipment left unattended. A train's air brakes shall not be depended upon to hold equipment standing unattended (including a locomotive, a car, or a train whether or not locomotive is attached).
- All hand brakes shall be fully applied on all locomotives in the lead consist of an unattended train.
- All locomotives shall be equipped with an operative external locking mechanism.

#### Communication Requirements:

Before equipment may be left unattended on a main track or siding outside of an ARRC yard or terminal, the employee(s) responsible for securing such equipment shall communicate to the Train Dispatcher:

- The number of handbrakes applied;
- The tonnage and length of the equipment;
- The grade and terrain features of the track;
- Any relevant weather conditions; and
- The type of equipment being secured



## Section VIII. Emergency Response

### Add 6: Initial Actions to be taken by the Train Crew or MOW Personnel for an oil spill incident while underway.

- Instruct the engineer to stop the train
- Assess the situation for crew & public safety
- Notify the Train Dispatcher and provide them with information about the incident

#### If fire or vapor clouds are visible:

- Take all shipping papers and train list with you
- Evacuate to ½ mile upwind and uphill of vapor cloud or fire
- Select a safe location accessible to arriving emergency response personnel

#### If NO fire or vapor clouds are apparent:

Extinguish all ignition sources, do not light fusee.

Check the train or shipping papers to determine what cars and cargoes are involved

Inspect the train to determine what if any cargoes have spilled

Approach from upwind if possible and from the uphill side

Look for any indication of fire, vapor clouds, smoke, leaks or unusual smells or noises. If you detect any of these conditions, **DO NOT GO NEAR THE CARS.**

If there is fuel or an oil product spill:

Do not approach the spill area until you have determined it is safe to do so

If it is safe, find and stop the source of the leak if possible

Remain at the scene until relieved by an incoming ARRC responder unless directed otherwise by the Train Dispatcher.

## **Item 94, Positive Train Control Instructions**

### **94.1 Designated Trains**

All trains operating on controlled track are designated PTC trains. The controlling locomotive on designated trains must have an operable PTC system unless authorized by rule, special instructions, or the train dispatcher.

#### **94.1.1 Passenger Trains on Non-Controlled Track**

Loaded passenger trains arriving or departing passenger stations must have an operable PTC system while operating on non-controlled track, unless otherwise instructed by rule, special instruction, or the train dispatcher.

### **94.2 Qualification**

Employees must be qualified to operate the locomotive PTC system in territory where PTC is in effect. Employees are qualified upon completion of classroom training and receiving a simulator based or on-the-job check ride.

### **94.3 PTC Job Safety Briefing**

Crews assigned to operate a PTC train must add the following to their job briefing before departure to verify the:

- PTC circuit breakers are on, cut out switches are in the cut in position, and there are no missing or broken seals
- Required departure test was completed
- Accuracy of the PTC consist data
- Correct location and direction
- Accuracy of PTC displayed mandatory directives
- Proper PTC system state

Crews must complete additional job briefings enroute in response to:

- System state changes (e.g., Active to Disengaged, Active to Cut Out, etc.)
- Warnings and prompts
- Display flags
- PTC being disabled (by crew action or enroute failure)

### **94.4 Departure Tests**

Crews preparing locomotives for an outbound train are required to perform a PTC departure test on the controlling locomotive and any other locomotive that will be used as controlling within the same trip.

At the initial terminal, road crews are only required to verify their lead locomotive had a departure test performed, unless otherwise instructed. Perform a departure test if any of the following apply:

- No prior successful departure test record is present.
- The prior successful departure test is older than 24 hours.
- A yellow "Depart" flag is present on the PTC display.

If the departure test fails, notify the Mechanical MOD as soon as possible.

## **94.5 Selecting Location and Entering Controlled Track**

Do not select a track location while the leading edge of the train is within a turnout if the correct turnout name cannot be determined.

After initializing, trains are permitted to operate at restricted speed in Disengaged State to move past a turnout before making a track selection or while attempting to transition to the Active State. Notify the train dispatcher if the PTC system does not enter the Active State after moving one train length on mapped track.

Prior to initiating movement on controlled track, ensure the PTC display shows the correct track the train is currently occupying. The five letter designations for uncontrolled track can be found in the Track Chart and are shown on fouling point signs where uncontrolled track connects to controlled track.

## **94.6 Train Consist Comparison**

Prior to departure and whenever a consist update is received, the information shown on the PTC display must be compared to the PTC Compare List for accuracy.

Consist does not have to be compared prior to departure if completed by another crew, record of the comparison is provided, and the PTC system was left initialized by the previous crew.

### **94.6.1 Consist Discrepancies**

Report consist discrepancies to the train dispatcher and ensure the PTC consist is updated prior to departure, subject to the following:

- Base train length is used by the PTC system and it is not considered a discrepancy when the PTC display length is within +/- 25 feet of the train list.
- DP locomotive position does not have to be corrected unless off by more than +/- 10 lines.
- If trailing tonnage does not match, the heavier weight will be utilized for the PTC system unless otherwise directed by the train dispatcher.

### **94.6.2 Consist Changes**

Consist changes must be reported to the train dispatcher who will send the updated consist data to the locomotive PTC system.

If an unrequested PTC consist update is received, the crew must not accept the consist and contact the train dispatcher for instructions.

### **94.6.3 Equipment Speed Restriction**

Notify the train dispatcher if handling equipment, (e.g., key train, locomotive crane, spreader) with a maximum speed restriction in Special Instructions.

### **94.6.4 Mixed Freight and Passenger**

Trains with a mixed consist of freight and passenger equipment must operate with the train type as freight in the PTC display consist details.

## **94.7 Mandatory Directive Comparison & Verification**

Crews must compare the mandatory directives on the PTC display with those in their possession that have limits inside PTC territory and are on the train's entire scheduled or planned route, in accordance with the instructions below.

If the train's route is unknown, assume all bulletins in all PTC subdivisions are on the route for purposes of these instructions.

Track bulletins Form C and Form F without mile post limits in the bulletin header must be verified as being present on the PTC display but the details are not required to be compared.

#### **94.7.1 Comparison Required**

After initialization and before departing, crew members must complete a comparison of each applicable mandatory directive number and details in their possession with those on the PTC display. This is only required once per trip unless initializing:

- A different locomotive.
- With a new TGBO number.
- After the locomotive PTC system was power-cycled.

#### **94.7.2 Verification Required**

When initializing and a full comparison is not required by 94.7.1 above, crews must verify all applicable mandatory directive numbers are present on the PTC display but are not required to compare the details. In addition, this procedure also applies when:

- Taking control of a PTC train that must be initialized and a comparison of the mandatory directives was completed by another crew using the same TGBO and record of that comparison is provided.
- Re-initializing after an unexpected transition from the Active State.

#### **94.7.3 Comparison/Verification Not Required**

When taking control of a PTC train and the locomotive PTC system was left initialized by the previous crew, comparison/verification of mandatory directives on the PTC display prior to departure is not required if record of the full comparison using the same TGBO is provided.

#### **94.7.4 Mandatory Directive Issued**

Whenever a mandatory directive is issued, the number and details must be compared to the PTC display version as soon as the read and repeat process is complete.

### **94.8 PTC Trip Report**

Employees must complete a PTC trip report for each Train ID operated within their tour of duty. The trip report is used to document TGBO/consist comparison and events such as braking enforcement, en route failure, or the system not functioning as expected.

Conductors are responsible to ensure completion of the trip report and will submit it with their time slip unless relieved en route. If relieved en route (scheduled or unscheduled, the relieving conductor is responsible to submit the report with their time slip.

If a TGBO and consist comparison is completed for an outbound train, the employee(s) who performs the comparison will record the details on this form and leave it on the lead locomotive.

### **94.9 PTC Brake Enforcement**

If a train is stopped by a PTC initiated brake enforcement, notify the train dispatcher as soon as possible. The train must remain stopped until notified by the train dispatcher or other proper authority.

The following details must be recorded on the PTC Trip Report:

- Approximate time, date and location of the braking enforcement.
- Reason for the PTC enforcement, if known.

### **94.10 PTC En Route Failures**

Except as provided in 94.10.1 below, trains must stop consistent with good train handling and notify the train dispatcher in the event of an en route failure of the PTC system. If a train is operating under conditions where stopping could compromise safety, the train may continue moving in accordance with the speeds in GCOR 18.12 until such time that a safe stop can be made.

#### **94.10.1 En Route Failure Unknown Position/Direction**

If the PTC system state unexpectedly transitions from Active to Disengaged due to unknown position or direction, the train dispatcher must be notified as soon as possible but the train may continue moving in the Disengaged State not to exceed 15 MPH while attempting to correct the condition. Note the issue on the PTC trip report regardless of whether or not the condition is corrected.

#### **94.10.2 En Route Failure Unknown Position/Direction**

If the PTC system state unexpectedly transitions from Active to Disengaged due to unknown position or direction (not due to synchronization error and/or COMM flag), the train dispatcher must be notified as soon as possible but the train may continue moving in the Disengaged State at the applicable GCOR 18.12 Movements with Inoperable PTC System speed while attempting to correct the condition.

When transitioning from Disengaged to Active in CTC territory, restricted speed will be enforced in the current block. If the condition has not been corrected within 5 miles from where the PTC system went to Disengaged, the train must stop and notify the train dispatcher.

#### **94.11 Operative Brake Percentage**

PTC trains must maintain a minimum of 95% operative brakes. If the amount of operative brakes becomes less than 95%, a soft cut out of the PTC system must be performed. Notify the train dispatcher of this condition as soon as possible and proceed under the en route failure maximum speeds in GCOR 18.12.

#### **94.12 Short Train PTC Operations**

For PTC operations, a short train is defined as 15 railcars or less.

The PTC system assumes locomotive brake cylinder pressure is not actuated during PTC braking enforcement for short trains. Engineers operating short trains must exercise good judgement and safe train handling techniques to manage locomotive brake cylinder pressure during a PTC braking enforcement in order to prevent the overrun of a target.

#### **94.13 Relieved En Route**

Crews relieved en route will leave the PTC system initialized unless instructed by the train dispatcher or other proper authority.

**Abbreviations:** PTC — Positive Train Control

#### **Glossary of Terms**

**En Route Failure** — The locomotive PTC system fails to initialize or degrades unexpectedly from the Active State or exhibits other behavior that creates an unsafe condition.

**Operable PTC System** — Locomotive PTC system initialized and in the Active State.

**Soft Cut Out** — Placing the PTC system in the Cut Out State using the cut out function on the PTC display.

## **Item 95, Job Briefings**

### **STEP 1: Plan the job briefing:**

#### **A. Develop your own work plan by:**

1. Reviewing work or task to be accomplished.
2. Checking job location and work area: Know the condition of gates, switches, derails, track conditions, close clearances, short spurs, bad footing, and that cars are secure before coupling.
3. Breaking the work or task down into step-by- step procedure.
4. Determining tool, equipment, and material requirements.
5. Determining what safety rules or procedures are applicable. Consider close clearances and gates, etc.

#### **B. Consider existing and potential hazards that might be involved as a result of:**

1. Job and weather conditions.
2. The nature of the work to be done. Consider switching, spotting, picking up or setting out.
3. The job locations, consider whether yard, industry, or road.
4. The tools, equipment, and materials used.
5. Equipment to be worked on.
6. Traffic conditions and visibility. Consider people, vehicles, time of day, other jobs in track area, and obstructions.
7. Time of day. Consider whether 03:00-05:00 (alertness), or end of shift ("go home" moves).
8. Safety or personal protective equipment required.

#### **C. Consider how work assignments will be made:**

1. Group assignments: remember that the whole crew is a team and will be held jointly responsible.
2. Individual assignments: (who checks for what?)
3. Engineers need to check with crew about the status of the gates, switches, derails, hand brakes, how much room, how many cars?
4. Abilities, experiences of individuals. Make sure that each crew member is able to do his/her assignment (experience, mental state, and physical condition).

### **STEP 2: Conduct the Job Briefing:**

#### **A. Explain work or task to involved employees:**

1. What is to be done?
2. Why is it to be done?
3. When it is to be done.
4. Where is it to be done?
5. How it is to be done. Everyone needs to understand what signals will be used. If radio, know the condition of the radio and verify the correct radio channel.
6. Who is to do it? Who will open and secure gates, line switches, line derails, make the cut or joint, protect the move?
7. What safety precautions are necessary? All crew members must know that the following are done: Gates open, switches lined, derails lined, cars not attached to the facility (plates and hose removed), and cars secured before coupling, sufficient room has been verified for the move. Identify close

clearances and bad footing. Engineers must not move until direction and distance has been received and will stop after moving 1/2 the distance given unless further instructions are received.

B. Discuss existing or potential hazards and ways to eliminate or protect against them.

C. Make definite work assignments.

1. Make sure employees understand assignments
2. Ask questions of the "how" and "why" type.

D. Issue all instructions clearly and concisely, check to see that they are understood.

### **STEP 3: Job brief for special conditions:**

A. Complex jobs:

1. Brief only a portion of the job.
2. Give additional briefing as the job progresses.

B. Change in job conditions - when it becomes necessary to change plans and procedures as the job progresses, brief employees on these changes (i.e. weather conditions change).

C. If special tools, material equipment, or methods are to be used, make sure employees know how to proceed safely.

### **STEP 4: Follow up: Supervisor:**

It is important that frequent checks be made as the work progresses to ensure that:

- A. Your plans are being followed and correct work methods used.
- B. Each individual is carrying out the assignment responsibilities
- C. Any hidden hazards have been identified and action initiated to eliminate or what precautions are required.

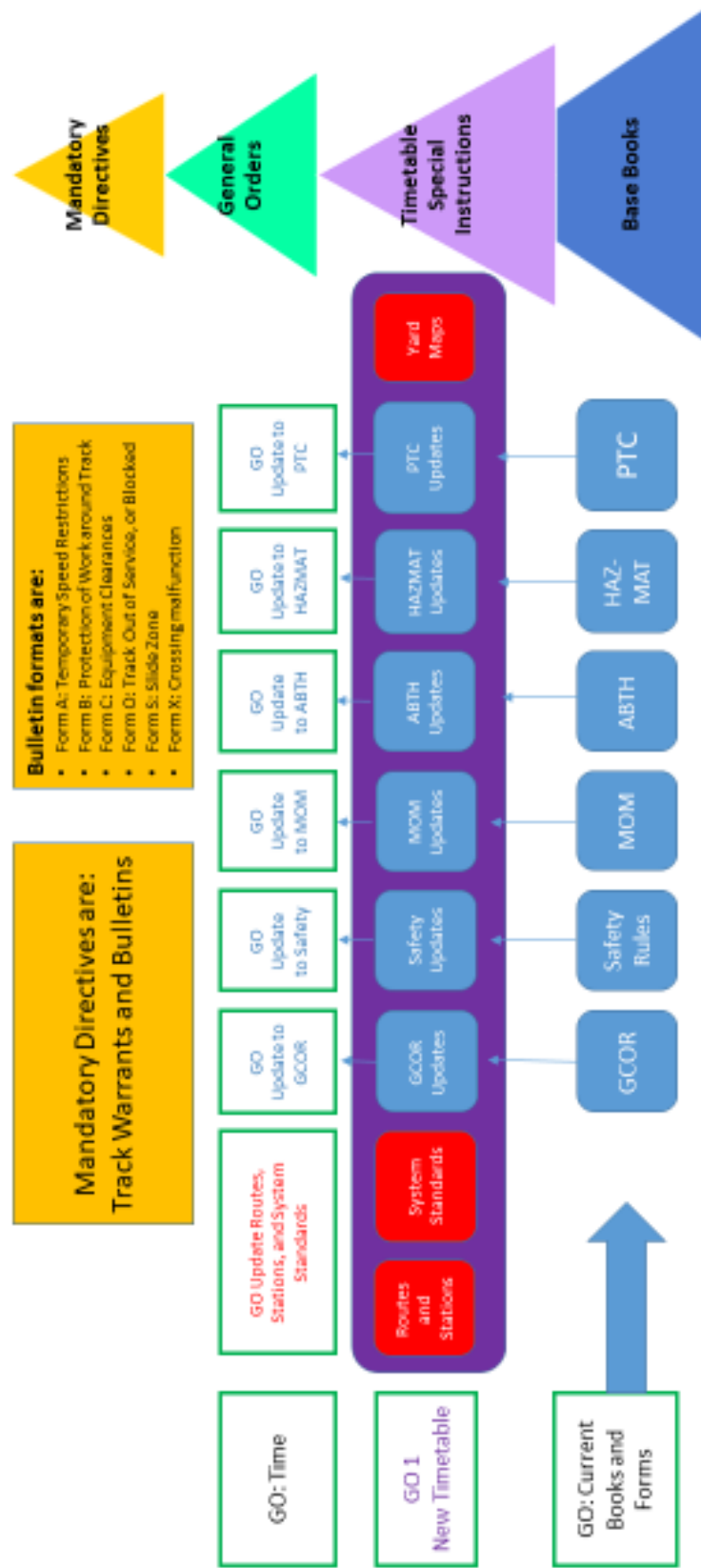
### **STEP 5: Individual Responsibility:**

All employees are responsible to see that the work plan is carried out according to the job briefing or modification when conditions change.

### **STEP 6: Debriefing:**

- A. Review what went right.
- B. Discuss any unexpected occurrences.
- C. Discuss ideas for improvement.
- D. Recognize good performance.

# Hierarchy of the Rules





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## **Appendix**

Speed Table					
Time per Mile		MPH	Time per Mile		MPH
Min	Sec		Min	Sec	
1	00	60	2	30	24
1	01	59	2	40	22.5
1	05	55.4	2	50	21.2
1	06	55	3	00	20
1	10	51.4	3	05	19.5
1	12	50	3	10	18.9
1	14	49	3	15	18.5
1	15	48	3	20	17.6
1	25	42.4	3	30	17.1
1	30	40	3	35	16.7
1	35	37.9	3	40	16.4
1	40	36	3	45	16
1	43	35	4	00	15
1	45	34.3	6	00	10
1	50	31.3	7	30	8
2	00	30	8	34	7
2	05	28.8	10	00	6
2	10	27.7	12	00	5
2	15	26.7	15	00	4
2	20	25.7			
2	24	25			
2	25	24.8			

Measured Mile Locations	
MP 4 – 5	MP 306 – 307
MP 37 – 38	MP 344 – 345
MP 57 – 58	MP 356 – 357
MP 76 – 77	MP 368 – 369
MP 91 – 92	MP 391 – 392
MP 120 – 121	MP 406 – 407
MP 143 – 144	MP 418 – 419
MP 192 – 193	MP 433 – 434
MP 219 – 220	MP 453 – 454
MP 230 – 231	MP 464 – 465
MP 272 – 273	
MP 290 – 291	MP F8 – F9

Signal Displayed	Is it in writing?	Is a Red Flag displayed?	Action to take two miles beyond signal	When does restriction end?
Yellow/Red	Yes	Yes	STOP, proceed through limits as directed by EIC.	Follow direction of EIC until entire train is clear of the limits specified in the Form B.
Yellow/Red	Yes	No	STOP, proceed through limits as directed by EIC.	Follow direction of EIC until entire train is clear of the limits specified in the Form B.
Yellow/Red	No	Yes	STOP, proceed through limits as directed by EIC.	Follow direction of EIC until entire train is clear of the limits specified in the Form B.
Yellow/Red	No	No	Attempt to contact EIC, if unable to do so proceed at restricted speed.	Follow direction of EIC until entire train is clear of the limits specified in the Form B.  If EIC cannot be reached, proceed at Restricted Speed until leading end of train has traveled 4 miles from the yellow/red AND the Train Dispatcher confirms no Form B in effect for that location.
Yellow	Yes	N/A	Proceed at speed prescribed in Form A.	Rear of train passes end of restriction.
Yellow	No	N/A	Proceed not to exceed 10 MPH.	Rear of train passes green flag OR rear of train has traveled 4 miles from the yellow flag and the Train Dispatcher confirms no speed restriction in effect at that location.

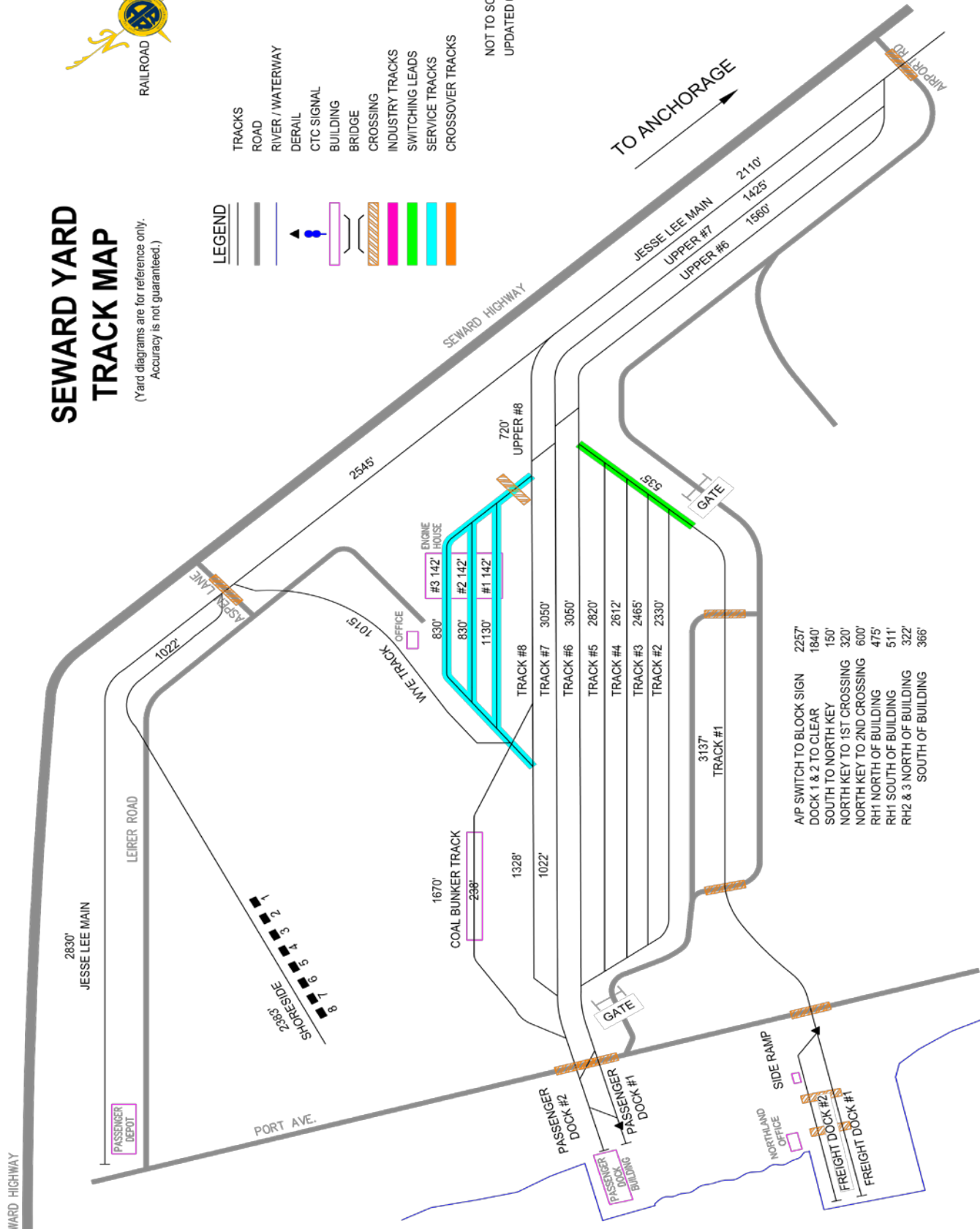
# SEWARD YARD TRACK MAP

(Yard diagrams are for reference only.  
Accuracy is not guaranteed.)



- LEGEND**
- TRACKS
  - ROAD
  - RIVER / WATERWAY
  - DERAIL
  - CTC SIGNAL
  - BUILDING
  - BRIDGE
  - CROSSING
  - INDUSTRY TRACKS
  - SWITCHING LEADS
  - SERVICE TRACKS
  - CROSSOVER TRACKS

NOT TO SCALE  
UPDATED 03/2020



- AIP SWITCH TO BLOCK SIGN 2257'
- DOCK 1 & 2 TO CLEAR 1840'
- SOUTH TO NORTH KEY 150'
- NORTH KEY TO 1ST CROSSING 320'
- NORTH KEY TO 2ND CROSSING 600'
- RH1 NORTH OF BUILDING 475'
- RH2 & 3 NORTH OF BUILDING 511'
- SOUTH OF BUILDING 322'
- SOUTH OF BUILDING 366'



# WHITTIER YARD TRACK MAP

(Yard diagrams are for reference only.  
Accuracy is not guaranteed.)

TRACK #	LENGTH
MAIN-LOWER MAIN NO CUTS	3700
SHUTTLE RUNAROUND POCKET	500
PASS-PASS SWITCH TO BUMPER	1200
FULL SPOT DOCK 4 (fouls both ends)	1050
AREA 53	1250
BAY TK (North to south clearance)	2050
MOUNTAIN TK (spotted for unloading)	2060

SMALL BOAT HARBOR

CRUISE SHIP DOCK

PROCESS  
TERMINAL

TO TUNNEL

PRINCESS

TO ANCHORAGE

SHUTTLE: 1770 ft.

SHUTTLE RUNAROUND

TRACK 3: 2512 ft.

TRACK 2: 2800 ft.

TRACK 1: 3050 ft.

MAIN: 2400 ft.

BAY: 2340 ft.

MOUNTAIN: 2575 ft.

OIL TRACK

WHITTIER STREET

GLACIER AVENUE

EASTERN AVENUE

LEGEND

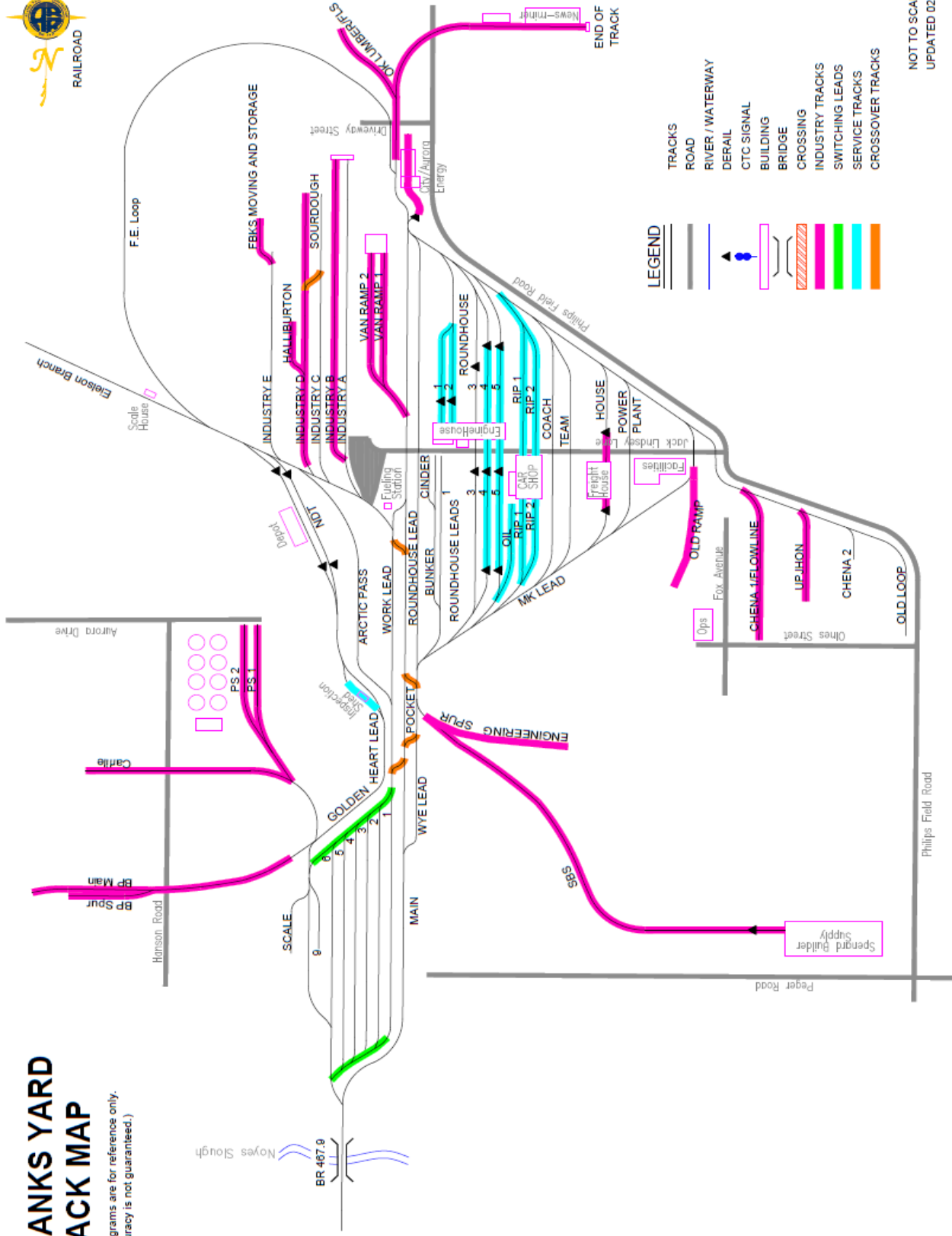
- TRACKS
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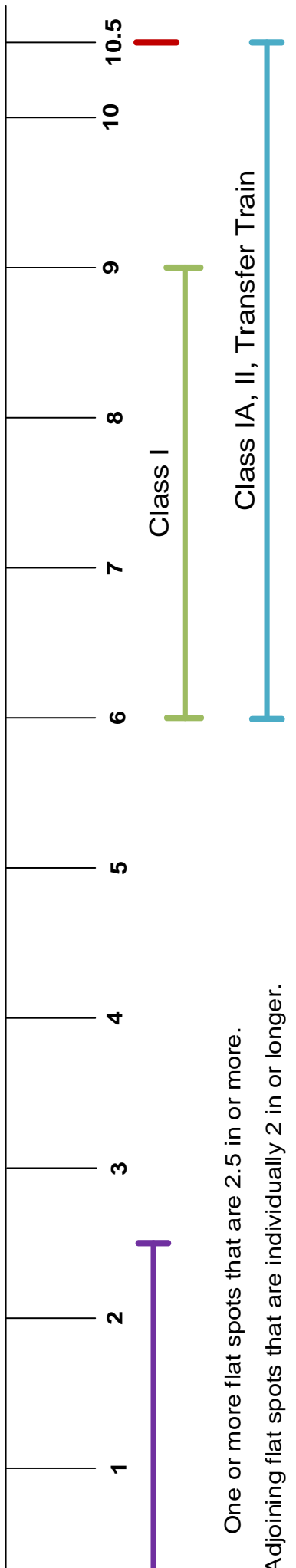
NOT TO SCALE  
UPDATED 03/2020



# FAIRBANKS YARD TRACK MAP

(Yard diagrams are for reference only.  
Accuracy is not guaranteed.)





**Passenger Train Checklist:**  
**Door Briefing Complete** \_\_\_\_\_

**Medical Kit Location** \_\_\_\_\_

**Medically Trained Passengers:**

\_\_\_\_\_ **Car** \_\_\_\_\_

\_\_\_\_\_ **Car** \_\_\_\_\_

\_\_\_\_\_ **Car** \_\_\_\_\_

\_\_\_\_\_ **Car** \_\_\_\_\_

**Handbrakes** \_\_\_\_\_

**Air Test** \_\_\_\_\_

**Crew Count** \_\_\_\_\_

**Passenger Count** \_\_\_\_\_

**Total Onboard** \_\_\_\_\_