## Alaska Railroad

## Corporation

# Effective <br> 00:01 Sunday <br> April 20, 2003 

Alaska Daylight Time
Patrick Gamble
President and Chief Executive Officer
Matthew G. Glynn
Vice President and Chief Operating Officer
Robert B. Stout
Vice President and Chief Mechanical Officer
Patrick C. Shake
Superintendent, Transportation
Steven W. Pfeiffer
Assistant Vice President, Maintenance

| Signal <br> Displayed | Is it in Writing? | Is Stop in the Stop Column? * | Is a <br> Red <br> Flag <br> Displa- <br> yed | Action to <br> Take Two <br> Miles <br> Beyond <br> Signal | Type of Flag at End of Restricted Area if Displayed |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1) Yellow/Red | Yes | Yes | Yes | STOP (do not proceed without permission from EIC) | No Flag Displayed |
| 2) Yellow/Red | Yes | No | Yes | STOP (proceed only as in no.1) | No Flag Displayed |
| 3) Yellow/Red | Yes | Yes | No | STOP (proceed only as in no.1) | No Flag Displayed |
| 4) Yellow/Red | No | N/A | Yes | STOP (proceed only as in no.1) | No Flag Displayed |
| 5) Yellow/Red | No | N/A | No | Proceed thru limits at restricted speed | No Flag Displayed -or- as directed by EIC -or- leading end of train has traveled 4 miles from yellow/red and dispatcher confirms no <br> Form B in effect |
| 6) Yellow | Yes | N/A | N/A | Proceed at speed as prescribed | Green Flag -or- rear car has cleared the restriction |
| 7) Yellow | No | N/A | N/A | 10 MPH | Green Flag -or- rear car has traveled 4 miles from the yellow flag and dispr confirms no restriction |
| *On ARRC all Form B Territories will be protected by STOP in the STOP column |  |  |  |  |  |

## Timetable No. 131

To make an emergency phone call from a radio telephone to FIRE/POLICE/MEDICAL, enter * 1, wait for dial tone, enter 9 for commercial dial tone, then enter 911 . You will be connected to Emergency Services in Anchorage. It may take up to ten seconds for the operator to answer - DO NOT HANG UP.

> Dispatcher, Maintenance of Way, and Yard (except channel 6) radio frequencies all have 911 emergency call-in capability. Once activated, the radio will answer back with a short tone, followed by three beeps, then another short tone, acknowledging the call has been received by the dispatcher radio system.

The telephone number for the ARRC Command Center (when activated) is 265-2581.

## A Single Second

It takes a minute to write a safety rule.
It takes an hour to hold a safety meeting.
It takes a week to plan a good safety program.
It takes a month to put that program into operation.
It takes a year to win a safety award.
It takes a lifetime to make a safe worker.
But it takes only a second to destroy it all - with one accident.
Take the time now to work safe and help your fellow
employees to be safe.

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## STATION COLUMN ABBREVIATIONS

The following letters, when placed in the columns provided in Timetable, indicate:

```
B - General Orders C - Call Up Station J - Junction
L - Loop Track X - Yard Limits P - Telephone
W - Water Y - Wye Z - Track Scale
```

The grade profiles shown in this Timetable are an addition to the track chart and must not be used to determine the minimum number of hand brakes to apply to hold equipment on a grade.

It only takes a minute to prevent an accident, but it can take a lifetime to recover from one.

> Noise annoys, then destroys. Wear your hearing protection.

$$
\begin{aligned}
& \text { If you are aw are } \\
& \text { of it } \\
& \text { take care of it. }
\end{aligned}
$$

### 80.0 SEWARD SUBDIVISION

### 80.1 SEWARD SUBDIVISION



Seward Subdivision Special Instructions

### 80.1.1 METHOD OF OPERATION

| LOCATION | METHOD OF OPERATION |
| :--- | :--- |
| MP $\quad 2.90$ - MP 3.40 | YL |
| MP 3.40 - MP 113.00 | TWC |
| MP 113.00 - MP 113.85 | YL |
| MP 113.85 - MP 113.90 | CTC |
| MP 113.90 - MP 114.30 | YL |

### 80.1.2 MAXIMUM AUTHORIZED SPEEDS

Maximum Authorized
Speed Between:

In MPH For:
Frt Psgr
MP 2.90 and MP 3.40 (Yard Limit) ..... 20 ..... 20
MP 3.40 and MP 8.10 ..... 35 ..... 35
MP 8.10 and MP 20.45 ..... 25 ..... 25
MP 20.45 and MP 22.90 ..... 35 ..... 35
MP 22.90 and MP 23.40 ..... 25 ..... 25
MP 23.40 and MP 25.60 ..... 35 ..... 35
MP 25.60 and MP 29.50 ..... 25MP 29.50 and MP 29.55.................................................. 10 10 1010
MP 29.55 and MP 33.20 ..... 25 ..... 25
MP 33.20 and MP 40.50 ..... 35 ..... 40
MP 40.50 and MP 42.50 ..... 25 ..... 25
MP 42.50 and MP 44.55 ..... 20
MP 44.55 and MP 47.50 ..... 25
MP 47.50 and MP 53.00 ..... 15
MP 51.80 and MP 53.00 Northward ..... 10
MP 53.00 and MP 53.65 ..... 20
MP 53.65 and MP 63.80 ..... 49
MP 63.80 and MP 66.00 ..... 30
MP 66.00 and MP 66.80 ..... 25
MP 66.80 and MP 69.33 ..... 30
MP 69.33 and MP 69.50 ..... 25
MP 69.50 and MP 70.26 ..... 30
MP 70.26 and MP 70.45 ..... 25
MP 70.45 and MP 71.45 ..... 25 ..... 30
MP 71.45 and MP 73.00 ..... 25
MP 73.00 and MP 74.00 ..... 30
MP 74.00 and MP 83.85 ..... 35
MP 83.85 and MP 84.20 ..... 25
MP 84.20 and MP 85.00 ..... 30
MP 85.00 and MP 85.71 ..... 25
MP 85.71 and MP 89.50 ..... 30
MP 89.50 and MP 93.15 ..... 40
MP 93.15 and MP 93.85 ..... 35
MP 93.85 and MP 100.00 ..... 40
MP100.00 and MP 105.00 ..... 45
MP105.00 and MP 108.80 ..... 30
MP108.80 and MP 112.00 ..... 25
MP 112.00 and MP 113.00 ..... 20
MP 113.00 and MP 113.85 (Yard Limits) ..... 20
MP 113.85 and MP 113.90 ..... 20
MP 113.90 and MP 114.30 (Yard Limit) ..... 20
80.1.3 LOCATION OF OTHER TRACKS

| MP | Name | Switch <br> Location | Capacity <br> in feet |
| ---: | :--- | ---: | ---: |
| 24.40 | Phillips Spur.......................................... S |  |  |

110.20 Anchorage International Airport Branch/ South Leg Airport Wye ..... S
110.58 North Leg Airport Wye ..... N
110.60 SBSTruss537
113.90 South Yard Lead ..... S
80.1.4 SIDING SWITCH LOCATIONS
South North
SidingSwitch
Switch
Divide ..... 11.80 ..... 12.30
Crown Point ..... 24.40 ..... 25.20
Moose Pass ..... 29.10 ..... 29.40
Hunter ..... 39.20 ..... 40.20
Grandview ..... 44.80 ..... 45.20
Tunnel ..... 51.20
Spur
Spencer ..... 55.10 ..... 55.80
Portage ..... 63.80 ..... 64.35
Girdwood ..... 74.50 ..... 74.90
Brookman ..... 81.50 ..... 81.90
Indian ..... 88.30 ..... 89.30
Rainbow ..... 93.1093.26
Potter ..... 100.30 ..... 100.70
Turnagain ..... 105.80 ..... 108.20
Campbell ..... 109.10 ..... 110.70

### 80.1.5 MEASURED MILES

These mileposts are designated "measured miles" to check accuracy of locomotive speed indicators:

| MP | 5 to MP | 6 | MP 76 to MP 77 |
| :--- | ---: | ---: | :--- |
| MP | 38 to MP | 39 | MP 91 to MP 92 |
| MP 57 to MP | 58 | MP 101 to MP 102 |  |

Advance Yard Limit signs are also "measured miles."

### 80.2 EXCEPTED TRACK

## EXCEPTED TRACK: SEWARD SUBDIVISION

The track, or segments of track, listed below is designated as excepted track as provided in Operating Rule 6.12.

## DESCRIPTION

Spencer: Gravel Pit Tracks

### 80.3 CALL-UP STATIONS

Trains, as indicated, will call the applicable train dispatcher when the entire train has passed the last siding switch at the following locations:

Hunter All trains call district 1
Portage All trains call district 1

### 80.4 SEWARD

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Main track begins and ends at MP 2.9, Seward Subdivision. Movements over all tracks south of MP 2.9 will be made in compliance with Operating Rule 6.28.

## Do not park locomotive(s) with engine running by Alaska Votech Center.

## Do not exceed walking speed on locomotive and car servicing tracks.

Coach cleaning rack on south end of Round House Track 3 will not clear locomotive visors nor a person on side of equipment.

Freight trains should not be yarded in Track 8 and Upper 8 when it would interfere with a passenger train's ability to access 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.

Train crews are to ensure that no cars or equipment are left on Upper 8 track between Jesse Lee switch and the crossover switch.

Exception to GCOR Rule 8.3: Airport switch MP 2.95 may be left lined and locked in either position. Switch target will display red when lined for the airport.

Shoreside Track is out of service from Shoreside Petroleum to end of track.

Jesse Lee Track 2 is out of service.

## Seward Subdivision Special Instructions

### 80.5 DIVIDE

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

### 80.6 CROWN POINT

Use row B on Determining Number of Hand Brakesto Apply Table to determine number of hand brakes to be secured at this location.

Propane cars will be spotted at the unloading header located at north end of siding.

Close clearance at side ramp on siding.
The length of the siding south of the crossover switch is 2,253 feet. The length of the siding north of the crossover derail is 1,200 feet. The crossover main line switch is north of the crossover on the siding.

A portable derail is in place on the Phillips spur at Crown Point.
SD70MAC locomotives prohibited between clearance points at south and north ends of siding.

### 80.7 MOOSE PASS

Use row B on Determining Number of Hand Brakesto Apply Table to determine number of hand brakes to be secured at this location.

Close clearance at side ramps on both sides of siding ramp track and east of siding.
SD70MAC locomotives prohibited between clearance points at south and north ends of siding.

### 80.8 HUNTER

Use row B on Determining Number of Hand Brakesto Apply Table to determine number of hand brakes to be secured at this location.

Hunter wye out of service unless authorized to occupy track by engineering supervisor.

SD70MAC locomotives prohibited from the wye.

### 80.9 GRANDVIEW

Use row C on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Cars left at Grandview must have sufficient hand brakes set on each end of cut to safely secure cars. When necessary, rail clamps will be placed on downhill end of cars set out. Crews picking up cars must remove rail clamp. When rail clamps are not in use, they must be returned, chained, and secured by switch lock to switch stand.

Capacity of siding is 2,180 feet from south switch clearance point to derail on north end of siding.

### 80.10 DOUBLING GRANDVIEW HILL

All Southward trains exceeding 4,000 feet in length must double Grandview Hill, unless otherwise directed.

### 80.11 MP 50

Milepost 50 removed due to line change. The distance between MP 49 and MP 51 is approximately 7,241 feet.

### 80.12 TUNNEL

Use row D on Determining Number of Hand Brakesto Apply Table to determine number of hand brakes to be secured at this location.

When necessary, rail clamps will be placed on north end of cars set out. Crews picking up cars must remove rail clamp. When rail clamps are not in use, they must be returned, chained, and secured by switch lock to switch stand.

SD70MAC locomotives prohibited beyond clearance point of siding.

### 80.13 SPENCER

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

## Seward Subdivision Special Instructions

Spencer Pit Track MP 55.82 out of service unless authorized to occupy track by engineering supervisor.

Do not exceed walking speed on any tracks at Spencer Pit Track MP 55.82.

SD70MAC locomotives prohibited between clearance points at south and north ends of siding.

SD70MAC locomotives prohibited from clearance point to end of all pit tracks.

### 80.14 MP 62.8 SNOW FLEET TRACK

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited from clearance point to end of track.

### 80.15 PORTAGE

## Use row B on Determining Number of Hand Brakes to Apply Chart to determine number of hand brakes to be secured at this location.

Seward Subdivision Special Instructions govern Portage on the Seward Subdivision. Whittier Subdivision Special Instructions govern Portage on the Whittier Subdivision.

The normal position for the Portage junction switch, MP 64.3, is for the Seward Main Track and it must be lined and locked in that position, unless authorized by track warrant to leave switch in reverse position. The switch target is illuminated, and will indicate green when lined for movement on the Seward Subdivision, and will indicate red when lined for movement to Whittier Subdivision.

Side ramp track (Old Shuttle Track) is the designated siding.
Side ramp at siding is 65 feet long and is close clearance.
SD70MAC locomotives prohibited between south end of ramp and south clearance point of side ramp track.

### 80.16 GIRDWOOD

Use row B on Determining Number of Hand Brakes to Apply Chart to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited between clearance points at south and north ends of siding.

### 80.17 BROOKMAN

Use row B on Determining Number of Hand Brakes to Apply Chart to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited between clearance points at south and north ends of siding.

### 80.18 INDIAN

Use row A on Determining Number of Hand Brakes to Apply Chart to determine number of hand brakes to be secured at this location.

### 80.19 RAINBOW

Use row B on Determining Number of Hand Brakes to Apply Chart to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited between clearance point and end of track.

### 80.20 POTTER

Use row B on Determining Number of Hand Brakes to Apply Chart to determine number of hand brakes to be secured at this location.

Northward trains will contact the Terminal Superintendent's office for yarding instructions in Anchorage Yard. If unable to contact the Terminal Superintendent, contact the Train Dispatcher.

SD70MAC locomotives prohibited between clearance points at south and north ends of siding.

## Seward Subdivision Special Instructions

Anchorage Natural Gas access must not to be blocked with standing cars.

### 80.21 TURNAGAIN

Use row B on Determining Number of Hand Brakes to Apply Chart to determine number of hand brakes to be secured at this location.

Locomotives and equipment must not stop or be left standing with engine running between MP 107.7 and MP 108.2 from 22:00 until 06:00.

Southward movements over Anchorage Sand and Gravel track at Klatt Road will not activate automatic crossing signal until train or engine is within thirty (30) feet of crossing.

### 80.22 QAP MP 108.4

Use row B on Determining Number of Hand Brakes to Apply Chart to determine number of hand brakes to be secured at this location.

Do not exceed walking speed over dump pit.

### 80.23 CAMPBELL

Use row B on Determining Number of Hand Brakes to Apply Chart to determine number of hand brakes to be secured at this location.

### 80.24 CP 1139 (OVL)

CTC limits are in effect at CP 1139 (Switch MP 113.9).

### 80.25 ANCHORAGE

Anchorage Subdivision Special Instructions will govern Anchorage
Yard.
80.26 ANCHORAGE INTERNATIONAL AIRPORT BRANCH

| south $\downarrow$ Auxiliary Track |  |  |  | $\uparrow$ NORTH |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Call } \\ \text { Code } \end{gathered}$ | Capacity of siding | STATIONS | Mile Post | Meth. of Opr. | Detector Locations |
|  |  | End of Track | J 2.45 | 6 |  |
| 00 |  | Airport Branch Jct Jy | J 0.0 |  |  |

### 80.26.1 METHOD OF OPERATION

| LOCATION | METHOD |
| :--- | :--- |
| MP J 0.00 - MP J 2.45 | GCOR Rule 6.28 |

### 80.26.2 MAXIMUM AUTHORIZED SPEEDS

| Maximum Authorized | In MPH For: |  |
| :--- | ---: | ---: |
| Speed Between: | Frt | Psgr |
| MP J 0.00 and MP J 1.23 ................................................................ | 25 | 25 |
| MP J1.23 and MP J 2.45 | 15 |  |

### 80.26.3 LOCATION OF OTHER TRACKS

|  | Switch | Capacity |
| :---: | :---: | :---: |
| MP | Location | in Feet |

J 0.35 Anchorage School District ..... N ..... 970
J 1.60 Airport Runaround ..... Both ..... 744
J 2.33 Terminal Track ..... S ..... 520

## Seward Subdivision Special Instructions

### 80.26.4 AIRPORT BRANCH JUNCTION, MP J 0.0

The Airport Branch Junction/South Leg Airport Wye Switch, MP J 0.0/MP 110.2, is the beginning of the Anchorage International Airport Branch.

### 80.26.5 ANCHORAGE INTERNATIONAL AIRPORT TERMINAL, MP J 2.45

Close clearance at terminal platform located between end of Anchorage International Airport Branch and Terminal Track.

### 80.27 SEWARD SUBDIVISION GRADE PROFILE




### 81.0 WHITTIER SUBDIVISION

### 81.1 WHITTIER SUBDIVISION

| SOUTH | $\downarrow$ | Main Track |  | $\uparrow$ NORTH |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Call } \\ & \text { Code } \end{aligned}$ | Capacity of siding | STATIONS | Mile Post | Meth. of Opr. | Detector Locations |
| 04 |  | Portage Jxy | F 12.0 | YL |  |
|  | 2,340 | Bear Valley | F 5.5 | TWC |  |
| 03 |  | Whittier $\quad$ bwx | F 0.0 | CTC |  |

### 81.1.1 METHOD OF OPERATION

| LOCATION | METHOD OF OPERATION |
| :--- | :--- |
| MP F 0.0 - MP F 2.5 | YL |
| MP F 2.5 - MP F 5.2 | CTC |
| MP F 5.2 - MP F10.8 | TWC |
| MP F10.8 - MP F12.0 | YL |

### 81.1.2 MAXIMUM AUTHORIZED SPEEDS

| Maximum Authorized | In MPH For: |
| :--- | :--- |
| Speed Between: | Frt |

MP F 0.00 and MP F 1.30 (Yard Limit) ..... 10 ..... 10
MP F 1.30 and MP F 2.50 (Yard Limit) ..... 20
MP F 2.50 and MP F5.20 Northward ..... 20
MP F 2.50 and MP F5.20 Southward ..... 25
MP F5.20 and MP F 6.90 ..... 25
MP F 6.90 and MP F 10.80 ..... 49
MP F 10.80 and MP F 12.00 (Yard Limit) ..... 20

## Whittier Subdivision Special Instructions

### 81.1.3 LOCATION OF OTHER TRACKS

| MP Name |  | Switch Location | Capacity in feet |
| :---: | :---: | :---: | :---: |
| F 11.3 | New Yard Track 1 | ... Both | 4,240 |
| F 11.3 | New Yard Track 2 | ... Both | 3,960 |
| F 11.3 | New Yard Track 3 | ... Both | 3,785 |
| F 11.3 | New Yard Track 4 | ... Both | 3,585 |

### 81.1.4 SIDING SWITCH LOCATION

|  | North | South |
| :--- | :---: | :---: |
| Siding | Switch | Switch |
| Bear Valley .................................................... F5.3 | F5.7 |  |

### 81.1.5 MEASURED MILE

These mileposts are designated "measured miles" to check accuracy of locomotive speed indicators:

MP F 8 to MP F 9
Advance Yard Limit signs are also "measured miles."

### 81.2 LOCATION OF TUNNEL DOORS

| MP | Name |  |
| :--- | :--- | :--- |
| F | 2.54 | Whittier Tunnel - Door 1 |
| F | 5.18 | Whittier Tunnel - Door 2 |
| F | 5.73 | Portage Tunnel - Door 3 |
| F | 6.91 | Portage Tunnel - Door 4 |

### 81.3 EXCEPTED TRACK

The track, or segments of track, listed below is designated as excepted track as provided in Operating Rule 6.12.

## DESCRIPTION

Sawmill Track and Ramp Storage Spur, Whittier

### 81.4 WHITTIER

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Radio channel 5 (primary) or 6 (secondary) will be used during barge switching operation.

The U.S.Coast Guard Regulations require waterfront port facilities to be designated "NO SMOKING" areas where dangerous cargo is handled,stored,stowed,loaded, discharged, or transported.In accordance with these regulations, the ARRC Port of Whittier (the area from the Assistant Terminal Superintendent's office road crossing to the bay) is designated a 'NO SMOKING"'area. The only area within the port facility authorized as a smoking area is the Crowley Marine break shack.

When switching movements are being made over the slip at Whittier, the following procedures apply:

- Cars will not be placed on the slip unless ramp is at rest on barge.
- Brake pipe air must be cut in on all cars.
- Movement is to be controlled with independent air brakes only and automatic brakes are not to be used except in case of emergency.
- Engines used in switching service for barge operations will not be permitted on ramp while switching.
- Employees are prohibited from riding on outboard side of car while car is on outboard track of barge slip.
- All movements on and off rail barges will be made not exceeding 3 MPH , prepared to stop at any time.
- A safety stop will be made 1 car length prior to making any joints on the slip or barge.
- Bunching cars on barges is only to be done after a joint or a stop has been made.
- During loading and unloading of "break bulk" cargo, flat cars may be moved with unsecured loads.

All movements on and off barges will be made within designated slipangle limitations.

## Whittier Subdivision Special Instructions

The following car-handling limitations for movements on and off rail barges will apply (exclusive of handle):

1 locomotive -----------------------------------------------15 cars
2 or more locomotives ---------------------------------- 21 cars
Note: SD70MAC locomotives must not be used to switch barge.
When movements are made south of the slip crossing and the slip is in a raised position, the following will apply:

- A safety stop must be made north of the crossing before proceeding southward.
- Crew member must precede the leading car of the movement.
- Movement will be made at walking speed.
- Each piece of equipment left south of the crossing must be secured by its hand brake.

Whittier slip derail must be in derail position except during switching.

## Sawmill Track out of service unless authorized to occupy track by engineering supervisor.

The target on the switch into Old Shuttle Runaround track when lined for Old Shuttle Runaround track will indicate green.

Yard lights can be turned on remotely by radio. To turn them on, a radio equipped with a dial touch pad must be used and tuned to channel 4 . Then key-in numbers $61,62,63,64$, and 65 . These lights will automatically turn off after approximately four hours. To re-illuminate them, wait at least two minutes after they have extinguished, then repeat the steps outlined above.

### 81.5 WHITTIER SUBDIVISION TUNNELS

Portage Tunnel Doors:
A signal in the form of a switch target is provided for Portage Tunnel doors. This signal will display indication only for the door where it is located. These signals are located to the right of the track, in the direction of approach, in front of the entrance of the tunnel. These signals will display a red aspect when the doors may be closed, and will display a green aspect when doors are opened on each end of tunnel. Normally, doors will be open during the period April 16 through October 31, and closed during the period November 1 through April 15.

If the target displays a red aspect, the train must stop before entering the tunnel, and may proceed only on the authority of the foreman in charge, or the train dispatcher (after ensuring both tunnel doors are open).

| LOCATION | DIRECTION |
| :--- | ---: |
| Door 3-MP F 5.73 - Portage Tunnel ................................. Sorthward |  |
| Door 4 - MP F 6.91 - Portage Tunnel ................ Southward |  |

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, conductors of trains en route to or from Whittier will contact the Train Dispatcher, via radio, who will arrange to have Portage Tunnel doors opened approximately one hour prior to expected arrival at Door 4.

### 81.6 EMERGENCY TELEPHONES IN WHITTIER SUBDIVISION TUNNELS

Emergency telephones may be used to provide access to Anchorage emergency services by dialing 9-911, to call the Train Dispatcher by dialing 2504, or to call Anchorage local phone service by dialing 9 and the desired telephone number. The telephones are located inside the Portage Tunnel portals at Doors 3 and 4. The number of these phones and the tunnel control operator is 2306.

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.

### 81.7 WHITTIER TUNNEL SIGNAL SYSTEM (TSS)

CTC limits are in effect on main track between MPF 2.5 and MPF 5.2.

The telephone number to the tunnel control center is 265-2306; this number also rings at the telephones at doors 2,3 and 4 .

### 81.7.1 TRAIN MOVEMENTS

Trains approaching CTC limits must attempt to notify the tunnel control center, when open, either by radio or by telephone at 265 2306,fifteen minutes prior to arrival at applicable absolute signal.

### 81.7.2 ON-TRACK MOVEMENTS

To perform maintenance on or foul the main track inside the tunnel, on-track vehicles must request track and time from the train dispatcher, and must inform the dispatcher of what movements will be made.

If Tunnel Control Center is in operation, the train dispatcher will coordinate movements with the tunnel control operator.

If the tunnel control center is not in operation, use 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.

Portal door control buttons are located at the traffic islands in locked boxes secured with 05 locks, but are only functional when track and time authority is in effect. These buttons open or close both portal doors. Telephones located in these boxes connect directly to the train dispatcher.

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.

Known maintenance within or on the Whittier Tunnel control point to be performed while the tunnel control center isin operation, must be scheduled at least 48 hours in advance through the Chief Dispatcher at 265-2421.

### 81.7.3 FOUL TIME

Employees may request Foul Time to perform maintenance on or foul the main track outside the tunnel between the portal and the absolute signal when the Tunnel Control Center is in operation. Work performed under foul time authority must not interfere with highway traffic unless movement iscoordinated with the tunnel controloperator.

### 81.7.4 SWITCH POINT DERAILS

Switch point derails are located at the absolute signals at MPF 2.5 and MPF 5.2. The length of the tracks off these derails is approximately 200 feet.
On-track vehicles must:

- before moving over switch point derails, make sure they are properly lined for intended route.
- not exceed 10MPH over switch point derails.
- if applicable, not return switch point derail to power until entire movement is clear of the switch.


### 81.7.5 HIGHWAY VEHICLE CROSSING GATES

Vehicle crossing gates MUST NOT be lifted to gain access to the Whittier Tunnel unless authorized by train dispatcher. Lifting the gates while the control point is lined for main track movements locks up the signal system, preventing movement of both rail and highway traffic, and it has to be reset by both a signal maintainer and a tunnel control operator.

### 81.7.6 WHITTIER TUNNEL SIGNAL SYSTEM MALFUNCTION

During a malfunction of the signal system, the tunnel control operator is unable to control the exhaust fans. Consequently, public vehicles must not enter the control point until a signal maintainer has repaired the control point and the exhaust fans are operational.

### 81.8 BEAR VALLEY

Use row A on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

### 81.9 PORTAGE

Use row A on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Whittier Subdivision begins and ends at tail of wye switch, MP F 12. Movement between tail of wye switch and Portage junction switch, MP F 12.4 (MP 64.3 on Seward Subdivision), is on the north leg of wye, an auxiliary track. Do not exceed 16 MPH on north leg of wye. Instructions to restore junction switch, MP 12.4, or leave reversed, will be included in the track warrant authorizing movement to or from this switch on the Seward Subdivision.

New Yard Track 1 out of service unless authorized to occupy track by engineering supervisor.

### 81.10 WHITTIER SUBDIVISION GRADE PROFILE

WHITTIER SUBDIVISION

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> Accident prevention should be your \# intention.

### 82.0 ANCHORAGE SUBDIVISION 82.1 ANCHORAGE SUBDIVISION

SOUTH $\downarrow$ Main Track $\uparrow$ NORTH

| $\begin{aligned} & \text { Call } \\ & \text { Code } \\ & \hline \end{aligned}$ | Capacity of siding | STATIONS | $\begin{aligned} & \hline \begin{array}{l} \text { Mile } \\ \text { Post } \end{array} \\ & \hline \end{aligned}$ | Meth. of Opr. | Detector Locations |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5,342 | Honolulu | 288.7 | TWC | 290.5 A |
| 05 | 6,026 | Hurricane c | 281.4 | CTC | 281.5 B |
|  | 2,108 | Chulitna y | 273.8 | TWC |  |
|  | 2,132 N | Canyon | 268.4 |  |  |
| 04 | 5,274 | Gold Creek c | 263.2 |  |  |
|  | 1,470 | Sherman | 257.7 |  |  |
|  | 6,755 | Susitna | 251.0 |  |  |
|  | 3,016 S | Curry 123 | 248.5 |  |  |
|  | 6,266 | Chase | 236.2 |  |  |
| 03 | 1,750 N | Talkeetna c | 226.7 |  | 225.7 B |
|  | 6,011 | Sunshine | 215.3 |  |  |
|  | 4,143 | Montana | 209.3 |  |  |
|  | 1,328 | Caswell | 202.3 |  | 206.2 B |
|  | 1,607 | Kashwitna | 193.9 |  |  |
| 06 | 6,288 | Willow cy | 185.7 |  | 185.2 C |
| 01 | 2,422 | Houston | 175.3 |  |  |
|  | 6,229 | Pittman | 165.6 | CTC |  |
| 02 | 3,214 | Wasilla | 159.8 | TWC | 164.3 B |
|  | WYE | Palmer Junction cJy | 151.0 | CTC |  |
|  | 1,320 N | Matanuska | 150.7 |  |  |
|  | 5,452 | Eklutna | 141.8 | Twc | 145.5 B |
|  | 4,895 | Birchwood | 136.3 |  |  |
|  | 5,867 | Reves <br> Reves | 128.0 | CTC | 123.0 B |
| 00 |  | Anchorage bwxyz | 114.3 | $\begin{gathered} \frac{\mathrm{TWC}}{2 \mathrm{MTCTC}} \\ \frac{\mathrm{YLC}}{} \\ \hline \end{gathered}$ |  |

## ANCHORAGE SUBDIVISION

(Continued)


### 82.1.1 METHOD OF OPERATION

| LOCATION | METHOD OF OPERATION |
| :--- | :--- |
| MP 114.30 - MP 115.50 | YL |
| MP 115.50 - MP 117.00 | TWC |
| MP 117.00 - MP 119.80 | 2 MT CTC |
| MP 119.80 - MP 128.00 | TWC |
| MP 128.00 - MP 129.20 | CTC |
| MP 129.20 - MP 150.45 | TWC |
| MP 150.45 - MP 150.50 | CTC |
| MP 150.50 - MP 164.95 | TWC |
| MP 164.95 - MP 166.25 | CTC |
| MP 166.25 - MP 281.20 | TWC |
| MP 281.20 - MP 282.40 | CTC |
| MP 282.40 - MP 467.50 | TWC |
| MP 467.50 - MP 470.30 | YL |

### 82.1.2 MAXIMUM AUTHORIZED SPEEDS

Maximum Authorized Speed Between:

In MPH For:
Frt Psgr
MP 114.30 and MP 115.10 (Yard Limit) .................... 10 20

MP 115.10 and MP 115.50 (Yard Limit)
MP 115.50 and MP 117.00
20
30
MP 117.00 and MP 117.60 East Main Track........................... 3030
MP 117.60 and MP 119.80 East Main Track ............ 40
MP 117.00 and MP 119.80 West Main Track .......... 2525
MP 119.80 and MP 121.50 ....................................... 40 40
MP 121.50 and MP 126.40 ............................................ $25 \quad 25$
MP 126.40 and MP 139.50 ........................................... 35
20
30 35

## Anchorage Subdivision Special Instructions

MP 139.50 and MP 146.00 ..... 45
MP 146.00 and MP 146.60 ..... 30
MP 146.60 and MP 150.87 ..... 45
MP 150.87 and MP 151.15 ..... 30
MP 151.15 and MP 152.10 ..... 45
MP 152.10 and MP 153.70 ..... 35
MP 153.70 and MP 159.60 ..... 25
MP 159.60 and MP 159.90 ..... 49
MP 159.90 and MP 159.90 Northward HER ..... 25
MP 159.90 and MP 183.57 ..... 40
MP 183.57 and MP 193.20 ..... 49
MP 193.20 and MP 193.40 ..... 45
MP 193.40 and MP 211.25 ..... 49
MP 211.25 and MP 213.51 ..... 40
MP 213.51 and MP 224.50 ..... 49
MP 224.50 and MP 224.90 ..... 40
MP 224.90 and MP 226.00 ..... 49
MP 226.00 and MP 227.70 ..... 40
MP 227.70 and MP 239.70 ..... 49
MP 239.70 and MP 243.05 ..... 35
MP 243.05 and MP 248.80 ..... 30
MP 248.80 and MP 255.00 ..... 40
MP 255.00 and MP 258.00 ..... 35
MP 258.00 and MP 261.00 ..... 30
MP 261.00 and MP 266.00 ..... 40
MP 266.00 and MP 266.50 ..... 35
MP 266.50 and MP 266.90 ..... 25
MP 266.90 and MP 269.20 ..... 35
MP 269.20 and MP 270.30 ..... 20
MP 270.30 and MP 277.15 ..... 30
MP 277.15 and MP 278.50 ..... 25
MP 278.50 and MP 283.95 ..... 35
MP 283.95 and MP 284.27 ..... 10
MP 284.27 and MP 288.30 ..... 25
MP 288.30 and MP 292.25 ..... 45
MP 292.25 and MP 294.50 ..... 30
MP 294.50 and MP 303.50 ..... 49
MP 303.50 and MP 320.00 ..... 45
MP 320.00 and MP 321.45 ..... 35
MP 321.45 and MP 322.25 ..... 25
MP 322.25 and MP 327.01 ..... 30
MP 327.01 and MP 327.80 ..... 25
MP 327.80 and MP 331.50 ..... 30
MP 331.50 and MP 332.80 ..... 25
MP 332.80 and MP 339.70 ..... 30
MP 339.70 and MP 341.70 ..... 25
MP 341.70 and MP 347.10 ..... 30
MP 347.10 and MP 347.50 ..... 10
MP 347.50 and MP 357.50 ..... 15
MP 357.50 and MP 358.30 ..... 20
MP 358.30 and MP 361.15 ..... 35
MP 361.15 and MP 378.90 ..... 49
MP 378.90 and MP 379.50 ..... 35
MP 379.50 and MP 385.60 ..... 40
MP 385.60 and MP 411.10 ..... 49
MP 411.10 and MP 411.65 ..... 20
MP 411.65 and MP 415.10 ..... 25
MP 415.10 and MP 416.00 ..... 40
MP 416.00 and MP 431.80 ..... 49
MP 431.80 and MP 452.85 ..... 40
MP 452.85 and MP 463.10 ..... 30
MP 463.10 and MP 467.50 ..... 40
MP 467.50 and MP 469.90 (Yard Limit) ..... 20
MP 469.90 and MP 470.30 (Yard Limit) ..... 8
82.1.3 SIDING SWITCH LOCATIONS

| $\begin{array}{lr}\text { Siding } & \text { South } \\ \text { Switch }\end{array}$ | North Switch |
| :---: | :---: |
| Reves ......................................................... 128.00 | 129.20 |
| Birchwood ................................................... 135.20 | 136.30 |
| Eklutna ..................................................... 141.00 | 142.10 |
| Matanuska ....................................................Spur | 150.90 |
| Palmer Junction ......................................... 150.50 | 151.10 |
| Wasilla ...................................................... 159.40 | 160.30 |
| Pittman ....................................................... 164.95 | 166.25 |
| Houston ...................................................... 175.10 | 175.60 |
| Willow ...................................................... 185.20 | 186.50 |
| Kashwitna ................................................... 193.50 | 194.00 |
| Caswell ....................................................... 201.90 | 202.40 |
| Montana .................................................... 208.50 | 209.50 |
| Sunshine ..................................................... 214.50 | 215.60 |
| 223 Pit ....................................................... 223.10 | 223.60 |
| Talkeetna .......................................................Spur | 227.10 |
| Chase .......................................................... 235.30 | 236.40 |
| Curry .......................................................... 247.80 | Spur |
| Susitna ....................................................... 250.20 | 251.60 |
| Sherman .................................................... 257.40 | 257.80 |
| Gold Creek ................................................. 262.30 | 263.50 |
| Canyon ..........................................................Spur | 288.60 |
| Chulitna ..................................................... 273.60 | 274.10 |
| Hurricane ................................................... 281.20 | 282.40 |
| Honolulu .................................................... 288.30 | 289.50 |
| Colorado ...................................................... 296.60 | 297.50 |
| Broad Pass ................................................. 303.50 | 304.50 |

## Anchorage Subdivision Special Instructions

Summit ..... 312.15 ..... 312.80
Cantwell ..... 319.30 ..... 319.70
Windy ..... 325.70 ..... 326.90
Carlo ..... 334.30 ..... 334.70
Oliver 341.70 ..... 342.90
Denali Park ..... 347.50 ..... 348.10
Garner ..... 355.70 ..... 355.90
Healy 358.90 ..... 359.90
Usibelli Tipple ..... 361.70 ..... 363.00
Ferry 371.10 ..... 371.50
Bear Creek ..... 374.00 ..... 375.23
Browne ..... 381.10 ..... 381.40
388 Pit ..... 388.10 ..... 388.40
Clear Site ..... 392.10 ..... 392.90
Nenana ..... 411.90 ..... 412.70
North Nenana ..... 415.20 ..... 416.00
Manley ..... 420.40 ..... 421.30
Dunbar ..... 430.90 ..... 431.80
Standard ..... 439.10
Spur
Saulich ..... 450.40 ..... 451.00
Dome Spur ..... 456.20
Happy Spur ..... 463.10
82.1.4 LOCATION OF OTHER TRACKSSwitch CapacityMP
Location in Feet
115.4 Yard Lead ..... S ..... 8,264
117.0 MP 117 XO / CP 1170 ..... N
120.0 FortRichardson ..... S
131.0 Powder Spur ..... S ..... 2,896
136.3 Birchwood Track 2 ..... Both ..... 4,446
136.3 Birchwood Track 3 ..... N ..... 4,283
142.0 Rock Pit ..... 2,936
142.0 Ramp, off Rock Pit track ..... 856
145.45 MP 145.45 Spur ..... 200
147.55 MP 147.55 Spur .....  .....
158.7 Spenard Builders Supply ..... 457
159.8 Short Siding, off Wasilla Siding Both ..... 204
161.6 Spenard Builders Supply Both ..... 675
223.6 Log Track Both ..... 2,200
223.6 Pit Track off Log Track ..... N ..... 2,575
226.7 HouseTrack ..... Both ..... 1,060
226.7 Ramp, off House Track ..... 195
263.2 Carr Outfit Track, off Gold Creek Siding ..... 1,735
281.5 Engineering Track, off Hurricane Siding ..... 940
319.5 Ramp, off Cantwell Siding ..... 290
326.7 Outfit Track, off Windy Siding ..... 1,252
333.7 House Track ..... 330
350.6 Cascade Outfit Track ..... 743
358.7 East 1 ..... Both ..... 3,157
358.7 East 2 Both ..... 2,363
358.7 East 3, off East 2 ..... 1,283
358.7 Old Rip Track ..... 428
358.7 Roundhouse1 ..... 452
358.7 Roundhouse2 ..... 277
358.7 CraneTrack ..... 143
358.7 New Rip Track ..... 355
359.0 UCM Prill Track ..... 1,300
359.0 West 1 ..... 5,834
359.0 West 2 ..... 5,693
359.0 Outfit Track ..... 1,085
359.0 RampTrack ..... 165
360.0 New Storage ..... 3,890
362.6 Outfit Track (Lignite) ..... 1,025
371.2 Ramp, off Ferry Siding ..... 155
388.0388 Pit -Tail of Wye ..... Both ..... 3,465
392.2 OldClear ..... N ..... 5,021
392.9 Main Base, off Tail of Wye ..... Both
392.9 Short Siding ..... Both ..... 789
401.1 Maintenance Track ..... 156
411.1 Engineering Spur ..... 440
411.1 Track 1, Lower Yard ..... 1,100
411.1 Track 2, Lower Yard ..... S ..... 1,032
411.1 Track 3, Lower Yard Both ..... 700
411.1 New Ramp, off Track 3, Lower Yard ..... 397
411.1 Old Ramp, off Track 3, Lower Yard ..... 509
411.1 Hi-line, off Track 3, Lower Yard ..... 500
411.3 WaterfrontTrack ..... Both ..... 3,300
411.8 House Track, off Waterfront Track ..... N ..... 1,240
412.0 Long Siding Both ..... 3,198
412.0 Union Oil Spur, off Long Siding ..... 655
415.4 Spur, off North Nenana Siding ..... 363
420.4 Spur, off Manley Siding ..... 240
432.6 Outfit Track ..... 202
467.0 UAF Both ..... 3,250

## Anchorage Subdivision Special Instructions

### 82.1.5 MEASURED MILES

These mileposts are designated "measured miles" to check accuracy of locomotive speed indicators:

| MP 118 to MP 119 | MP 306 to MP 307 |
| :--- | :--- |
| MP 119 to MP 120 | MP 344 to MP 345 |
| MP 143 to MP 144 | MP 368 to MP 369 |
| MP 165 to MP 166 | MP 391 to MP 392 |
| MP 192 to MP 193 | MP 406 to MP 407 |
| MP 219 to MP 220 | MP 418 to MP 419 |
| MP 230 to MP 231 | MP 433 to MP 434 |
| MP 272 to MP 273 | MP 464 to MP 465 |

MP 290 to MP 291
Advance Yard Limit signs are also "measured miles."

### 82.2 EXCEPTED TRACK

## EXCEPTEDTRACK: ANCHORAGESUBDIVISION

The track, or segments of track, listed below is designated as excepted track as provided in Operating Rule 6.12.

## DESCRIPTION

Powder Spur, MP 131
Ramp Track and Rock Pit Track, MP 142
Gravel Pit Track and Log Track, Mile 223.6
Ramp Track, Cantwell
Outfit Track, Windy
Ramp Track, Denali Park
Outfit Track, Mile 350.6
Outfit Track, East 3, Old Rip and Rip Track and Roundhouse Track 1 and 2 at Healy
Suntrana Branch
Ramp Track, Ferry
Gravel Pit Track, Outfit Track and Wye, MP 388
Wye and Main Base, Clear Site
Old Clear
Maintenance Track, MP 401.1
Ramp Track, Nenana

### 82.3 CALL-UP STATIONS

Trains, as indicated, will call the applicable district train dispatcher when the entire train has passed the last siding switch at the following locations:

| Palmer Junction | Southward trains call district 1 |
| :---: | :---: |
|  | Northward trains call district 2 |
| Willow | Southward trains call district 1 |
|  | Northward trains call district 2 |
| Talkeetna | All trains call district 2 |
| Gold Creek | All trains call district 2 |
| Hurricane | All trains call district 2 |
| Cantwell | All trains call district 2 |
| Healy | All trains call district 2 |
| Nenana | Northward trains call district 2 |
| Manley | Southward trains call district 2 |

### 82.4 ANCHORAGE

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

If unable to contact the assistant terminal superintendent or operations support technician, each train, engine, track car or employee working on or near a track will announce its intention to move within, or enter into, the yard limit territories.

Trains departing the Anchorage terminal, which required a class 1 initial terminal air brake test before departure, must be given a roll-by inspection by a qualified employee.
CTC limits are in effect at CP 1139 (Switch MP 113.9).
CTC limits are in effect on East Main Track and West Main Track between CP 1170 (MP 117 XO) and CP 1198 (Switch MP 119.8). A drill signal may be requested from the dispatcher for switching movements on the West Main Track north of CP 1170. Notify the dispatcher when the drill signal is no longer required.

## North Yard Lead, MP 116.5, Power Switch Operation:

The illuminated switch target provides the following information:
Green: Switch points fit properly in normal position.

Yellow: Switch points fit properly in reverse position.
In addition, the lights flash alternately yellow and green when the switch is in transition between normal and reverse positions, or if the switch fails to complete the throw to the full normal or reverse position. If the lights are flashing, the switch must be operated by hand to the desired position, and the switch points checked to ensure they are in the proper position. Any malfunction of this switch or electronic switch target must immediately be reported to the assistant terminal superintendent on duty.

The switch can be operated in one of three ways:

## 1) REMOTECONTROLOPERATION:

The presence detection loops must not be occupied by a car or locomotive. These loops are located 120 feet in front of the switch points, and at the clearance point of the turnout. Prior to occupying the presence detection loops, select radio channel 15,press\#1165 to line the switch in the opposite position. Pressing \#1165 again will line the switch to the original position. If a presence detection loop is occupied the switch will not throw.

## 2) PUSHBUTTONOPERATION:

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. This will line the switch to the opposite position.

## 3) MANUALOPERATION:

To operate the switch manually follow the attached instructions. It will take about 20 pumps on the handle to complete the movement of the switch points from one position to the other.
Remember: This is a remote controlled switch that can be operated at any time unless you provide protection against unwanted movement. Always check the position of the switch points and the lights on the illuminated switch target to determine that the switch is properly lined for your movement.

## 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

## Anchorage Subdivision Special Instructions

switch in the off position, it is necessary to manually pump the switch to the desired position.

Crossing signal located at First and Post Streets will activate only by using the manual start button located within the key box (accessible with a switch key) placed adjacent to the track for either approach, or on the signal control cabinet.

Anchorage diesel shop area tracks between South Roundhouse Lead Switch and Backshop Lead Switch are designated locomotive servicing area tracks, and maximum authorized speed in these limits is walking speed.

The maximum speed on Anchorage Car Shop Tracks 1, 2, 3, and 4 is walking speed.

## Excepted Track Within Anchorage Yard

The track listed below is designated as excepted track as provided in Operating Rule 6.12.

## DESCRIPTION

OVL2, $2^{1 / 2}$
General Electric - Inside
Wrightway Old 1
Ash Track
CEA Inside
CEA Outside
Warehouse 1 \& 3
Back Shop Lead
Mechanical Office Track
Wheel Shop 2
On-Track Equipment Storage
General Repair
Back Shop Lead
Electric Shop and Diesel Shop
Heavy Equipment

### 82.5 MP 117 CROSSOVER TO SW MP 119.8

CTC limits are in effect on East Main Track and West Main Track between CP 1170 (MP 117 Crossover) and CP 1198 (Switch MP 119.8).

## Anchorage Subdivision Special Instructions

### 82.6 FORT RICHARDSON

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Close clearance on all tracks at Fort Richardson.
During switching operations on Fort Richardson, air brakes must be cut in and operative.

SD70MAC locomotives are prohibited on all tracks.

### 82.7 MP 123

Southward trains will contact the Terminal Superintendent's office for yarding instructions in Anchorage Yard. If unable to contact the Terminal Superintendent, contact the Train Dispatcher.

### 82.8 REVES

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

CTC limits are in effect on main track and siding between south siding switch and north siding switch.

### 82.9 POWDER SPUR MP 131

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Powder Spur MP 131 is out of service unless authorized to occupy track by an engineering supervisor.

### 82.10 BIRCHWOOD

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Track 1 is the designated siding.

Tracks 2 and 3 will be used for set-outs and storage, unless otherwise instructed.

Track 2 out of service from a point 700 feet south of north switch to a point 3000 feet north of south switch unless authorized to occupy track by engineering supervisor.

SD70MAC locomotives prohibited on tracks 2 and 3.
Do not exceed 5 m.p.h. on Tracks 2 and 3.
L.P.G. transfer facility located off north end of Track 2.

Close clearance at side dock at Spenard Builder's Supply.

### 82.11 EKLUTNA

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Do not exceed walking speed and closely observe leading wheels on Ramp Track off Pit Track MP 142.

SD70MAC locomotives prohibited on pit and ramp track.

### 82.12 MATANUSKA

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited beyond clearance point.
The south siding switch at Matanuska has been removed.
Matanuska siding is a stub track heading in from the north, measuring $\mathbf{1 , 3 2 0}$ feet in length.

### 82.13 PALMER JUNCTION

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location. CTC limits are in effect at south siding switch, CP 1505.
Palmer Branch begins and ends at tail of the wye switch Palmer Jct. The wye is the designated siding.

## Anchorage Subdivision Special Instructions

When opposing trains meet at Palmer Junction and the northbound train is required to pull by and back into the north leg of wye, the southbound train must stop short of MP 152.1 and not proceed until the northbound train's movement south is clear of MP 151.3 to allow proper operation of highway crossing signals MP 151.6.

### 82.14 SPENARD BUILDERS SUPPLY MP 158.7

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited from clearance point to end of track.

### 82.15 WASILLA

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location. Do not exceed 5 MPH in Wasilla siding over Knik-Goose Bay Road crossing, MP 159.9, until the leading wheels occupy the crossing. SD70MAC locomotives prohibited between clearance points at south and north ends of siding.

### 82.16 SPENARD BUILDERS SUPPLY MP 161.6

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited between clearance points at south and north ends of track.

### 82.17 PITTMAN

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

CTC limits are in effect on main track and siding between south siding switch and north siding switch.

### 82.18 HOUSTON

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited between clearance points.

### 82.19 WILLOW

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Willow Wye out of service unless authorized for use by an engineering supervisor.

SD70MAC locomotives prohibited on wye.

### 82.20 KASHWITNA

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited between clearance points.

### 82.21 CASWELL

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited between clearance points.

### 82.22 MONTANA

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

## Anchorage Subdivision Special Instructions

### 82.23 MONTANA CREEK BRIDGE, MP 211

Warning bells are installed on bridge as a warning of an approaching train. The bells are activated whenever a train is approaching the bridge. A yellow strobe light is located on the south end of the bridge to indicate the bells are operating. This system is in use during the period June 1 through September 30. Malfunction of this system must be reported to the train dispatcher.

### 82.24 SUNSHINE

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

### 82.25 LOG TRACK MP 223.6

Use row C on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Pit Track off Log Track MP 223.6 out of service unless authorized to occupy track by engineering supervisor.

Do not exceed walking speed on Log Track MP 223.6 and on Pit Track off Log Track 223.6. SD70MAC locomotives prohibited between clearance points at south and north ends.

### 82.26 TALKEETNA

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

East side stub track, switch MP 227.1, is the designated siding.
SD70MAC locomotives prohibited on House track between south switch and clearance point of north switch and on Ramp track.

Do not tie up equipment with engine running on north end of house track.

Do not exceed walking speed on Talkeetna House Track.

### 82.27 CHASE

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

### 82.28 CURRY

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited on wye tracks.

### 82.29 SUSITNA

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

### 82.30 SHERMAN

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited between clearance points.

### 82.31 GOLD CREEK

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Close clearance at side ramp on outfit track.
Do not exceed 5 MPH on Carr Outfit Track off Gold Creek Siding.
SD70MAC locomotives prohibited on Carr Outfit Track, off siding.

### 82.32 CANYON

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

## Anchorage Subdivision Special Instructions

Canyon Spur out of service unless authorized for use by an engineering supervisor.

SD70MAC locomotives prohibited beyond clearance point.

### 82.33 CHULITNA

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Chulitna Wye out of service unless authorized to occupy tracks by an engineering supervisor.

SD70MAC locomotives prohibited between clearance points of siding and on wye tracks.

### 82.34 HURRICANE

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

CTC limits are in effect on main track and siding between south siding switch and north siding switch.

Close clearance at Engineering Track side ramp. SD70MACs prohibited on the Engineering Track.

### 82.35 HONOLULU

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

### 82.36 COLORADO

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

### 82.37 BROAD PASS

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited on wye tracks.
82.38 SUMMIT

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

### 82.39 CANTWELL

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited between clearance point at south end and ramp track switch and on ramp track.

### 82.40 WINDY

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited on outfit track.

### 82.41 MP 333.7 HOUSE TRACK

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Close clearance at side ramp on house track.
SD70MAC locomotives are prohibited beyond clearance point.

## Anchorage Subdivision Special Instructions

### 82.42 CARLO

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

### 82.43 OLIVER

Use row C on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

### 82.44 DENALI PARK

Use row C on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited from a point 900 feet south of north switch to clearance point of south switch.

### 82.45 CASCADE OUTFIT TRACK

Use row C on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited on outfit track.

### 82.46 GARNER

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Garner siding out of service from a point 400 feet south of north switch to south switch unless authorized to occupy track by an engineering supervisor.

SD70MAC locomotives prohibited on siding unless authorized by an engineering supervisor.

### 82.47 HEALY CANYON BETWEEN DENALI PARK AND HEALY

Crew member on all trains except trains operating without a caboose will position themselves in such a manner as to make careful inspection of track to rear of train for indications of derailments so that train may be stopped immediately.
Dynamic brakes must be restricted to one-half of maximum on trains operating northbound between Denali Park and Healy.
Area subject to falling rock between MP 349 and MP 358.
Moody Tunnel is located at MP 353.6.

### 82.48 GARNER TUNNEL

## Garner Tunnel is located at MP 356.2.

Do not exceed restricted speed while approaching north portal of Garner Tunnel until track is seen to be clear of rocks and/or debris.

### 82.49 HEALY

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

West 1 Track is the designated siding.
Tail of Wye Track is 725 feet long.
Close clearance at side ramp on ramp track, between tracks East 2 and East 3 and at south end of Outfit Track.

Yard lights switch is located on the outside wall of the air compressor shed. These lights, once activated, are on a timer and will automatically turn off after a preset period of time.
SD70MAC locomotives prohibited from the following tracks: East Track 2 (off East Track 1), East Track 3 (off East Track 2), Old Rip Track, Roundhouse Tracks $1 \& 2$, Crane Track, New Rip Track, Outfit Track, Ramp Track and New Storage Track.
Whenever cars are set out on East 1 or East 2, in addition to setting the switch point derail at the north end of East 1 in the derailing position, the derail at the north end of the New Storage track must also be set in the derailing position.

### 82.50 USIBELLI TIPPLE

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Do not exceed 5 MPH through the tipple tunnel.
A green light is located across from the tipple operator's control station that, when illuminated, indicates the loading chute is in its fully raised position. In absence of this signal, the crew must ascertain the loading chute is in its fully raised position before proceeding.
If necessary to run locomotives around train prior to loading, empty hoppers will be left just outside tipple door to enable mine personnel to begin their inspection of the cars while locomotives are en route to opposite end of train.
Locomotives will not be left standing in the tunnel or within 50 feet (outside) of either portal. The amount of time a locomotive is in the tunnel is to be kept at a minimum.

Any coal train exceeding 71 cars must pull locomotives north of the north portal.
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 empty train, or releasing train air brakes on train being prepared for loading.
The motion scale is located 60 feet from the north tunnel portal.
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.

All trains loading in this facility proceed as directed by mine personnel.

Notify Train Dispatcher when circumstances arise that may increase expected loading time.
Loading speed is approximately .34 m.p.h. The speed is to be increased or decreased as loading operations dictate. In the event the movement exceeds $1 \mathrm{~m} . \mathrm{p} . \mathrm{h}$. it may be necessary to stop the movement and back train south of the scale and begin scaling again. Engineers working trains through the tunnel must control speed of train to prevent making an air application during scaling.

When entire train has been loaded and last car clears the track scale, a reverse movement may be made over the track scale.
Cars will not be set out or left standing on the Usibelli Tipple track without authorization from the Train Dispatcher. Should conditions require a car to be set out or left standing on the track, brakes must be properly secured and the car chained or chocked.
Length of main track from clearance point NSS to middle of Usibelli Tipple road crossing is 4237 feet.
Length of main track from clearance point SSS to middle of Usibelli Tipple road crossing is 3406 feet.
The south switch of the Industry track serving Usibelli coal loading tipple is located at MP 361.51 ; the north switch is located at MP 362.92. Use of this track restricted to industrial use only.
SD70MAC locomotives prohibited on Outfit track, Lignite.
Employees working in this structure must wear hard hats.
Length of track from clearance point SSS to south portal of tipple is 4247 feet. The small road crossing may be blocked when necessary to provide clearance on the south end of track.
Length of track from clearance point NSS to north portal of tipple 4010 feet.

Close clearance at north end of tunnel.
The tipple tunnel is 265 feet long.

## EXPORT COAL

Empty trains left to be loaded with the locomotives parked outside the north loading tunnel portal, due to train length, must not back up until the tipple operator is ready to load the train. After the tipple operator acknowledges he is ready to load the train, back the train to clear the scale and remain until advised to proceed at loading speed.
Notify dispatcher when train is half loaded.
When 60 to 65 cars are loaded, ascertain from tipple operator if there is sufficient coal to finish the load. If necessary, pause to recharge tipple with coal prior to gaining authority to mainline to finish loading.

To run locomotives around train after loading: after clearing scale, back train approximately eight cars, leaving two cars out of the south tunnel.

## Anchorage Subdivision Special Instructions

## LOCALCOAL

Conductors of local coal trains must furnish the tipple operator an accurate consist of all cars picked up on line to be loaded. This consist will be in addition to the pickup and set out report that is turned in at Fairbanks.

North end local coal trains on arrival at Usibelli Tipple, unless otherwise instructed, will pull by south switch, back into the siding and spot train at the road crossing just south of the tipple door for door inspection and tie train down. If a yard crew is on duty, they should be at the south switch to line the movement into the siding.

### 82.51 FERRY

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited between clearance points.

### 82.52 BEAR CREEK

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

### 82.53 BROWNE

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited between clearance points.

### 82.54 MP 388 PIT TRACK

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location. SD70MAC locomotives prohibited from 300 feet past clearance point on south leg of wye. SD70MAC locomotives prohibited from tail of wye.

### 82.55 CLEAR SITE

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Trains performing switching in such a manner that would block highway crossings and/or activate crossing signals must leave train back a sufficient distance from crossing while performing such switching so as to not activate crossing signals or block crossing.

### 82.56 MILE POSTS 394 A AND 394 B

Track realignments resulted in adding MP 394 A and MP 394 B.

### 82.57 MAINTENANCE TRACK MP 401.1

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Maintenance Track Mile 401.1 out of service unless authorized by an engineering supervisor.

### 82.58 NENANA

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Long Siding Track is the designated siding.
SD70MAC locomotives prohibited on Long Pass track between clearance points at south and north ends of siding; on Waterfront track between a point 500 feet north of south switch to clearance point at north end of track and on House track at clearance point to end of track. SD70MACs also prohibited from South end little yard.

Engineering Track is 440 feet long. Trains operating on this track must not use more than one locomotive.

Close clearance on Union Oil Spur 300 feet south of switch. The switch to this track is to be left lined for the Main Track.

## Anchorage Subdivision Special Instructions

Engineering Spur (formally south leg of wye), Hi-Line Track, Track 1 from the north switch to end of track sign, Track 2 from the north switch to the red flag, and Track 3 out of service unless authorized to occupy track by an engineering supervisor.

Do not exceed walking speed on Waterfront Track. Do not shove cars or cross the Market Street crossing (the first grade crossing south of the Ice Classic timing tower) on the Waterfront track.

### 82.59 NORTH NENANA

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Engineering spur out of service unless authorized by an engineering supervisor.

### 82.60 MANLEY

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

### 82.61 DUNBAR

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

### 82.62 OUTFIT TRACK MP 432.6

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Outfit track MP 432.6 out of service unless authorized by an engineering supervisor.

### 82.63 STANDARD

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location. SD70MAC locomotives prohibited beyond clearance point.

### 82.64 SAULICH

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Northward trains contact the Fairbanks Operation Support Technician via radio telephone, extension 6022, for yarding instructions in Fairbanks Yard. If unable to contact Operation Support Technician, contact the Train Dispatcher.

### 82.65 DOME

Use row A on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

Dome Spur Track out of service unless authorized to occupy track by an engineering supervisor.

SD70MAC locomotives prohibited beyond clearance point.

### 82.66 HAPPY

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

SD70MAC locomotives prohibited beyond clearance point.

### 82.67 FAIRBANKS

Use row B on Determining Number of Hand Brakes to Apply Table to determine number of hand brakes to be secured at this location.

## Anchorage Subdivision Special Instructions

All trains departing the Fairbanks terminal must be given a roll-by inspection by a qualified employee.

> If unable to contact the assistant terminal superintendent or operations support technician, each train, engine, track car or employee working on or near a track, will announce its intention to move within, or enter into, the yard limit territories.

Fairbanks Diesel Shop Tracks 3, 4 and 5 are designated as locomotive servicing area tracks. The maximum authorized speed on these tracks is walking speed.

The maximum authorized speed on Fairbanks Car Shop Tracks 1 and 2 is walking speed.
F.E. Lead out of service north of O.K. Lumber Company. O.K. Lumber switch is spiked for movement into O.K. Lumber.

Do not exceed 5 MPH on UAF track MP 467. A locomotive will not clear coal shed doors.

## Excepted Tracks, Fairbanks Yard

The tracks listed below are designated excepted track as provided in Operating Rule 6.12.

> DESCRIPTION

Fidelity
O.K.Lumber

| SOUTH | $\downarrow$ A | Auxiliary Track |  | $\uparrow$ NORTH |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Call } \\ & \text { Code } \end{aligned}$ | Capacity of siding | STATIONS | Mile Post | Meth. of Opr. | Detector Locations |
|  |  | Palmer | A 6.2 | Rule |  |
| 02 |  | Palmer Junction sy | A 0.0 | 6.28 |  |

### 82.68.1 METHOD OF OPERATION

| Location | Method |
| :--- | :--- |
| A 0.0-A 6.20 | GCOR Rule 6.28 |

### 82.68.2 MAXIMUM AUTHORIZED SPEEDS

Maximum Authorized Speed Between:
MP A 0.00 and MP A 6.20 ..... 1010
82.68.3 LOCATION OF OTHER TRACKS
Switch CapacityMPLocationin Feet
A 1.44 QAP Switch to Gravel Loop ..... 9,387
A 2.43 Wilder Switch to Gravel Loop ..... 9,387
A 4.92 Armco ..... S ..... 586
A 4.99 Industrial Park Lead (Airport Spur) ..... 6,109
A 4.99 Big 3, off Industrial Park Lead ..... 1,053
A 4.99 Track 2, off Industrial Park Lead ..... 506
A 6.2 House Track ..... 1,150
A 6.2 Ramp Track, off House Track ..... 195
A 6.24 Mat Maid ..... 977
A 6.5 PalmerSiding Both ..... 1,240

## Anchorage Subdivision Special Instructions

### 82.68.4 PALMER BRANCH SPECIAL INSTRUCTIONS

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

Conductors of commercial gravel trains will call the Train Dispatcher when their train is half-loaded and give dispatcher estimated time of departure (ETD) from Palmer Junction.

Mat Maid Track MP A 6.24 is out of service, unless authorized by an engineering supervisor.

Palmer siding Mile A 6.5 is out of service unless authorized by an engineering supervisor.

Big 3 track is out of service unless authorized by an engineering supervisor.

SD70MAC locomotives prohibited beyond MP A 4.0.

### 82.69 SUNTRANA BRANCH



### 82.69.1 METHOD OF OPERATION

| Location | Method |
| :--- | :--- |
| D 0.0 - D 1.70 | GCOR Rule 6.28 |

### 82.69.2 MAXIMUM AUTHORIZED SPEEDS

Maximum Authorized Speed Between:

In MPH For:
Frt Psgr
10
10

### 82.69.3 SUNTRANA BRANCH SPECIAL INSTRUCTIONS

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

SD70MAC locomotives prohibited beyond MP D 0.5.
Do not leave any railcars attached to cars on spot at Prill Silo.

### 82.70 FAIRBANKS INTERNATIONAL AIRPORT BRANCH

| SOUTH | Auxiliary Track |  |  | $\uparrow$ NORTH |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Call Code | Capacity of siding | STATIONS | Mile Post | Meth. of Opr. | Detector Locations |
|  |  | End of Track <br> 10.0 | H 10.0 | Rule |  |
| 03 |  | Fairbanks | H 0.0 | 6.28 |  |

### 82.70.1 METHOD OF OPERATION

| Location | Method |
| :--- | :--- |
| H $0.0-$ H 10.00 | GCOR Rule 6.28 |

### 82.70.2 MAXIMUM AUTHORIZED SPEEDS

Maximum Authorized
Speed Between: Speed Between:

### 82.70.3 LOCATION OF OTHER TRACKS

| MP | Name | Switch Location | Capacity in Feet |
| :---: | :---: | :---: | :---: |
| H0.0 | Airport Branch Switch |  |  |
| H 1.0 | FS\&G Spur | N |  |
| H 2.8 | North Star Terminal | .. N |  |
| H 2.9 | Northland Wood |  |  |
| H 3.6 | Alaska West Track 1 | N |  |
| H 3.6 | Alaska West Track 2 |  |  |
| H3.7 | Great Western Track 1 |  | 600 |
| H 4.1 | Parker Runaround | ... Both | 1,900 |
| H 4.9 | Metro Siding ........... | ... Both | 1,143 |
| H 9.3 | Tesoro .......... | ...... S |  |
| H 9.5 | Chevron ... |  |  |
| H 9.6 | Runaround | Both | 880 |

### 82.70.4 FAIRBANKS INTERNATIONAL AIRPORT BRANCH SPECIAL INSTRUCTIONS

Fairbanks International Airport Branch out of service at MP H 5.5 unless authorized by an engineering supervisor.

Riding on the building side of cars at Northstar Terminal is prohibited.

Close clearance at door 805 where steps have been built. Do not exceed walking speed while moving past these steps.

Do not exceed 5 m.p.h. on North Star Terminal Lead between Cushman Street Crossing and the gate.

SD70MAC locomotives prohibited from H 0.5 to end of track.

> Confidence, determination, and positive thinking can put you on the right track.

### 82.71 EIELSON BRANCH



### 82.71.1 METHOD OF OPERATION

| Location | Method |
| :--- | :--- |
| G 0.00-G 28.00 | GCOR Rule 6.28 |

### 82.71.2 MAXIMUM AUTHORIZED SPEEDS

Maximum Authorized
Speed Between:

MP G 0.00 and MP G 3.20 .................................. 1515
MP G 3.20 and MP G 6.20 .................................. 10 10
MP G 6.20 and MP G 24.50 ................................. 20 20
MP G 24.50 and End of Track ................................... 1010

### 82.71.3 LOCATION OF OTHER TRACKS

| MP |  | Switch Location | Capacity in Feet |
| :---: | :---: | :---: | :---: |
|  | TAPS | S | 2,607 |
| G 3.5 | Ladd Main | ... S | 2,070 |
| G 4.9 | Warehouse 1 | ..... S | 1,144 |


| G 5.0 | Fort Wainwright Power Plant .................. S | 1,197 |
| :---: | :---: | :---: |
| G 5.4 | BobSmall Runaround ...................... Both | 1,131 |
| $\text { G } 6.0$ | Fairbanks International Airport ............... S |  |
| G 8.1 | Salvage Yard ...................................... S | 332 |
| G 9.9 | K \& | 1,390 |
| G 12.4 | Green Construction ............................. N | 299 |
| G 16.6 | Mapco Refinery Main ........................... S | 4,282 |
| G 24.1 | Bluff Spur ......................................... N | 422 |

### 82.71.4 EIELSON BRANCH SPECIAL INSTRUCTIONS

The switch targets at Chapados Siding, when lined for the siding, will display yellow indication, and when lined for the main, will display green indication. These switches may be left lined and locked in either position.
Do not exceed 5 m.p.h. on Ladd Main.
Do not exceed 5 m.p.h. on Outside Power Plant Track at Fort Wainwright.
Do not exceed walking speed on Building 3030 Track mile G 4.94.
Conductors that switch NPR will show on their timeslip:

- departure time from Fairbanks
- time first load is pulled
- time last empty is spotted
- arrival time at Fairbanks.

In operations of yard movements between Fairbanks and Eielson, Fort Wainwright or Airport Spur, air brakes must be cut in and operative.
Yard crew picking up or setting out at North Pole will leave cars to provide clear passage of vehicle traffic over either $5^{\text {th }}$ or $8^{\text {th }}$ Avenue.
ARRC maintained track ends at MP G 24.5.
SD70MAC locomotives prohibited beyond G 17.8.

## NORTH POLEREFINERY POWERSWITCHOPERATION:

The illuminated switch target provides the following information:
Green: Switch points fit properly in normal position.
Red: Switch points fit properly in reverse position.

## Anchorage Subdivision Special Instructions

In addition, the lights flash alternately red and green when the switch is in transition between normal and reverse positions, or if the switch fails to complete the throw to the full normal or reverse position. If the lights are flashing, the switch must be operated by hand to the desired position, and the switch points checked to ensure they are in the proper position. Any malfunction of this switch or electronic switch target must be reported to the Operations Support Technician.
The switch can be operated in one of three ways:

## 1) REMOTECONTROLOPERATION:

The presence detection loops must not be occupied by a car or locomotive. These loops are located 120 feet in front of the switch points, and at the clearance point of the turnout. Prior to occupying the presence detection loops, select radio channel 6, press \#4166 to line the switch in the reverse position. Pressing \#4166 again will not return the switch to the normal position, unless the RESTORE switch is in the off position. If a detection loop is occupied the switch will not throw. In addition to the protection provided by the loops the end loops provide a restore feature that will restore the switch to the normal position 10 minutes after the loop is cleared. If the presence detection loops are not occupied the switch will return to the normal position in 10 minutes.

## 2) PUSHBUTTON 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. This will line the switch to the reverse position. The switch will restore to the normal position in 10 minutes.

## 3) MANUALOPERATION:

To operate the switch manually follow the attached instructions. It will take about 20 pumps on the handle to complete the movement of the switch points from one position to the other.

## AUTO-RESTORE:

This feature is used to restore the switch to the normal position after the presence detection loops are clear and the 10 minute timer has run, or if nothing is on the presence detections loops the switch will restore to the normal position after the 10 minute timer has run. The auto-restore can be disabled by unlocking the box on the switch stand that is labeled RESTORE, and moving the toggle switch to the OFF position. With the switch in the OFF position the switch can be thrown normal and reverse without waiting for the timer to run as long as the presence detection loops are not occupied. This switch must be left in the ON position when not used for immediate switching moves. If the switch is left in the OFF position the auto-restore will not line the switch back to the normal position.

## 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 manually pump the switch to the desired position.

### 82.72 ANCHORAGE SUBDIVISION GRADE PROFILES

Teamwork and communications prevent accidents and complications.

## Anchorage Subdivision Special Instructions





### 83.0 SPECIAL INSTRUCTIONS, ALL SUBDIVISIONS

Changes in the Special Instructions from the previous Timetable will be shown in bold type for the life of the new Timetable only. This practice will not relieve employees whose duties are affected in any way by the Timetable from reading and complying with all instructions contained herein.

### 83.1 GENERAL ORDERS

General Orders containing information affecting the safety or movement of trains and engines will be issued and cancelled by the Chief Operating Officer, and will be posted at locations designated in the Timetable.

General Orders containing instructions that modify or make reference to a physical plant change will be removed after having been in effect for a period of 60 days. Such instructions or modifications will remain in effect.

### 83.2 OPERATING CIRCULARS

Employees in train, engine, hostling, or yard service must be familiar with information contained in Operating Circulars, and will be held accountable for the information contained therein.

## $83.3 \quad$ TRACK AND TIME

Track cars granted track and time to enter CTC limits must operate as prescribed by ARSM Chapter 42: Operating Track Cars. The latest General Order number and Form B information must be confirmed before commencing each tour of duty.

### 83.4 MINIMUM FLAGGING DISTANCE

Minimum flagging distance on all subdivisions as prescribed by GCOR Rule 6.19 is one mile.

## System Special Instructions

### 83.5 TRAIN OPERATIONS AT SIDINGS

Except as shown below, revenue freight trains are prohibited from
backing into or out of sidings.
Exceptions, revenue freight trains may:

- back into or out of Palmer Junction.
- back into or out of Healy Track West 2.
- back into or out of Usibelli Tipple.
- back into sidings as required when necessary for doubling or performing work.


### 83.6 MAXIMUM SPEEDS PERMITTED AND INSTRUCTIONS FOR HANDLING SPECIAL EQUIPMENT

MAXIMUM AUTHORIZED SPEEDFOR:
Locomotive and car servicing tracks ........................ Walking Speed
Walking speed is not to exceed ..............................................4MPH
Passenger Trains, when authorized by Track Warrant or Track Bulletin 59 MPH
Freight and Mixed Trains ..... 49 MPH
Trains handling combination freight and passenger equipment will not exceed speed prescribed for freight trains.
Auxiliary tracks, unless otherwise provided ..... 10 MPH
Through turnouts, unless otherwise provided ..... 10 MPH
Through siding Turnagain ..... 25 MPH
Through siding and north siding turnout Campbell ..... 25 MPH
Through MP 109.5 Crossover and turnouts ..... 25 MPH
Through South Leg Airport Wye and turnout, MP 110.2 . ..... 25 MPH
Through North Leg Airport Wye and turnout, MP 110.58.25 MPH
Anchorage North Yard Lead between:Switch MP 115.4 and MP 117 crossover20 MPH
Between MP 117 Crossover and Switch MP 119.8 ..... 25 MPH
Through turnout MP 115.4 15 MPH
Through turnouts and crossover MP 117 ..... 15 MPH
Through turnout MP 119.8 ..... 25 MPH
Through junction turnout at Portage ..... 15 MPH
Through sidings and siding turnouts: Pittman; Willow; Sunshine; Chase; Susitna; Hurricane; Summit; and Bear Creek - EXCEPT: Trains exceeding 100 tons per operative brake* (excluding passen- ger trains) and trains handling loaded petroleum tank cars15 MPH
SD70MAC over bridge 33 ..... 10 MPH
Railcars equipped with friction bearings ..... 35 MPH
Railcars equipped with friction bearings must not be moved in any revenue train without authorization from the Superintendent of Transportation.
Southward trains, except passenger trains, exceeding 100 tons per operative brake* must not exceed the following speed restrictions:
MP $\mathbf{1 1 2 . 0}$ to MP 111.7 ..... 15 MPH
MP 121.3 to MP 115.5 ..... 25 MPH
MP 297.0 to MP 292.1 ..... 25 MPH
MP 279.7 to MP 270.3 ..... 25 MPH
MP 269.2 to MP 266.0 ..... 25 MPH
Trains passing occupied camp cars on auxiliary tracks immediatelyadjacent to the main track must not exceed 30 MPH .
Employees must not occupy the locomotive walkway at speeds greater than 25 MPH .
If speed authorized by Track Bulletin or Track Warrant is greater than speed prescribed for certain trains, engines, or equipment the most restrictive speed will apply.

## THE MAXIMUM SPEED OF TRAINS HANDLINGEQUIPMENT INDICATED BELOW WILL BE AS FOLLOWS, UNLESS OTHERWISEPROVIDED:

Locomotive Crane No. 106 and 107 ..... 25 MPH
Locomotive Cranes No. 108, 109, 110 and 111 ..... 35 MPH
Locomotive Cranes must have their booms trailing when handled in trains, unless otherwise authorized.
Spreaders No. 7, No. 8, or No. 9 ..... 35 MPH
Spreaders must face in direction of travel when handled intrains. Spreaders in work train service may be handled in eitherdirection. If handled with plow backwards, wings must be se-cured and movement authorized by Maintenance of Wayoperator.
Air dump cars, series ARR 15000 through ARR 15799, when loaded to car's capacity ..... 35 m.p.h.Passenger trains handling cars equipped with three-axle trucks mustposition a crew member where they can closely observe these carswhile moving through the following curves: $154,269 \mathrm{~B}, 284,353 \mathrm{~A}$,353B , 354D , 357C , 357D , and 411A (refer to track chart for exactlocations).*To figure tons per operative brake divide trailing tonnage bynumber of cars.

### 83.7 SWITCH ALIGNMENT

Switches with yellow/green aspects may be left lined in either position after use.

Switch machines, installed before the train dispatcher has the ability to control them, are considered hand-operated switches, and all rules governing hand-operated switches apply to them. These switches will be equipped with illuminated switch targets, and/or reflectorized targets affixed to the hand throw lever, until the signals governing movements over the switch are operational. The selector lever on these switches must be left locked in the HAND position.

### 83.8 DERAILS

## EXCEPTIONTOOPERATINGRULE 8.20:

When a track protected by a derail has no cars or equipment left standing on such track, derails will be left in the non-derailing position.

This exception will exclude derails in Anchorage (including Fort Richardson). Except when changed to permit immediate movement, derails at these locations must be set in the derailing position, unless otherwise provided for by Terminal Superintendent Bulletin.

### 83.9 SWITCHING/TRAIN MAKEUP RESTRICTIONS

Crews handling TTWX cars must ensure the ramps are locked and secured in the upright position before coupling or initiating movement.

Hopper cars equipped with rotary couplers (TNM, HPJX, CEFX, ARR 16400 series) must not be handled in trains with their rotary coupler ends together (indicated by colored stripes).

When handling empty cars seventy-five (75) feet or longer, or TOFC/COFC cars loaded with empty trailers/containers, these cars will be handled on the rear portion of the train whenever possible. Cars in excess of seventy-five (75) feet in length must not be coupled to a car forty (40) feet or less in length while handled in trains.

In switching, cars are not to be coupled at a speed more than four miles per hour.

Kicking, dropping, or allowing rail cars to move under their own momentum is prohibited.

Passenger coaches must not be coupled to cars equipped with double-shelf couplers.

### 83.10 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.

Customer Service will ensure proper placement of steel underframe flat cars of not less than 100,000 pounds capacity for loading of equipment specified above. It will be the responsibility of the Mechanical Department to inspect and accept such loads, advising Customer Service of acceptance, giving car number and maximum speed at which car may be moved. It will be the responsibility of Customer Service to see that no loads such as specified above will be placed in trains for movement until they have been accepted by the Mechanical Department and the Train Dispatcher has been notified of any speed restrictions.

Equipment with boom attached must be loaded with boom trailing 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 to do so by message from the 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.

### 83.11 SETTING OUT CARS

All cars handled in trains will be set out at destination shown on work message. If, at any time, it is necessary to do otherwise, permission must FIRST be obtained from the Train Dispatcher giving specific reasons why set out cannot or should not be made.
When setting out cars at intermediate stations, they will be spotted to proper location at time of set out. When possible, cars will be spotted not less than 400 feet from clearance point of switch.

Conductor will use Set Out and Pickup Report form to report cars set out or picked up at intermediate stations. All available information must be included.

## BADORDER SHIPMENTS:

If shipment is set out en route due to defect, conductor will notify the Train Dispatcher of the car number, contents, shipper, consignee, and detailed description of defect. The Train Dispatcher will then notify the appropriate Terminal Superintendent and the Customer Service Department to make arrangements to notify the Mechanical Department, shipper and consignee that their car has been set out and give approximate time the car will be moved to destination.

When loads are bad ordered at terminals, the Terminal Superintendent will notify Customer Service, who, in turn, will notify the shipper and consignee.

## DEFECTIVECARREPORTS:

These reports must be submitted even if no defects are noted. If no defects are noted, this must be reflected on report.

Passenger Trains: Form 22-1001P "Coach Inspection Report" must be completed for each coach by the completion of each trip, and left in a conspicuous location either in the dome car office, baggage car, or in a coach if there is no baggage car.

Other Than Passenger Trains: Conductors on freight trains will fill out a copy of Form 22-0156P "Conductor's Report of Defective Cars on Trip" for any defective cars on their trip. This form is to be submitted to the employee in charge at Anchorage or Fairbanks or, in the absence of an employee in charge, sent to the trains destination.

### 83.12 EXCESSIVE HEIGHT CARS AND LOADS

When handling excessive height cars or loads, especially passenger equipment, high cube box cars, loaded bi-level and tri-level auto racks, high cube trailers on flat cars (TOFC), or excessive height loads into warehouses, shops, freight house sheds or other buildings, the movement of this equipment or load must be protected to

## System Special Instructions

prevent damage to building, overhead equipment, roof projections and vehicles loaded on cars being spotted.

When operating conditions require the placing of this equipment to areas of close or restricted clearance, all concerned must protect the movement to prevent accident or injury.

### 83.13 CLEARANCE OF HIGH, WIDE AND HEAVY LOADS

For clearance of the following types of loads and cars, contact the Clearance Coordinator through the Customer Service Department:

- Loads and cars exceeding the dimensions shown in Special Instructions.
- Loads and cars longer than 90 feet over strikers.
- Double or triple loads.
- Loads with overhangs beyond the end of car.
- Loads with unequal distribution of weight on trucks.
- Cars exceeding the gross weight limits shown in Special Instructions or the stenciled capacity of the car.
- Shipments having a combined center of gravity of car and lading exceeding 90 inches above top of rail.

> Teamwork is our game plan for accident prevention.

### 83.14 LOADING CLEARANCE DIAGRAMS



## ALLOWABLE WIDTH WHITTIER TO PORTAGE



## MAXIMUM LOADING DIAGRAM FOR SINGLE CARLOADS

Above diagrams are for single carloadswithout overhangs beyondend of car and are based on cars with a length not exceeding 90 feet over strikers, 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.

## System Special Instructions

### 83.15 HEAVY LOADS

Maximum gross weight of car and lading in pounds on all subdivisions in 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 90 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 . Loads of greater dimensions or weights may be moved by special arrangement coordinated through the Customer Service Department, or as outlined in section 83.13.

### 83.16 STANDARD HOPPER CAR LOADING CAPACITY

The following will govern the maximum loading limits of hopper cars used in coal service:

| Hopper Series |  |  | Tare Weight <br> (approximate) | Gross Weight <br> (railcar and contents) |  |
| :--- | ---: | :--- | ---: | :---: | :---: |
| ARR | 7100 | - | 7199 | 57,600 | 215,000 |
| ARR | 14301 | - | 14349 | 49,600 | 215,000 |
| ARR | 14400 | - | 14449 | 53,800 | 215,000 |
| ARR | 14809 |  |  | 48,000 | 215,000 |
| ARR | 16000 | - | 16075 | 64,700 | 263,000 |
| ARR | 16100 | - | 16180 | 63,000 | 263,000 |
| ARR | 16200 | - | 16255 | 50,800 | 263,000 |
| ARR | $\mathbf{1 6 3 X X}$ | - | $\mathbf{1 6 3 X X}$ | $\mathbf{6 3 , 0 0 0}$ | $\mathbf{2 6 3 , 0 0 0}$ |
| ARR | $\mathbf{1 6 4 X X}$ | - | $\mathbf{1 6 4 X X}$ | $\mathbf{5 0 , 8 0 0}$ | $\mathbf{2 6 3 , 0 0 0}$ |
| ARR | $\mathbf{1 6 5 X X}$ | - | $\mathbf{1 6 5 X X}$ | $\mathbf{6 8 , 0 0 0}$ | $\mathbf{2 6 3 , 0 0 0}$ |
| CEFX | 61976 | - | 62038 | 65,00 | 263,000 |
| HPJX | 40515 | - | 40612 | 64,800 | 263,000 |
| JAIX | 99116 | - | 99145 | 65,700 | 263,000 |
| TNM | 20000 | - | 20104 | 65,000 | 263,000 |

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

Under these parameters, train can proceed without restriction. If these limits are exceeded, notify the Train Dispatcher before proceeding.

The following will govern the maximum loading limits of hopper cars used in commercial aggregate service:

| Hopper Series |  |  | Tare Weight <br> (approximate) | Gross Weight <br> (railcar and contents) |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| ARR | 16000 | - | $\mathbf{1 6 0 7 5}$ | $\mathbf{6 4 , 7 0 0}$ | $\mathbf{2 6 4 , 7 0 0}$ |
| ARR | 16100 | - | $\mathbf{1 6 1 8 0}$ | $\mathbf{6 7 , 5 0 0}$ | 267,500 |
| CEFX | 61976 | - | $\mathbf{6 2 0 3 8}$ | $\mathbf{6 5 , 7 0 0}$ | $\mathbf{2 6 5 , 7 0 0}$ |
| HPJX | 40515 | - | $\mathbf{4 0 6 1 2}$ | $\mathbf{6 4 , 8 0 0}$ | $\mathbf{2 6 4 , 8 0 0}$ |
| JAIX | 99116 | - | $\mathbf{9 9 1 4 5}$ | $\mathbf{6 5 , 7 0 0}$ | $\mathbf{2 6 5 , 7 0 0}$ |
| TNM | 20000 | - | $\mathbf{2 0 1 0 4}$ | $\mathbf{6 5 , 0 0 0}$ | $\mathbf{2 6 5 , 0 0 0}$ |

## In addition:

- No hopper car can be loaded with more than 100 tons of aggregate.
- Aggregate material must be evenly distributed throughout the car.
- No hopper car can exceed 268,000 pounds.

Under these parameters, train can proceed without authority or restriction. If these limits are exceeded, notify the Train Dispatcher before proceeding.

### 83.17 LOADING PLACEMENT OF TOFC CONTAINERS

On three-hitch fifth-wheel-equipped flat cars, when loading two trailers, they must be positioned either on the end stands or both trailers on the end of the car in the direction of train movement. When loading a single trailer, it must be positioned at the end of the car in the direction of train movement.

On two-hitch fifth-wheel-equipped flat cars, single trailers must be positioned at the end of the car in the direction of train movement.

When loading trailers which have the commodity wrapped with a protective covering, the trailer should, if possible, be located with the hitch secured on a stand in the direction of train movement to help prevent the wrapping material from loosening.

### 83.18 SLIDE ZONES

Beginning of slide zone will be indicated by signs reading "BEGIN SLIDE ZONE (No.)", located on right side of track in direction of approaching train. End of slide zone will be indicated by sign reading "END OF SLIDE ZONE (No.)", located to the left of track in direction of approaching train.

Advance slide zone warning signs will be placed one half mile in advance, except southward advance sign for slide zone 11 is placed seven tenths of a mile in advance, of slide zone sign located on right side of track in direction of approaching train and will be indicated by an international orange sign with the number of the slide zone in black lettering.

When conditions require, track warrant or track bulletin will be issued advising which slide zones are in effect. On receipt of these instructions, speed of train must not exceed 15 MPH . This restriction is only applicable to the portion of the slide zone where visibility is restricted. These restrictions end 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.

Advance permission may be obtained from the train dispatcher to back away from a slide over the tracks when operating in designated avalanche areas (Slide Zones 18 through 83 and F7). In order to clear the slide area, train may begin the back up movement in accordance with Rule 6.6 (Picking Up Crew Member), and may then continue in accordance with Rule 6.4 (Reverse Movement). Once train is stopped clear of the chute crew is to await further instructions.

## SLIDEZONES

| No. | Between | Reason |
| :---: | :---: | :---: |
| 11 | MP 11.3 \& 11.6 | Rock/Snow |
| 16 | MP 16.2 \& 16.6 | Snow* |
| 18 | MP 17.8 \& 18.5 | Snow* |
| 21 | MP 20.6\& 21.2 | Snow* |
| 43 | MP 42.6 \& 43.62 | Snow* |
| 49 | MP48.8 \& 49.8 | Snow* |
| 51 | MP 51.3\& 52.9 | Rock/Snow/Brush* |
| 53 | MP 52.9 \& 53.6 | Snow* |
| F 7 | MPF 6.73 \& F 6.91 | Snow* |
| 68 | MP67.2 \& 68.1 | Snow* |


| 70 | MP 69.2 \& 70.1 | Snow* |
| :---: | :---: | :---: |
|  | (MP69.9 a.k.a. Centerline) |  |
| 72 | MP71.2 \& 72.6 | Snow* |
|  | (a.k.a. Kern btw MP 71.2 and MP 71.5) |  |
| 76 | MP75.6 \& 80.6 | Snow*/Rock/Mud |
|  | (MP78.3 a.k.a. Whisky Gulch) |  |
| 78 | MP 78.0 \& 78.1 | Rock/Snow* |
| 83 | MP 82.4 \& 83.9 | Snow* |
| 87 | MP 86.9 \& 87.4 | Rock/Mud |
| 224 | MP 224.7 \& 224.9 | Sand/Brush/Rock/Snow |
| 233 | MP 232.8 \& 233.1 | Mud/Rock/Brush/Snow |
| 236 | MP 236.5 \& 237.0 | Mud/Rock/Brush/Snow |
| 237 | MP 237.0 \& 238.0 | Mud/Rock/Brush/Snow |
| 238 | MP 238.0 \& 239.0 | Mud/Rock/Brush/Snow |
| 239 | MP 239.7 \& 240.0 | Mud/Rock/Brush/Snow |
| 240 | MP 240.0 \& 241.1 | Mud/Rock/Brush/Snow |
| 241 | MP 241.5 \& 241.6 | Mud/Rock/Brush/Snow |
| 244 | MP 243.6 \& 244.1 | Mud/Rock/Brush/Snow |
| 246 | MP 246.2 \& 247.0 | Mud/Gravel/Rock/Snow |
| 247 | MP 247.0 \& 247.9 | Mud/Gravel/Rock/Snow |
| 254 | MP 253.4 \& 254.3 | Mud/Rock/Snow |
| 255 | MP 255.5 \& 255.8 | Rock/Snow/Brush/Trees |
| 259 | MP258.7 \& 260.05 | Rock/Snow/Brush/Trees |
| 266 | MP266.1 \& 266.3 | Gravel/Rock/Snow |
| 269 | MP 269.2 \& 269.9 | Rock/Brush/Snow |
| 286 | MP285.95 \& 287.0 | Rock/Dirt/Brush/Snow |
| 288 | MP287.9 \& 288.05 | Snow |
| 294 | MP293.1 \& 294.3 | Snow/Mud/Brush/Trees/Rock |
| 321 | MP320.9 \& 321.95 | Rock/Mud/Gravel/Brush |
| 325 | MP325.6 \& 325.75 | Rock/Gravel |
| 327 | MP 327.1 \& 327.8 | Rock/Mud |
| 328 | MP 328.8 \& 329.0 | Rock |
| 332 | MP 332.5 \& 332.7 | Snow/Trees/Brush |
| 334 | MP334.05 \& 334.15 | Rock |
| 336 | MP 335.9 \& 336.2 | Rock |
| 341 | MP 340.8 \& 341.7 | Rock/Trees/Brush/mud at n/e |
| 371 | MP 371.5 \& 371.7 | Rock/Mud |
| 383 | MP 382.4 \& 383.1 | Rock/Gravel |
| 384 | MP 384.2 \& 384.6 | Rock/Gravel |
| 415 | MP 414.5 \& 415.0 | Rock |

[^0]Only the Assistant Vice President, Maintenance, or an Avalanche Technician can permit a train to proceed through a downed avalanche.

### 83.19 AVALANCHE DETECTION SYSTEM

An avalanche detection system is in service at Slide Zone 72. The detector is located near the top of the avalanche chute between MP 71.2 and MP 71.5 , identified in warning message as "Kern". Various instruments are used by this detector to determine if an avalanche has released. Once an avalanche is detected the detector sends a signal to the radio base station, located at Portage, which will then broadcast an emergency warning message, "Possible Avalanche at Kern", on radio channel 2. It takes approximately 50 seconds, 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, if possible, stop movement before entering Slide Zone 72 between MP 71.2 and MP 71.5. After stopping, and after at least 50 seconds have passed, movement may continue at restricted speed, and in compliance with Slide Zone restrictions, until the main track in Slide Zone 72 is seen to be clear. Trains and on-track equipment receiving this emergency broadcast which cannot stop movement before entering the avalanche chute between MP 71.2 and MP 71.5 must take action to ensure that an occupied locomotive, coach, caboose or the on-track equipment will not be passing through, or end up stopped in, the avalanche chute. If necessary to stop notify the train dispatcher, who will contact an avalanche technician, for further instructions.

### 83.20 MOVEMENT OVER BRIDGES

The speed of trains must be controlled before crossing the following bridges so that no air application, and only minimal dynamic braking, will have to be made while train is upon these bridges, except in case of emergency or consistent with safe train handling:

Bridge 146.4 --------------------------------- Knik River
Bridge 284.2 ------------------------- Hurricane Gulch
Bridge 347.4 ---------------------------------- Riley Creek
Bridge 413.7 ----------------------------- Tanana River

### 83.21 DRAGGING EQUIPMENT DETECTORS AND/OR DEFECT DETECTORS

## General Information

Dragging equipment and/or defect detectors will notify train crew of any detected defect and/or dragging equipment via radio communication after train has cleared the detector circuit.

When defects are noted, the axle number of the defect will be given by type "B" and "C" detectors; type "A" and "D" do not give axle number of defect. Axle locations are counted from the head-end of the train, including the locomotives. For the purpose of this section, locomotive axles will be counted the same as cars. If inspection does not reveal a defect at the axle indicated, inspect 12 axles forward and 12 axles to the rear of the indicated axle. Inspect all 12 axles in each direction, even if a defect is found before reaching the twelfth axle.
When a detector alarm requires inspection, if applicable, inspect the side of the train in the message.

Trains receiving notification of hot bearing will use a $200^{\circ}$ temperature indicator stick, if available, to assist in determining whether the car must be set out. If the temperature indicator stick melts after contacting the indicated hot bearing, the car must be set out. Connecting or relieving crews must be advised of any unusual occurrences encountered at detector locations passed en route by inbound crew.

A sign reading "DD" may be attached to flanger boards preceding some detectors to alert train crews to monitor channel 4.

## Detector Malfunction (including no communication)

Detectors may communicate "detector malfunction" in the following circumstances:

- Powerfailure.
- 7 or more defects of the same type.
- Train movement through detector at approximately $8 \mathrm{~m} . \mathrm{p} . \mathrm{h}$. or less.
Trains receiving radio notification of "detector malfunction" or there is no communication after passing detectors may continue to the next detector location, except under the following conditions:
- Train will not pass a second "A", "B", or "C" detector location or will not receive an inspection before entering a
terminal (i.e.; MP 123 detector malfunctions for southbound train and car inspector not in position to give "roll-by" inspection at north end of yard, then crew must stop and inspect train before entering Anchorage terminal).
- An alarm tone sounds while passing the detector.
- Detector advises there is dragging equipment.
- Southward trains must stop and inspect train for any abnormal operation of detectors located at MP 417, MP 356.5, MP 348.2, and MP75.
- Northward trains must stop and inspect train for any abnormal operation of detectors located at MP 185.2, MP 225.7, MP 281.5 , and MP 405.

Trains receiving radio notification of "detector malfunction" or no communication after passing a second detector must stop and inspect train.

Notify Train Dispatcher any time a detector gives "detector malfunction" or "call maintainer" report.

### 83.21.1 Type "A", Dragging Equipment Detector.

- Dragging equipment detectors detect any equipment dragging on top of ties.
- Type A Detector locations are shown on the Station Columns.
- Operates on Channel 4


### 83.21.2 Type "B", Dragging Equipment/Hot Bearing Detector.

- Dragging equipment/hot bearing detectors detect any equipment dragging on top of ties and /or any hot bearings (ambient temperature plus $172^{\circ}$ Fahrenheit or $120^{\circ}$ Fahrenheit temperature variance between ends of same axle) and/or any hot wheels ( $600^{\circ}$ Fahrenheit).
- These detectors will communicate total axle count after train clears the circuit.
- Type B Detector locations are shown on the Station Columns.
- Operates on channel 4


### 83.21.3 Type "C", Dragging Equipment/Hot Bearing/Hot Wheel/High or Wide Clearance Detector.

- Dragging equipment/hot bearing/hot wheel/high or wide clearance detectors detect any equipment dragging on top of ties and/or any hot bearings (ambient temperature plus $172^{\circ}$ Fahrenheit or $120^{\circ}$ Fahrenheit temperature variance between ends of same axle) and/or any hot wheels ( $600^{\circ}$ Fahrenheit) and/or any high or wide clearances ( $19^{\prime} 4^{\prime \prime}$ high and/or $13^{\prime} 6^{\prime \prime}$ wide).
- Type C Detector locations are shown on the Station Columns.
- Type C Detectors use photo-optic sensors to detect high or wide clearance defects. These wide clearance detection devices are located 6' $9^{\prime \prime}$ from the track center.
- Trains crews receiving radio notification, "Clearance defect near axle $\qquad$ " followed by, "Detector Malfunction" at these detectors must stop and inspect their train.
- Operates on Channel 4
- Trains receiving notification of "clearance defect" within the locomotive consist or within a passenger, unit hopper or tank train, may continue without inspection.


### 83.21.4 Type "D", Dragging Equipment Detector.

- Dragging equipment detectors detect any equipment dragging on top of ties.
- Type "D" detectors operate on the applicable road channel at the location of the detector and will only communicate if activated by dragging equipment. Once this type detector is activated, it will not be operational again until reset by a signal maintainer.
- All Type "D" defect detector alarms are to be reported to the train dispatcher.
- Type "D" detector locations are not shown on Station Columns.


## System Special Instructions

Detector Type, Location and Operating Radio Frequency Chart:

| Location | Name | Channel |  |  | A | B | C |  | D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 456.2 | Dome | I | 4 | 1 | I | $\bullet$ |  |  |  |
| 417.7 | North Nenana | I | 4 | 1 | I | $\bullet$ |  |  |  |
| 413.0 | 413 Nenana | I | 1 | I | I |  |  |  | $\bullet$ |
| 405.4 | MP 405 | I | 4 | \| | I |  | $\bullet$ |  |  |
| 370.1 | Ferry | I | 4 | I | I | $\bullet$ |  |  |  |
| 357.5 | MP357.5 | I | 1 | I | I |  |  |  | $\bullet$ |
| 357 | MP357 | I | 1 | I | I |  |  |  | $\bullet$ |
| 356.4 | Garner | I | 4 | I | I |  |  |  |  |
| 355 | MP 355 | I | 7 | I | I |  |  |  | $\bullet$ |
| 353.9 | MP 353.9 | I | 7 | I | I |  |  |  | $\bullet$ |
| 353.5 | MP353.5 | I | 7 | I | I |  |  |  | $\bullet$ |
| 353.1 | Moody | I | 4 | I | 1 |  |  |  |  |
| 351.3 | MP 351.3 | I | 7 | I | I |  |  |  | - |
| 350.4 | Cascade | 1 | 4 | I | I |  |  | I |  |
| 348.9 | MP348.9 | I | 7 | I | I |  |  |  | - |
| 348.2 | Denali Park | 1 | 4 | I | I | $\bullet$ |  | I |  |
| - 345.0 | MP 345.0 | I | 7 | \| | I |  |  |  | - |
| 339.7 | MP 339.7 | 1 | 7 | I | I |  |  |  | - |
| 332.9 | MP332.9 | I | 7 | \| | I |  |  |  | - |
| 328.1 | MP 328.1 | I | 7 | I | \| |  |  |  | - |
| 322.5 | MP322.5 | I | 7 | I | I |  |  |  | - |
| 319.4 | Cantwell | I | 4 | I | I |  | $\bullet$ | 1 |  |
| 294.8 | MP 294 | I | 7 | I | I |  |  |  | - |
| - 290.5 | Honolulu | I | 4 | I | I |  |  | 1 |  |
| 286.5 | MP286 | I | 7 | I | I |  |  |  | - |
| 281.1 | Hurricane | I | 4 | \| | I | $\bullet$ |  | I |  |
| 276.0 | MP 276 | I | 7 | I | I |  |  |  | - |
| 270.4 | MP 270 | 1 | 1 | I | I |  |  |  | - |
| 261.0 | Gold Creek | I | 4 | 1 | 1 |  |  | I |  |
| 258.5 | MP 258 | I | 1 | I | I |  |  |  | - |
| 252.0 | MP 252 | I | 1 | I | I |  |  |  | - |
| 225.7 | Talkeetna Hwy | I | 4 | I | I | - |  | 1 |  |
| 206.2 | Parks Highway | I | 4 | I | 1 | $\bullet$ |  | I |  |
| 185.2 | Willow | I | 4 | I | I |  | $\bullet$ | 1 |  |
| 164.3 | Schrock-Pittman | I | 4 | I | I | $\bullet$ |  | I |  |
| 145.5 | Old Glenn Hwy | I | 4 | I | I | - |  | 1 |  |
| 123.0 | Loop Road | I | 4 | I | 1 | $\bullet$ |  | 1 |  |


| 104.6 | Ocean View | I | 4 |  | 1 | $\bullet$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 88.7 | Indian | I | 4 |  | 1 | $\bullet$ |  |  |  |  |
| 75.0 | Girdwood | I | 4 |  | 1 |  |  |  |  |  |
| 63.0 | Portage | I | 4 |  |  | - |  |  |  |  |
| 42.2 | Grandview | I | 4 | , | - 1 |  |  | 1 |  |  |
| 29.4 | Moose Pass | I | 4 |  | 1 | $\bullet$ |  | I |  |  |
| 18.4 | Primrose | I | 4 |  | 1 | $\bullet$ |  |  |  |  |
| 14.3* | Snow River | 1 | 4 | , | - |  | I |  |  |  |
| G4.2 | MPG4.2 | I | 4 |  | I |  |  |  | $\bullet$ |  |
| G3.6 | MPG3.6 | I | 4 |  |  |  |  |  | $\bullet$ |  |
| G1.5 | MPG 1.5 | I | 4 |  | I |  | I |  | $\bullet$ |  |

*Detector MP 14.3, Snow River, out of service until further notice. Trains are not required to inspect after passing this detector.

### 83.22 HIGHWAY CROSSING SIGNALS

Automatic crossing signals on auxiliary tracks at the following locations are activated with motion detectors. These signals will give a thirty-second warning when a train or engine is moving at 10 mph :

Arctic Blvd.

MP 109.4

Whitney Rd. at Post Rd. Psgr Main ..................... MP 115.3
Davis Highway ................................................... MP 119.1
Knik Goose Bay Rd. ................................................ MP 159.9
Old Willow Rd. ..................................................... MP 185.5
Automatic crossing signals on auxiliary tracks at the following locations will not be activated until the train or engine is within approximately 30 feet of the crossing:
Klatt Rd. MP 105.6
$100^{\text {th }}$ Ave.*
MP 106.7
N. Cordova
Psgr Main MP 114.7
N . Ingra
Psgr Main MP 114.9
*Can also be operated manually.

Crossing signals at C Street, MP 114.3, have been automated for movements on Passenger Main only. All movements over auxiliary tracks (team tracks) must be protected by manual start button lo-

## System Special Instructions

cated on the side of control cabinet. The ON-OFF switch is located inside box locked with switch lock. When ON switch is activated, a yellow strobe light located on top of control cabinet will flash to indicate the crossing signal is in manual ON and will continue to flash until OFF button is depressed.

Trains entering the main track at NSS Campbell, not otherwise governed by Rule 6.32.2, must not foul highway crossing MP 110.75 until the warning device has been operating long enough to provide warning and the crossing gates are fully lowered.

Trains entering the main track at SW MP 115.4, not otherwise governed by Rule 6.32.2, must not foul high way crossing MP 115.3 until the warning device has been operating long enough to provide warning and the crossing gates are fully lowered. There is a sign reading "Crossing Start" at the south end of the North Yard Lead track indicating the beginning of the crossing signal circuit. Equipment must not be left standing inside this track circuit, as it will cause a short warning at the crossing for a southbound train on the main track.

Crossing signals for Post Rd. at $1^{\text {ST }}$ Avenue, K\&L Spur, and N.C. Machinery Spur can only be operated manually.

Trains moving on Wasilla siding, not otherwise governed by Rule 6.32.2, must not foul Knik-Goose Bay Road highway crossing, MP 159.9, until the warning device has been operating long enough to provide warning and the crossing gates are fully lowered.

Unless movement is delayed a sufficient time to allow a minimum of twenty (20) seconds advanced warning of automatic crossing signals, crossing must be protected in accordance with GCOR Rule 6.32.2.

Anything that affects the operation of railroad crossing signals such as broken bonds, lights out, damage to battery boxes, etc., must be reported immediately to the Train Dispatcher.

No one will alter, modify, turn off, or in any other way make changes to the operation of an automatic or manually operated signal device without the specific authority to do so from the Supervisor, Signaling.

Upon discovery or notification of a crossing signal malfunction, any employee must immediately notify the Train Dispatcher by the quickest means available. The Train Dispatcher must notify the Special Agent or police having jurisdiction over the crossing and each train prior to its arrival at the affected crossing.

Trains or equipment must not cause unnecessary activation of highway crossing signals. If necessary to stop at 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.

Exception: Trains or equipment must not stop in the approach to the following highway crossing signal circuits because they are not equipped with motion detectors and will not reset:

MP 117.15 ........ Post Road
MP 279.65 ........ Hurricane
MP 305.50 ........ Broad Pass
MP $313.96 \ldots . . .$. Summit
MP 392.96 ........ ClearSite
MP G 1.88 ........ Old Steese
MP G 1.92 ........ New Steese
MP G 5.07 ........ Neely Road
MP G 9.31 ........ Bradway Road
MP G 16.30 ........ 5th Ave.
MP G 17.55 ........ Laurence Road

### 83.23 GRADE CROSSING/HIGHWAY CROSSING CROSS REFERENCE

## $\underline{\text { ARRC Mile Post Location }}$

2.3 ARR Roundhouse Rd.
2.9 Airport Road
3.5 Nash Road
4.3 Subdivision Rd.
5.2 Subdivision Rd.

## Highway Location

East of Seward Hwy MP 2.2
East of Seward Hwy MP 2.8
East of Seward Hwy MP 3.5
Off Nash Rd.
East of Seward Hwy MP 5.2

| 6.3 | Lake Drive | East of Seward Hwy MP 6.3 |
| :---: | :---: | :---: |
| 6.7 | BearLake Road | East of Seward Hwy MP 6.7 |
| 12.2 | Seward Hwy Overpass | Seward Hwy MP 12, Divide |
| 14.3 | Seward Hwy Overpass | Seward Hwy MP 14, Snow River |
| 18.2 | Seward Hwy Overpass | Seward Hwy MP 18, South KenaiLake |
| 23.7 | Crown Point Crossing | Seward Hwy MP 23.4 |
| 29.2 | Moose Pass | Seward Hwy MP 29 |
| 62.9 | Portage Glacier Road | East of Seward Hwy MP 79 |
| 64.66 | Portage Parking Lot | Seward Hwy MP 80 |
| 74.7 | Alyeska Hwy Overpass | Girdwood, 3 mi. East of Seward Hwy |
| 75.0 | DOT Maintenance Rd. | Girdwood, 3 mi. East of Seward Hwy |
| 77.7 | Utility Maintenance Rd. | East of Seward Hwy |
| 80.9 | Seward Highway Underpass | Seward Hwy MP 95.9 |
| 102.8 | Rabbit Crk Rifle Range | Seward Highway MP 117 |
| 104.6 | Ocean View Drive | West of Seward Highway |
| 105.3 | East 120 ${ }^{\text {th }}$ Avenue | West of Seward Highway |
| 105.6 | Klatt Road | West of Seward Highway |
| 106.2 | O'Malley Dr. Overpass | West of Seward Highway |
| 106.45 | East 104 ${ }^{\text {th }}$ Avenue | West of Seward Highway |
| 106.67 | East 100 ${ }^{\text {th }}$ Avenue | West of Seward Highway |
| 107.7 | Dimond Blvd. Overpass | West of Seward Highway |
| 108.2 | $67^{\text {th }}$ Avenue Overpass | West of Seward Highway |
| 108.8 | Raspberry Rd. | Off C St. |
| 108.9 | C Street | North of Raspberry Road |
| 109.4 | Arctic Blvd. | South of Int'l Airport Road |
| 110.0 | Int'l Airport Overpass | East of Minnesota Drive |
| 110.4 | Minnesota Dr. Overpass | North of Int'l Airport Road |
| 110.7 | $44^{\text {th }}$ Avenue | West of Minnesota Drive |
| 111.0 | Spenard Road | West of Minnesota Drive |
| 111.3 | $36^{\text {th }}$ Avenue | West of Minnesota Drive |
| 111.7 | Northern Lts. Overpass | West of Minnesota Drive |
| 114.4 | Anchorage Depot | $1{ }^{\text {st }}$ and C Street |
| 114.7 | North Cordova | $1{ }^{\text {st }}$ Ave./Warehouse Ave. |
| 114.9 | North Ingra | $1{ }^{\text {st }}$ Ave./Warehouse Ave. |
| 115.3 | Whitney Road | West of Post Road |
| 117.1 | Post Road | North EAFB Post Road Gate |
| 119.8 | Davis Highway | East of EAFB Spur Road |


| 122.9 | Loop Road | Otter Lake, Fort Richardson |
| :---: | :---: | :---: |
| 128.0 | Artillery Road | West of Eagle River on Fort Richardson |
| 133.2 | Bible Camp Road | A.k.a. Beach Lake, West of S. Birchwood Loop, : mi. North of Glenn Hwy MP 17.2 |
| 136.3 | North Birchwood Road | 1.7 mi. North of Glenn Hwy MP 21 Near Birchwood Airport |
| 141.9 | Eklutna Village | 2 mi. West of Glenn Hwy MP 26.3 |
| 142.35 | Glenn Hwy Overpass | Glenn Hwy MP 26.8 |
| 145.5 | Old Glenn Highway | $3 / 4 \mathrm{mi}$. East of Glenn Hwy <br> MP 29.6 |
| 151.6 | Glenn Highway | Glenn Hwy MP 34.9 . 1 mi . South of Glenn/Parks Hwy Junction |
| 155.3 | Abby Boulevard | West of Fairview Loop, Parks Hwy MP 38 |
| 156.2 | Fairview Loop Road | 12 mi. West of Parks Hwy MP 38 |
| 157.1 | Jude Road | Sewer Plant |
| 158.6 | Glenwood Road | Palmer Wasilla Highway |
| 159.9 | Knik-Goose Bay Road | $100^{\prime}$ West of Parks Hwy MP 42.2 |
| 160.8 | Snyder Road | 100' West of Parks Hwy <br> MP 44 |
| 161.2 | Lucille Lane (Halleah) | 100' West of Parks Hwy MP 45 |
| 162.3 | Church Road | $600^{\prime}$ West of Parks Highway MP46 |
| 164.2 | Parks Highway | Parks Highway MP 46.6 |
| 166.3 | Pittman Road | East of Parks Hwy MP 48.7 |
| 167.3 | Meadow Lakes | 2 mi. East of Parks Hwy <br> MP 49.5 |
| 171.28 | Parks Highway | East of Parks Highway MP 54.7 |
| 173.0 | Houston/Parks Hwy | Parks Highway MP 56.4 |
| 182.7 | Whites Underpass | Parks Highway MP 66.5 |
| 185.5 | Old Willow Road | East of Parks Highway |
| 186.9 | Hatcher Pass Road | Parks Highway MP 71.2 |


| 193.5 | Kashwitna Road | Just North of Parks Hwy MP 78 |
| :---: | :---: | :---: |
| 198.0 | Kashwitna Estates | East of Parks Highway MP 83 to end of road then turn right. |
| 202.94 | Hidden Hills Access Rd. | .3 mi . East of Parks Hwy MP 88 |
| 206.2 | Parks Highway | Parks Highway MP 91.7 |
| 209.5 | Lankford Farm | 2 mi. West of Parks Hwy MP 95.5 |
| 214.0 | Sunshine/Parks Hwy | Parks Highway MP 100.4 |
| 225.7 | Talkeetna Road | Talkeetna Road MP 13.3 |
| 226.4 | FAA Road | Off Talkeetna Road |
| 279.6 | Hurricane/Parks Hwy | Parks Highway MP 169 |
| 298.0 | Gold Mine Road | Parks Highway MP 186.8 |
| 305.5 | Broad Pass/Parks Hwy | Parks Highway MP 194.3 |
| 313.9 | Summit/Parks Hwy | Parks Highway MP 202.1 |
| 319.0 | Cantwell | East of Parks Hwy MP 209.9 |
| 345.0 | Parks Highway | Parks Highway MP 235.1, Just South of Denali Park |
| 346.6 | Parks Hwy Overpass | Parks Highway MP 236.7 |
| 348.2 | Denali Park Road | 1 mi. West of Parks Hwy MP 237.3 |
| 360.0 | Healy Underpass | Healy Spur Road |
| 362.1 | Usibelli Tipple Access |  |
| 371.1 | Ferry Road | . 1 mi. North of Nenana River Crossing |
| 386.2 | Rex/Parks Highway | Parks Highway MP 276. |
| 388.0 | 388 Pit | East off Parks Hwy MP 386.5 about $13 / 4 \mathrm{mi}$. to pit |
| 392.9 | Clear AFB Road | 2 mi. West of Parks Hwy <br> MP 283 |
| 395.1 | Anderson Road | Anderson Hwy (Off Clear AFB Road) |
| 405.0 | 405 Detector | West of Parks Hwy MP 298.9 towards radio tower |
| 411.31 | Nenana Underpass | Parks Highway MP 304.5 |
| 415.4 | FAA Road | A.k.a. North Nenana. East off Parks Hwy MP 306.2 |
| 416.1 | Nenana Dump Road | Parks Hwy MP 306.8 (locked city gate) |


| 417.7 | Monderosa(Parker's Patch) | Parks Highway MP 308.8 |
| :---: | :---: | :---: |
| 420.0 | Agricultural Access | A.k.a. Manley. West off Parks Hwy MP 310.8 to cleared area is MP 420, another $1 / 2 \mathrm{mi}$. is Manley siding |
| 422.7 | Runyon Crossing | West of Parks Hwy MP 314.5 ("Runyon" sign on mailbox) over Little Gold Stream Bridge. . 4 mi. south of bridge turn right on 1st major gravel rd., then $3 / 4 \mathrm{mi}$. to tracks |
| 443.4 | Standard Ck. Logging Rd. | West of Parks Hwy MP 343 on Old Nenana Hwy 2 mi. to 1st major gravel rd, turn left, then 8 mi. to tracks |
| 453.0 | Martin Siding | Murphy Dome Rd., about 3 mi. past Dome over bridge, 4 up the hill, turn left on Cache Ck. Rd. for about 150 feet, then left to old road bed |
| 456.2 | Dome | MP 5.5 Murphy Dome Rd, turn left to stop sign and gate |
| 459.8 | Gold Mine Crossing | Sheep Ck. Rd. to Murphy Dome Rd., turn left, then about $11 / 2 \mathrm{mi}$. to 1 st major road on left (gravel pit on right), then $1 / 2 \mathrm{mi}$. to tracks |
| 461.3 | $2^{\text {nd }}$ Sheep Creek Road | A.k.a. Goldstream. Take Sheep Creek Rd. west of Parks Hwy MP 355.8, past Ester crossing, turn left at stop sign, then past Happy crossing to next crossing |
| 462.8 | Happy/1 ${ }^{\text {st }}$ Sheep Creek | Sheep Creek Rd. West of Parks Hwy MP 355.8 past Ester crossing, turn left at stop sign |
| 465.5 | W. Tanana/Gold Hill Rd. | A.k.a. Ester crossing (Old Sheep Ck.) West on Sheep Ck. Rd. off Parks Hwy to 1st road crossing. |

466.1 ExperimentalFarm
467.7 University Avenue
470.3 Passenger Depot

Geist Rd. to Fairbanks St., turn right toward UAF, turn left on Tanana toward Sheep Ck. Rd. (runs parallel to tracks), take 1st dirt rd. to the left (before getting to UAF Experimental Farm)
University and Johannsen Expressway Fairbanks

### 83.24 RADIO COMMUNICATIONS

Dispatcher, Maintenance of Way, and Yard (except channel 6) radio frequencies all have 911 emergency call-in capability. Once activated, the radio will answer back with a short tone, followed by three beeps, then another short tone, acknowledging the call has been received by the dispatcher radio system.

## RADIOS

Communications may be established on these channels as follows:
Channel01 - Train to Train/Alternate Dispatcher
Channel02 - Train to Dispatcher*\#
Channel 03 - Yard Operations
Channel 04 - Gravel/Coal/Yard Operations
Channel 05 - Yard Operations
Channel 06 - Yard Operations
Channel07 - Train to Train/Alternate Dispatcher
Channel 08 - Train to Dispatcher *\#
Channel 09 - Radio Telephone**
Channel 10 - Radio Telephone**
Channel 11 - Radio Telephone**
Channel 12 - Maintenance of Way
Channel 13 - Maintenance of Way
Channel 14 - Maintenance of Way
Channel 15 - Maintenance of Way
Channel 16 - TOFC
*See Section 83.25 for operation
** See Section 83.26 for operation
\# All communications in Whittier Subdivision tunnels must be on channel 2.

| RADIO COMMUNICATIONS |  |
| :--- | :--- |
| Seward to Portage | Channels $1 / 2$ |
| Whittier to Portage | Channels $1 / 2$ |
| Portage to Anchorage | Channels $1 / 2$ |
| Anchorage to MP 162 | Channels 1/2 |
| MP 162 to MP 223 | Channels 7/8 |
| MP 223 to MP 274 | Channels 1/2 |
| MP 274 to MP 356 | Channels 1/2 |
| MP 356 to Fairbanks |  |

Signs are mounted at MP 162, MP 223, MP 274, and MP 356 as a reminder to change radio channel.

Trains operating on main track, outside yard limit territory, which are communicating on other than channels 1 and 2 or 7 and 8 , will also arrange to monitor the train to dispatcher or the train to train channels.

## Radio Approximate Coverage Map Follows:



### 83.25 DISPATCHER CALL ON TOUCH PADEQUIPPED RADIOS

To call dispatcher enter two digit call code for area as shown below:

| Base Radio Call Code | Base Radio Call Code |
| :---: | :---: |
| Seward .......................... 00 | Talkeetna ....................... 03 |
| Moose Pass ................... 02 | Talkeetna (use ch. 1) ....... 03 |
| Hunter .......................... 01 | Gold Creek ..................... 04 |
| Whittier ........................ 03 | Gld Crk Alt (use ch. 1) ..... 04 |
| Whittier Tunnels ............ 05 | Hurricane ....................... 05 |
| Portage ......................... 04 | Cantwell ........................ 06 |
| Anchorage South ............ 05 | Carlo (Ch.7) .................. 03 |
| Anchorage Ch. 4 ............. 00 | Denali Park ..................... 01 |
| Anchorage .................... 00 | Healy ............................ 00 |
| Wasilla (Ch. 7) ............. 02 | Healy Ch. 4 .................... 04 |
| Wasilla (Ch.1) ............. 02 | Rex .............................. 05 |
| Houston ....................... 01 | North Nenana ................. 02 |
| Willow (Southward) ....... 05 | Fairbanks ....................... 03 |
| Willow (Northward) ....... 06 | Fairbanks Ch. 3 .............. 03 |

NOTE: Both digits (include the preceding zero) must be used.
The district 1 train dispatcher authorizes main track movements between Seward and Pittman, including the Whittier Subdivision. The district 2 train dispatcher authorizes main track movements between Pittman and Fairbanks. The telephone number to district 1 dispatcher is 265-2315; the telephone number to district 2 train dispatcher is 265-2316.

Southward trains at Palmer Junction use channel 2 to call-in to the district 1 train dispatcher and northward trains at Palmer Junction use channel 8 to call-in to the district 2 train dispatcher.

Southward trains at Willow use call-in code 05 to contact the district 1 train dispatcher and northward trains at Willow use callin code 06 to contact the district 2 train dispatcher.
Report problems with these, or any other, radios by calling the communication trouble-line message recorder at extension 2370. Give specific and detailed information about the communication problem when leaving a message.

## System Special Instructions

### 83.26 RADIO TELEPHONE OPERATION

For dial tone, enter [ $* 1$ ], then dial number.
To disconnect, enter [ \# ]; MUST be used when through conversing. To call a radio telephone on the same base station as you are, enter [ * 1 ], wait for beep, then dial " 00 ".

## RADIO TELEPHONEBASESTATIONNUMBERS

| Seward | Channel 11 | 2627 |
| :--- | :--- | :--- |
| Moose Pass | Channel 09 | 2627 |
| Portage | Channel 10 | 2667 |
| Campbell Point | Channel 09 | 2668 |
| Site Summit | Channel 11 | 2629 |
| Wasilla/Palmer | Channel 10 | 2335 |
| Talkeetna | Channel 10 | 2331 |
| Hurricane | Channel 09 | 2633 |
| Cantwell | Channel 11 | 2637 |
| Healy | Channel 10 | 2332 |
| Nenana | Channel 09 | 2654 |
| Fairbanks | Channel 11 | 2333 |

To make an emergency call from a radio telephone to FIRE/POLICE/ MEDICAL, enter [ $* 1$ ], wait for dial tone, enter [ 9 ] for commercial dial tone, then enter [ $\left.\begin{array}{lll}9 & 1 & 1\end{array}\right]$. It may take up to ten seconds for the operator to answer - do not hang up. This rings into the Anchorage 911 office, they can connect you with the service you need.

Dial [ $* 1$ ], wait for dial tone, then dial the three-digit code shown below first to access the following area telephone exchanges toll free:
Seward/Moose Pass ........ 821, then local number
Whittier ........................... 826, then local number
Anchorage ...................... 9, then local number
Mat-Su Valley ................ 824, then local number
Healy/Denali Park ............ 822, then local number
Fairbanks ...................... 823, then 9, then local number

Radio-telephone base station radios time-out after 12 minutes of continuous use. Enter [ $*$ ] within this time period, or after hearing a short beep, to reset the timer.

### 83.27 RADIO BASE AND WAYSIDE STATION LOCATIONS, TIMES ATTENDED AND ASSIGNED CHANNELS

Base
\(\left.$$
\begin{array}{lcl}\text { Station } & \text { Channel } & \begin{array}{l}\text { Service and Attended }\end{array} \\
\text { Seward } & 1,5 \& 6 & \begin{array}{l}\text { 24 hours unattended } \\
\text { Whittier }\end{array}
$$ <br>
Anchorage Yard hours unattended, <br>
except during barge- <br>
switching operations <br>

Generally attended be-\end{array}\right]\)| tween 0700 and 2300 |
| :--- |
| *Press 00 while on chan- |
| nel 5 as alternate way to |
| contact the terminal. |
| Usibelli Tipple |

### 83.28 MAINTENANCE OF WAY RADIOS

To call Engineering office, use call-in code 19.
To call dispatcher, use call-in code 20.

| Base Radio | Channel |  | Base Radio |  |
| :--- | :---: | :--- | :--- | :---: |
| Sewannel |  |  |  |  |
| Seward | 12 |  |  |  |
| Moose Pass | 14 |  | Talkeetna | 15 |
| Portage | 15 |  | GoldCreek | 12 |
| Whittier | 12 |  | Hurricane | 13 |
| Campbell Point | 14 |  | Cantwell | 14 |
| Anchorage | 15 |  | Denali Park | 12 |
| Willow | 12 |  | Garner | 15 |
|  |  |  | North Nenana | 13 |
|  |  |  | Ester Dome | 12 |

## System Special Instructions

### 83.29 GAME ANIMALS/LIVESTOCK

When trains hit any large animal, train will come to a complete stop and train inspection will be made, except when it is known animal is clear of track and will cause no danger to movement of trains.

Whenever any animal is struck or killed by trains, a report must be made to the Train Dispatcher immediately.

### 83.30 FIXED SIGNALS

The following fixed signals will indicate information as shown.

### 83.30.1 Advance Yard Limit Sign

Indicates yard limit territory 1 measured mile ahead.


### 83.30.2 Yard Limit Sign

Indicates beginning of yard limits. When displayed on left-hand side of track, it indicates leaving yard limits.


### 83.30.3 Flanger Sign

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


### 83.30.4 Measured Mile Signs

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


### 83.30.5 Advance Warning Speed Control Sign

Placed $1 / 2$ mile in advance of a permanent speed restriction. Train or engine must be so controlled as to not exceed speed specified $1 / 2$ mile beyond. Black numbers on yellow sign.


## System Special Instructions

### 83.30.6 Speed Control Sign

Indicates 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.


### 83.30.7 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.


Be safe, stay alert, chances are you won't get hurt.

### 83.30.8 Speed Control Sign

Indicates the end of the speed restriction shown on the preceding speed control sign and the beginning of the speed restriction as shown. Speed of train or engine must not be increased to the speed shown on this sign until last car of train or engine has passed this sign. Yellow sign with black numbers if adjacent speed restriction is less than first one. Green sign with yellow numbers if adjacent speed is greater than the first restriction.


### 83.30.9 Advance Warning Slide Zone Sign

Placed $1 / 2$ mile in advance of slide zone.


### 83.30.10 Slide Zone Sign - Front

Indicates beginning of a slide zone. Speed of train must be controlled as per Timetable Special Instructions.


### 83.30.11 Slide Zone Sign - Back

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


### 83.30.12 Station Warning Sign

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


### 83.30.13 Road Crossing Warning Sign

Placed $11 / 4$ mile in advance of road crossings. Sound engine whistle as directed by Rule 5.8.2(11). Sound engine bell as directed by Rule 5.8.1.


### 83.30.14 Bridge and Tunnel Warning Sign

Placed approximately $1 / 4$ mile in advance of bridges and tunnels. Sound engine whistle as directed by Rule 5.8.2(11).


### 83.30.15 Mile Post Sign



### 83.30.16 Bridge Sign

347.4
83.30.17 Tunnel Approach Sign


### 83.30.18 Station Sign



### 83.30.19 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.

### 83.30.20 Derail Post

Displayed where short stand derail is located.


### 83.30.21 Advance Restricted Clearance Sign

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


### 83.30.22 Restricted Clearance Sign

Placed at the point where clearance is restricted.


### 83.30.23 End of Track Sign



### 83.30.24 End Block Sign

Indicates the end of a signal block.


### 83.30.25 Begin Block Sign

Indicates the beginning of a signal block.


### 83.30.26 Temporary Speed Restriction Sign (yellow signal with green numbers) used on Auxiliary Tracks and Main Tracks within Yard Limits

A yellow signal with green numbers displayed on the righthand 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 backside of this same signal displayed on the left-hand side of the track. This sign is an exception to GCOR.


### 83.30.27 Malfunctioning Automatic Crossing Warning Signal Sign (white signal with red stripes)



When viewed at a signalized crossing on the right side of the track, as viewed from an approaching engine, this signal indicates the automatic crossing warning signals may not operate properly. Movement over the crossing must be protected as prescribed by Special Instructions whenever this signal is displayed. When this signal is displayed on the left side of the track, as viewed from an approaching engine, it indicates the end of the restriction. Any crossings between these signals must be protected as prescribed by Special Instructions. This signal will only be displayed where Rules 6.27 and 6.28 apply.

### 83.30.28 Begin CTC Sign

Indicates the beginning of centralized traffic control.


### 83.30.29 End CTC Sign

Indicates the end of centralized traffic control.


### 83.31 DETERMINING NUMBER OF HAND BRAKES TO APPLY

Refer to specific operating instructions/procedures for the proper number of hand brakes to be applied. If not provided, use the following table to determine the minimum number of hand brakes to apply or wheels to block to hold equipment on a grade.

| Row | Grade | Number of Cars on Which to <br> Fully Apply Handbrakes |
| :---: | :---: | :---: |
| A | Level | 1 for every 50 |
| B | $0.1 \%-1.0 \%$ | 1 for every 6 |
| C | $1.1 \%-2.0 \%$ | 1 for every 4 |
| D | Greater than $2.0 \%$ | 1 for every 2 |

### 83.32 SIGNAL ASPECTS AND INDICATIONS, GCOR RULE 9.1

Distant, block, and interlocking signal aspects are shown at the back of this timetable.

### 84.0 GENERAL CODE OF OPERATING RULES

All rules in the General Code of Operating Rules (GCOR [forth edition, effective April 2, 2000]) are in effect on the Alaska Railroad (ARRC) with the issuance of this Timetable, except as follows:

- GCOR Rule 1.5 add and change the following:
- Measurable alcohol is defined to be .02 percent or greater breath alcohol content.
- The use or possession of alcoholic beverages while on duty is prohibited. Employees must not have any measurable alcohol in their breath or in their bodily fluids when reporting for duty or while on duty. The use or possession of intoxicants, over-the-counter or prescription drugs, narcotics, controlled substances, or medication that may adversely affect safe performance is prohibited while on duty, except medication that is permitted by a medical practitioner and used as prescribed. Employees must not have any prohibited substances in their bodily fluids when reporting for or while on duty.
- GCOR Rule 1.11.1 does not apply on ARRC.
- GCOR Rule 1.41 does not apply on ARRC.
- GCOR Rule 5.4.5, second bullet, changed to read:
- Place a green flag at the end of each speed restriction.

Diagram A is changed to show:


- GCOR Rule 5.4.8, delete first paragraph and reissue as follows:
- Flags will be displayed on the track affected. Flags must also be placed to protect all possible access to the restricted area.
- GCOR rule 5.8.1, add and change the following:
- While passing passenger stations.
- While switching in buildings and shop areas.
- GCOR Rule 5.8.2 add the following:
- When other employees are working in the immediate area, sound the required whistle signal before moving. Whenever roadway workers are seen to be on or near the tracks, sound the required whistle signal. Roadway workers can be identified by an orange hard hat or a reflective yellow strip on the front, back, and sides of their hard hat.
Whistle signals should be sounded as shown on the following chart. The radio may be used in place of whistle signals, except signals 1 and 11 .
- GCOR Rule 5.11 is changed to read as follows:
- Trains will be identified by engine number, adding the direction when required. When an engine of another company is used, the initials of the company will precede the engine number. When an engine consists of more than one unit or when two or more engines are coupled, the number of one unit only will be illuminated as the identifying number. When practical, use the number of the leading unit.
- GCOR Rule 6.8 , change the following:
- A train entering a siding that may be met or passed must stop at least 400 feet from the signal or clearance point of the facing point switch the other train will pass over, if length of train permits.
- GCOR Rule 6.10, is changed to read as follows:
- All crew members must remind the engineer that the train is approaching an area restricted by:
- Limits of authority

At known meeting points, immediately after passing the last station prior to the meeting point, all crew members must remind the conductor or engineer to call the opposing train to verify the requirements of the trains at the meeting point. If the identifying engine number of the opposing train is not known, the conductor or engineer will refer to them as "the train authorized to
$\qquad$ ".

- Track warrant
or
- Track bulletin

All crew members must inform the engineer after the train passes the last station, but at least 2 miles from the restriction. If the engineer fails to comply with the restriction, the conductor or other crew member must stop the train.

- GCOR Rule 6.11, Spacing Trains, does not apply on ARRC.
- CCOR Rule 6.23, Emergency Stop or Severe slack Action, add the following:
- When a train or engine is stopped by an undesired emergency application of the brakes or severe slack action occurs while stopping, the train crew must consider the following when determining whether an inspection of the train is necessary:
- severity of slack action
- commodities being handled in train
- whether it is a recurring undesired emergency brake application or an isolated incident.
If the above factors have been considered and it is the crew's determination that an inspection is unnecessary, train may proceed without inspection.
- GCOR Rule 6.32.1, is reissued as follows:
- When cars are shoved over road crossings at grade, a crew member must be on the ground at the crossing to warn traffic until the crossing is occupied. Make any movement over the crossing only on the crew member's signal. This procedure is not required when:
- at signalized crossings, the signals are working and, if so equipped, the gates are in the fully lowered position; or
- the movement is controlled by a crew member on the leading car, or,
- it is clearly seen that no traffic is approaching the crossing.


## GCOR Changes and Exceptions

- GCOR Rule 6.32.2, Automatic Crossing Devices, is changed as follows:
- Under any of the following conditions, a movement must not foul a crossing equipped with automatic warning devices until the device has been operating long enough to provide warning and the crossing gates, if equipped, are fully lowered.
- Movement has stopped within 3,000 feet of the crossing.
- Movement is within 3,000 of the crossing and speed has increased by more than 5 MPH .
- Movement is closely following another movement.
- Movement is on other than a main track or siding. or
- Movement enters a main track or siding within $\mathbf{3 , 0 0 0}$ feet of the crossing.
A. Automatic Warning Devices Malfunctioning Use the following table to properly complete movement over the crossing:

| Movement When Automatic Warning Devices <br> Are Malfunctioning |  |
| :--- | :--- |
| If ... | Then ... |
| Someone is not at the crossing to <br> provide warning. | Stop before occupying the <br> crossing. <br> After a crew member is on <br> the ground at the crossing <br> to warn highway traffic, <br> proceed over the crossing <br> on hand signals from that <br> crew member, <br> or <br> If devices are seen to be <br> working, or when <br> instructed by the train <br> dispatcher, proceed over <br> the crossing at 15 MPH <br> without stopping until <br> the head end of the train <br> completely occupies the |
| crossing. Then proceed |  |
| at normal speed. |  |$|$|  |  |
| :--- | :--- |
| The crew is notified that the <br> crossing has one equipped flagger <br> who is unable to provide warning <br> in all directions of approaching <br> traffic. | Proceed over the crossing <br> at 15 MPH without stopping <br> until the head end of the <br> train completely occupies <br> the crossing. Then proceed <br> at normal speed. |
| The crew is notified that the <br> crossing has one or more <br> equipped flaggers who are able to <br> provide warning in all directions of <br> approaching traffic. | Proceed over the crossing <br> at normal speed without <br> stopping. |
| NOTE: An equipped flagger is a person other than a crew <br> member who is equipped with an orange vest, orange shirt or <br> orange jacket. At night, the vest, shirt or jacket must be <br> fluorescent. The flagger must have a red flag or stop paddle by <br> day and a light at night. | When advised by the train dispatcher that the malfunctioning <br> automatic warning devices have been repaired these <br> restrictions no longer apply. |

- GCOR Rule 7.6, add the following:
- Apply a sufficient number of handbrakes, except each locomotive left unattended must have its handbrake applied, to prevent movement.
- GCOR Rule 7.12 , change the following:
- Stop the movement before the end of track.
- GCOR Rule 8.2 , change the following:
- The employee must not allow movement to foul a main track switch until the hand-operated switch or derail is properly lined.
- GCOR Chapter 11 does not apply on ARRC.
- GCOR Chapter 12 does not apply on ARRC.
- GCOR Chapter 13 does not apply on ARRC.
- GCOR Rule 14.4, Occupying Same Track Warrant Limits, Item 5 is added as follows:

5. Radio Blocking

In non-signaled territory, more than one train may be authorized within the same or overlapping limits, provided that the following train:

- Is notified on the track warrant of the identity of the preceding train.
- Does not foul the limits ahead of the preceding train.
- Is notified by the preceding train that the entire train has passed a specific location. Location specified must not be beyond limits indicated. The following words must be used: "(Train) has passed (location)."
- Does not proceed beyond the last location the preceding train has reported to have passed.
All instructions between the trains must be written, repeated and acknowledged with "That is correct" before being acted on. These written instructions (in format show below) between the trains must be retained until the end of tour of duty.
Written Instructions Between Trains:
(Preceding Train ID) has passed (Specific Location) at (Time)
When all available lines on track warrant form have been filled in, new track warrant authority must be obtained. Notify the train dispatcher if communication cannot be established between the two trains. If necessary, radio
blocking information may be relayed only by the train dispatcher.
The last named point of the following train's authority must not extend beyond the authority of the preceding train.
The conductor must remind the engineer that they are approaching the location last reported passed by the preceding train not less than two miles from that location. If the engineer fails to acknowledge this information, the conductor must take further action to stop the train.
In the application of Rule 6.4 (Reverse Movements) and Rule 6.6 (Picking Up Crew Member), the movement must not go beyond the last specific location reported to the following train.
- GCOR Rule 14.11, the following line is canceled:
- When a track warrant of a previous date is voided, the date must be included.
- GCOR Rule 14.13, add the following:
- A mechanically transmitted track warrant MUST NOT BE ACTED UPON until comparison of the track warrant has been made with the train dispatcher.
- GCOR Rule 14.14, Employee Reporting Clear of Track Warrant Limits is added as follows:
An employee reporting clear of track warrant limits must inform the dispatcher:
- Name of employee reporting clear of limits.
- Equipment identification (locomotive or vehicle number).
- Track warrant number.
- The last named point of a directional track warrant or both specific points of a "WORK BETWEEN" track warrant.
- Time the limits were cleared.

The train dispatcher will repeat the information before clearing the limits of the track warrant.

- GCOR Rule 15.1, add the following:
- The following Track Bulletin Forms are authorized for use:
- Form C: high, wide or restricted car notification.
- Form F: free-form text.
- Form S: Slide Zone activation.
- GCOR Chapter 16 does not apply on ARRC.


## GCOR Changes and Exceptions

- GCOR Chapter 17 does not apply on ARRC.
- GCOR Glossary, add the following abbreviation:
- TB - Track Bulletin
- GCOR Glossary, add the following definitions:
- AUXILIARY TRACK - Any track other than a main track.
- CS - Controlled Signal.
- QUALIFIED EMPLOYEE - An employee instructed and examined on the rules applicable to their duties.

> Common sense has determined that carelessness is hazardous to your health.

> A safe attitude is the best insurance againstaccidents.

### 85.0 ALASKA RAILROAD SAFETY MANUAL

### 22.5 DARK LENS EYE PROTECTION

Do not wear dark lens glasses or goggles at night (sunset to sunrise) when insufficient lighting conditions exist, or when working indoors, unless you are welding or using a torch. Employees operating equipment making abrupt transitions from light to dark must not wear photogray or transition lenses.

### 29.2.1 GETTING ON AND OFF MOVING EQUIPMENT

Employees qualified in train and engine service may get on and off moving rail equipment under the following conditions:

1. In ARRC terminals, when authorized by terminal superintendent bulletin or general order.
2. In industries served by ARRC, when such tracks and walkways have been inspected by the appropriate supervisor and approved through terminal superintendent bulletin or general order.
3. At other locations that may be designated by general order.

Speed at the time of the mount/dismount in approved locations must not exceed walking speed.

### 31.2.1 GOING BETWEEN CARS COUPLED TO LOCOMOTIVES OR BETWEEN LOCOMOTIVES COUPLED TO LOCOMOTIVES

Before going between, or working on the end of cars or locomotives:

- Make sure that crew members have a clear understanding of the work to be performed.
- Unless positive protection is provided, all crew members must ensure proper safeguards, as listed below, are in place:
- When a crew member is required to go between or work on the end of equipment, they must notify the engineer and all other crew members who could affect movement of the equipment, by radio or hand signal.
- The engineer, and all other crew members who could affect movement of the equipment, must verify by radio, hand signal or whistle signal (1 long) that they understand a crew member will be going between or working on the end of equipment.
- When hand or lantern are used, the following signal will be used both to notify and to verify that a crew member is going in between or working on the end of equipment:
- Day signal: Start with arms at side of body swinging them out, up and in, with hands meeting in center of body about waist height. Engineer must acknowledge with same hand signal or whistle signal 5.8.2(2).
- Night signal: Movement of lantern about chest high from side to side parallel to the ground. Engineer must acknowledge with same hand signal or whistle signal 5.8.2 (2).
- When radio is used employee will announce "going between". The engineer will respond by radio only "set and centered". A combination of hand and radio signals is prohibited.
- When the engine is coupled to the equipment which is not to be moved, the engineer must:
- center the reverser,
- fully apply the independent brakes, and automatic brakes, when required before acknowledgment is made.
- The engineer, and all other crew members, must ensure the equipment being secured will not move until the crew member who requested protection has reported by radio or hand signal the he is no longer between, or on the end of, the equipment.
- The crew member going between or working on the end of equipment must wait until all movement of equipment has stopped and the slack has adjusted. If handbrakes are being released, take proper safeguards to ensure slack has adjusted.
- Crew members going between or working on the end of equipment which may be coupled into or moved by other crews at that location must first communicate with the employee in charge of terminal movements to ensure equipment being secured will not be coupled into or moved. Employee in
charge of crews must not authorize movement into the affected track until notified that the crew member being protected has completed the work and is in the clear of secured equipment.
- When stepping out from between cars or locomotives, employees must watch for equipment moving on adjacent tracks or vehicles and machinery moving on the tow path, walkway, or roadway.
- Do not go between uncoupled locomotives or cars when clearance between them is less than 50 feet, unless these safeguards are provided. When applicable, blue signal protection must be provided.


### 43.2.6 FLAG LOCATION

- Delete first paragraph and reissue as follows: Flags will be displayed on the track affected. Flags must also be placed to protect all possible access to the restricted area.


### 43.7 REQUESTING AND USING TRACK BULLETIN FORM B

Change to 43.7.1, Number 1 :

- When possible, request the Form B from the designated employee by 16:00 hours the day before the effective date. All Saturday, Sunday and Monday Form B's should be requested by 16:00 hours on the Friday preceding the weekend, or the day before a holiday.
Add Rule 43.7.3 as follows:
- Track car operators must stop at the indicated limits even if no red flag is displayed.
- Track car operators must be informed of Form B limits. The train dispatcher can provide Form B territory information using any of the following methods:
- If the track car operator can obtain a Form B Track Bulletin for that subdivision, the bulletin may be compared with the train dispatcher.
or
- The train dispatcher may issue the track car operator a track bulletin containing all necessary Form B information.
- The train dispatcher may indicate the limits of a Form B in the other specific instructions of the track warrant.
or
- The train dispatcher may issue track warrant authority that ends at the working limit of the Form B territory. A track car operator receiving this type of authority would go to the end of the track warrant limits, then request permission from the EIC to share the Form B limits.
Note: whenever Form B information is received by either method 1 or method 2, it remains in effect for the tour of duty, unless voided by the train dispatcher.


### 44.3 WEARING SEAT BELTS

## Exception:

- Seat belt use is not required if vehicle is used during the task of inspecting cars, performing air brake test, coupling air hoses or changing brake shoes, and speed of vehicle does not exceed 5 mph . Seat belt must be worn to and from train or track.


### 44.7 BACKING UP

Position the vehicle, when possible, to avoid back-up movement. If it is safe to do so, before backing, get out of vehicle and inspect areas to the rear to make sure no person or obstruction is in the path of movement. When available, position someone to the rear to guide movement to completion on all reverse moves. Stop immediately if the person guiding the movement disappears from view. Sound the horn three short blasts for vehicles not equipped with a backup alarm before making a back-up move with a company vehicle or on company property.

### 58.4.2 NON-CONTROLLED TRACK

Addition to 58.4.2, Non-Controlled Track, The roadway worker establishes working limits on non-controlled track by any of the following methods, add new fifth bullet:

- Where remote controlled switches provide direct access, the employee in charge of the workmen must tell the train dispatcher what work will be done. The train dispatcher must then:
- Inform the employee in charge of the workmen that the switches have been lined against movement onto the track and devices controlling the switches have been secured.
- Not remove the locking devices, nor give permission to operate the dual control switches by hand, unless the employee in charge of the workmen says it is safe to do so.
- Maintain for 15 days a written record of each notification that includes:
- Name and craft of the employee in charge of the workmen requesting protection.
- Identification of track involved.
- Date and time the employee in charge of workmen is notified that protection was provided.
- Date, time, name and craft of the employee in charge of workmen who authorized removal of the protection.


### 58.6 AUDIBLE WARNING FROM TRAINS

Audible Warning from trains, is changed to read as follows:
Trains must provide continuous audible warning to roadway workers when both approaching and passing through a work group. The warning must be a combination of a series of short sounds of the the whistle, and the continuous ringing of the locomotive bell, until the lead locomotive is completely past the workers.

To give trains advance notice of roadway workers on or near the track, each roadway worker fouling the track must wear at least one of the following items:

- Orange reflective strips on a hard hat.
- Orange hard hat.
- Orange reflective vest.

Safety is a state of mind, accidents are an absence of mind.

Be generous to others, share a safety tip!

A positive attitude creates positive results.

### 86.0 AIR BRAKE AND TRAIN HANDLING RULES

### 86.1 AIR BRAKE AND TRAIN HANDLING MANUAL RULE CHANGES

- Rule 61.3.5, Performing an Initial Terminal Air Brake Test on a Train not Kept Charged, as follows:
- NOTE: A train considered "kept charged" has had its brake system charged to at least 60 psi within the last 4 hours.
- Rule 61.6 Air Brake Test When Cutting Off and Recoupling, change the first and last paragraphs from 2 hours to 4 hours.
- Rule 63.2, Inspecting Freight Cars:
- When a brake shoe defect is discovered:
- If the entire brake shoe is missing, cut the air out of the car and handle car to nearest repair facility.
- If only part of the brake shoe is missing, it is not required to cut out the air. Handle the car to the nearest repair facility to be repaired.
Notify the train dispatcher what action was taken, if any.
- Rule 63.6.8 Bleeding Off Cars (delete fourth bullet)
- Bleed off cars only in the following situations:
- When repairing the brake system.
- When cutting out the brakes on a defective car.
- When switching.
- Rule 63.10.1 Applying Hand Brakes on Cars, as follows:
- Sections 3,4 , and 5 , of this rule are cancelled.
- When securing cars or a portion of a train, apply enough hand brakes to prevent movement.

1. When determining the number of hand brakes to be fully applied or the blocking needed to hold cars without airbrakes, consider the following factors:

- Grade and adhesion.
- Loaded or empty equipment.
- Weather, wind and temperature.

2. When applying hand brakes:
a. Use proper body mechanics to prevent injury.
b. Do not use a device for additional leverage, such as a bar, brake club, or your foot.
c. Fully apply hand brakes by operating the mechanism until the slack is out of the chain and the brake shoes are snug against the wheels.

- Rule 63.10.3 Securing a Train or Portion of Train Without Locomotive Attached, is changed to read as follows:
- When securing a train or portion of a train without a locomotive attached in territory at or less than $1 \%$ grade:

1. Make a 20 PSI brake pipe reduction.
2. Close the angle cock on the locomotive(s) or equipment that will remain with the locomotive(s).
3. Cut away and allow the train or portion of the left standing to apply in emergency. Leave the angle cock on the equipment left standing in the fully open or fully closed position as required.
4. Immediately apply a sufficient number of hand brakes on the equipment left standing as prescribed by Rule 63.10.1.

CAUTION: Do not bottle the air or maintain air pressure in the brake pipe unless locomotives are attached.

- Rule 63.10.4 Securing a train or Portion of Train Without Locomotive Attached, in territory greater than $1 \%$ grade, addition:

1. Make a 20 PSI brake pipe reduction.
2. Apply a sufficient number of hand brakes on the equipment left standing as prescribed by Rule 63.10.1.
3. Close the angle cock on the locomotive(s) or equipment that will remain with the locomotive(s).
4. After cutting away, leave the angle cock on the equipment left standing in the fully open or fully closed position as required.

CAUTION: Do not bottle the air or maintain air pressure in the brake pipe unless locomotives are attached.

- Rule 64.12.1 Operating on a Grade, additions:

8. No train will operate at less than 5 mph while ascending a grade. Prior to train speed decreasing below 5 mph the engineer must prepare for a stop by immediately making a minimum brake pipe reduction, and must continue making additional reductions until train has stopped. Regardless of
the type of locomotive being operated (e.g. GPs or SD70MACs) if the train begins moving backwards as throttle is reduced, the engineer must immediately place the reverser in the direction of roll-back and apply the dynamic brakes to control speed. Brake cylinder pressure must be kept below 15 psi for maximum dynamic braking. If the speed of the train cannot be controlled, the engineer must immediately place the train in emergency.

- If operating SD70MACs and the train is placed in emergency, dynamic braking is reduced to a setup level. To achieve maximum dynamic braking, place the reverser handle in the opposite direction of roll-back. This will activate "Opposite Directional Braking", a feature found exclusively on the SD70MAC locomotives. Brake cylinder pressure must be kept below 15 psi for maximum dynamic braking.
- If operating GP locomotives, full dynamic braking remains available after an emergency application. Brake cylinder pressure must be kept below 15 psi for maximum dynamic braking.
Do not attempt to reset the PCS until the train has come to a complete stop. After the train has stopped properly secure the train, per Timetable Special Instructions Item No. 83.35, Determining Number of Hand Brakes. Once train is secured move the automatic brake valve to the RELEASE position to recharge the train. Conductor must confirm with the engineer the maximum tonnage that can safely be handled over crest of grade before releasing hand brakes and proceeding.


### 86.2 LOCOMOTIVE SPECIAL HANDLING

Locomotive engineers must ensure the maximum number of operating locomotive axles in their consist, in power or dynamic braking, do not exceed 24 . Helper service locomotives count as a separate consist. When calculating for consists that include six axle SD70MAC locomotives, count these units as having eight axles. Locomotives handled dead-in-tow will be placed immediately behind the road engines, except rail diesel cars which can only be handled as the last car in a train.

Locomotives, when coupled to another car or locomotive, must not be coupled with more force than is necessary to make the coupling.

MP 15 Locomotives Nos. 1551, 1552, 1553, and 1554

- These locomotives must not be moved in trains handling loaded tank cars (this does not include yard engines).
- When handled in trains, these locomotives must have coupler stops in place that restrict the coupler swing.
- Not more than one of these locomotives can be moved in a train.
- Authorization from the Superintendent of Transportation and the Chief Mechanical Officer (or their designees) must be obtained before any of these locomotives are moved in a train.

Hostler movements are to be protected with a groundsworker at all times. Hostlers are not authorized to make individual movements of locomotive power or equipment without another employee physically directing the movement.

If operating conditions allow, locomotive sanders are not to be manually activated passing over way-side track lubricators.

Whenever a locomotive is to be left unattended the doors are to be secured or locked, if possible, and handbrake tied.

SD70MAC locomotives can operate light engine on any track except: Hunter and Chulitna wye tracks. Restrictions shown in the Special Instructions are for SD70MAC locomotives handling cars. To determine whether a track, not listed in Special Instructions, is suitable for SD70MAC operation: measure the rail from the base of the rail to the top of the rail; do not operate on rail measuring less than six inches. Any track listed as out of service may be authorized for use by an engineering supervisor.

If necessary to work beneath a SD70MAC locomotive, use the following procedures:

- After the locomotive has been brought to a stop, center the reverser and leave the Isolation Switch in RUN.
- Use the display screen to activate the DC Link Shorting Test (on the second page of the Self-test Menu).
- During the test, the screen will prompt the engineer to isolate the unit. Once the test is completed, leave the Isolation Switch in Isolate.
- At this point, the engineer knows the DC Link has been discharged. As long as the Isolation Switch remains in Isolate, the DC Link will not be recharged and it is therefore safe to work beneath the locomotive without shutting down the diesel engine.
Switching passenger equipment, the following will apply:
- "When coupled to a GP locomotive, SD70MAC locomotives will be isolated while switching passenger equipment."
- "A trainman must be positioned on the leading car of the shoving movement and must be in control of the emergency valve."
- "Movement must be controlled so that speed does not exceed 3 MPH beginning three car lengths before the safety stop.
- "The engineer must set a minimum reduction at least five car lengths prior to the safety stop." 86.3 Locomotive Head End Power Operating Instructions
- If necessary to switch passenger equipment or outfit cars that have ineffective or inoperative air brakes, do not handle more than two cars at one time. Do not allow passengers or employees, other than train crew members, to ride on passenger equipment or outfit cars with inoperative or ineffective air brakes while being switched.

Use the following procedure to discharge the DC link to remove a moose from beneath a SD70MAC locomotive:

- After the locomotive has been brought to a stop, center the reverser and leave the Isolation Switch in RUN.
- Use the display screen to activate the DC Link Shorting Test (on the second page of the Self-test Menu).
- During the test, the screen will prompt the engineer to isolate the unit. When the test is completed, leave the Isolation Switch in Isolate.
- At this point, the engineer knows the DC Link has been discharged. As long as the Isolation Switch remains in

Isolate, the DC Link will not be recharged and it is therefore safe to remove the moose without shutting down the diesel engine.

### 86.3 LOCOMOTIVE HEAD END POWER OPERATING INSTRUCTIONS

Instructions below apply to locomotives $3009,3010,3011, \mathbf{3 0 1 3}$, and 3014:

START-UP:

1. Check fluid levels.
2. Open the upper right hand electric cabinet door and turn on the circuit breakers located at the bottom portion of the door.
3. Place the isolation switch to the 240 volt position for KFF service or 480 volt position for passenger service.
4. Verify that the green "Train Line Complete" indicator lamp is illuminated.

Note: In 480 volt (passenger) service, if the green "Train Line Complete" indicator is not illuminated, ensure all the cables and connections are properly connected and the last coach is looped back into itself.
5. Turn the start switch to the start position until the engine starts. Release the switch and it will return to the run position.
6. Let the engine warm up for approximately two to three minutes. Push the reset button. Using the speed control switch, increase the RPMs by pushing up and holding the switch until the cycle gauge shows 60 cycles.

Note: If after increasing the RPMs some and the cycle gauge does not show an amount of cycles, push the reset button again.
7. At this time (cycle gauge reads 60), the voltage gauge will read 240 volts for KFF service or 480 volts for passenger service plus or minus a maximum of 5 volts.
8. Push the HEP ON button.
9. Verify voltage and cycles are still correct. Adjust if necessary by increasing or decreasing RPMs using the speed control switch.

Note 1: You cannot adjust the voltage setting. It will increase or decrease in direct relation to the cycles, but if the cycles are set on 60 and you only show, for example, 440 volts in the passenger position, there is a problem. This is the same for the 240 volt service.

Note 2: The amperage gauge also cannot be adjusted. This gauge will fluctuate as the load demands from the equipment change.

## SHUTDOWN:

1. Push the HEP OFF button. The amperage gauge will drop to " 0 ".
2. Using the speed control switch, decrease the engine RPMs by pushing and holding down on the switch until the cycle gauge shows approximately 45 to 50 cycles.
3. Turn the engine start switch from the RUN position to the OFF position.
4. Turn isolation switch to isolate.
5. Turn off the circuit breakers located on the inside of the upper right front cabinet door.

Instructions below apply to locomotives 3013, 3014, and 3015:
TRAINLINESETUP:
When running from long hood end, both rear plugs must be jumpered. When running from short hood end all three corners must be jumpered.

## START-UP:

1. All breakers mounted inside the upper right electrical cabinet should be in the CLOSED position.
2. Select long or short hood trainline set up.
3. Put isolation switch in RUN position.
4. The idle switch and HEP switch should be in NORMAL position.
5. After the above procedures the HEP ready light and both green train line complete arrow lights should be on.

## START-UP(IF STANDBY MODEIS USED):

1. All breakers mounted inside the upper right electrical cabinet should be in the CLOSED position.
2. Put the isolation switch in the START/STOP position.
3. Put isolation switch in LOW position.
4. Press START.

## TROUBLESHOOTING

- In passenger service, if power is lost to the train, first verify the engine is not in an overheat condition by looking at the temperature gauge. An overheat condition is a reading on the gauge of above 200 degrees. The engine can still be running in this situation due to the first stage of correction is to nullify power to the train. If it continues to overheat, the engine will eventually shut down. When shutdown occurs, the control circuits will not allow the engine starter to be engaged until the temperature decreases to approximately 180 to 190 degrees.
- Allow the engine to cool, verify the "Train Line Complete" light is on. If the engine is running, push the reset button, verify the voltage and cycles are correct, push the HEP ON button. Verify the voltage and cycles are correct once more. Adjust if necessary using the speed control switch. The AMP gauge should show amperage.
- If the engine is not in an overheat condition and the green "Train Line Complete" light is on and no other fault lights are on, push the reset button, verify the voltage and cycles are correct, push the HEP ON button. Verify once more the voltage and cycles are correct. Adjust if necessary.
- If the engine is not running, verify it is not in an overheat condition. If it is, allow the engine to cool to 180 to 190 degrees, check the fluid levels and that the circuit breakers are in proper position. Verify the green "Train Line Complete" light is on. Turn the engine start switch to the OFF position to reset the starting circuit and restart the engine. Press the reset button and verify again there are no fault lights on. Check voltage and cycle gauges, push HEP

ON button. Verify voltage and cycles are correct. Adjust if necessary.

- If green train line complete light is not on, verify cables and connections are intact. When the missing link is found, correct it and verify the green "Train Line Complete" light is on. Push reset button, then push the HEP ON button.

Note: The HEP OFF and HEP ON buttons do not shut the engine on or off. They energize or de-energize the train. If doing anything to the connections, push the HEP OFF button. If the train line complete light is not on, you do not have to be concerned with the train line being energized. It will automatically de-energize the train. You can confirm there is no electricity to the train by verifying the reading on the amperage gauge is " 0 ".

### 86.4 CABOOSE SPECIAL HANDLING

Unless otherwise authorized, cabooses, including unoccupied cabooses, must be handled only as the rear car of the train. This requirement does not apply to trains consisting of less than 20 cars and not exceeding 2500 tons.

Whenever a caboose is to be left unattended, the doors are to be secured or locked, if possible.

Conductors must not delegate the responsibility of riding the caboose of their train to another crew member, unless the crew member has at least six months of cumulative train service experience.

### 86.5 BAGGAGE CAR GENERATORS

Baggage Cars \#100, 101, 110 and 111:
SET UPFOR BAGGAGE CAR GENERATORS:

1. Four hundred-eighty volt cables must be jumpered on all corners of the baggage car that are not being used.
2. Settings for switches in the light plant cabinet; Manual-Run-Off. Remote Run Switch in Remote Run position. Compartment overheat detection switch in normal position.

## Air Brakes and Train Handling Rule Changes

3. Place the two large breaker switches at the bottom of Electrical Cabinet A in the UP position.
4. Place the engine breaker switches up on both generator's panels in Electric Cabinet A.
5. One generator must be selected as the primary generator.
6. For the unit that has been selected as the primary generator, place Generator On-Off-Auto switch to the ON position.
7. On the other panel, place the Generator On-Off-Auto switch to the AUTO position.
8. Place the Primary Generator Selector Switch to correspond with primary generator selected in \#6.
9. Place the Secondary Generator Selector Switch to same as selected in\#7.
10. Place HEP receive Enable-Off-HEP feed enable switch to HEP fee enable position.
11.Place Trainline Control Switch to OFF.
11. Wait until both generators come on and both corresponding red Generator Contractor Closed Indicator lights are on, indicating generators are paralleled.
12. Place Trainline Control Switch to HEP feed.

## BAGGAGECARSHUT DOWN PROCEDURE:

1. Place the Trainline Control Switch to OFF.
2. Place the HEP Receive Enable - HEP Feed Enable Switch to OFF.
3. Place the generator On-Off Auto switch to OFF for both generators.
4. Leave all other switches alone.
5. Leave Engine Breaker Switch ON. This is an emergency switch only.
6. Engines are on a three minute timer before shutting off.
7. When the baggage car power will be shut down for more than six hours, the engine breaker switches should be shut off after the engines shut down on the three minute timer.

## SETUPFOR POWERING TRAIN WITHANOTHERHEP:

1. If generators are running, go through the shut down procedures.
2. The 480 volt jumper must be removed from the front baggage car (Fireman's side).
3. Plug the 480 volt cables from the front HEP unit to the front of the baggage car.
4. The front HEP unit must have a 480 volt jumper on the rear (Engineer's side) unless cables are run down both sides of the train.
5. For power inside baggage car, place HEP Receive Enable-Off-HEP feed enable switch to HEP Receive Enable.

## HOUSEPOWERTOBAG CAR:

1. Place HEP Receive Enable-Off-HEP feed enable switch to HEP Receive Enable.

### 86.6 EN ROUTE OPERATION OF GVS (GENERATOR VANS) GV-01, GV-02, GV-03

Each Generator Van has two generators on board. The GV-01 is capable of running both generators at the same time. The GV-02 and GV-03 are designed to only operate one generator at a time. The following instructions are designed to assist the trainmen in the proper shut down and restart of a generator.

## SHUTDOWN

1) After entering the van from the end, turn the timer light switch on which is located to the right as you enter the door.
2) Check the indicator lights on the control panel to see the possible cause of the shutdown. If the "High Temperature" light or the "Oil Pressure" light is illuminated there is coolant and oil on-board for you to add.
3) Turn the Start Switch located on the front of the Control Panel to the "OFF" position or the "OFF/RESET" position depending on which GV you're on.
4) On the GV-01/GV-02, turn the Field Switch located on the left side of the generator box as you face the Control Panel to the "OFF" position. The GV-03 does not have a Field Switch.
5) Make sure the Generator Circuit Breaker that corresponds to that Generator is in the "OFF" (all the way down) position.
6) If a restart of the engine is not possible, turn the battery switch located near the floor on the right side of the engine as you face the Control Panel to the "OFF" (vertical) position.

The Generator has now been properly shut down.

## STARTUPPROCEDURE

If a restart or a start up of the other generator is desired, use the following steps for starting a generator after turning the battery switch on.

1) On the GV-01 and 02, turn the Field Switch to the OFF position.
2) On the GV-01, turn the Start Switch to the START position until it starts and then release and it will automatically go to the "ON" position. On the GV-02 and 03, turn the OFF/RESET/RUN switch to the RUN position.
3) On the GV-01, adjust the RPMs (Hertz) to 60 by rotating the manual throttle located on the right side as you face the Control Panel. On the GV-02, adjust the RPMs using the electric speed control switch on the control panel. The GV-03 is all automatic and requires no adjustment.
4) On the GV-01 and 02, turn the Field Switch to the "ON" position.
5) Move the Generator Circuit Breaker to the "ON" position.
6) On the GV-02 and GV-03, turn on the plug circuit breakers located at the right of the circuit breaker panel. These breakers are labeled \#1 and \#2. These numbers correspond to numbered tags on the cables at the trainline plugs.

NOTE: Depending on the quantity of KFF vans on the train, you may be utilizing one or both plugs. A visual check to make certain which plug and how many are being used should be performed before turning on the breakers. At this time the outside indicator lights should be illuminated.

### 86.7 END OF TRAIN DEVICES

If a train is required to be equipped with a two-way end-of-train device (reference document: From the Desk of the Road Foreman, "Trains that require 2 -way telemetry," dated September 17,2002), it may not leave a terminal without a two-way end-of-train device (EOTD) that is armed and working properly.

If an EOTD fails, one of the following failure indications is displayed:

- DEAD BAT
- REPLBAT
- VALVFAIL
- DISARMED
- FRNOCOM


## If this failure occurs while en route:

- Do not exceed 30 mph until the failure is corrected or you have determined by another method there is brake pipe continuity throughout the train;
- Inform the dispatcher immediately, providing the EOTD number and the failure indication.

If the failure occurs before ascending or descending steep grades, the train must stop, consistent with good train handling, and not proceed until the failure is corrected or you have determined there is brake pipe continuity throughout the train.

This instruction applies to the following grades:

- SewardSubdivision
- MP7to MP 11.6
- MP45 to MP 53.7

If the failure occurs while ascending or descending one of these grades, it may be safer to proceed rather than stop. The engineer will determine if it is safe to continue by observing the information on air gauges or information displayed on the FIRE screen. (An increase or decrease in air flow, or a brake pipe pressure reduction of 5 psi or more, can indicate a jeopardized brake pipe system.)

## Air Brakes and Train Handling Rule Changes

If the engineer determines it is safe to proceed based on the information above:

- Reduce speed to 30 mph or less and attempt to restore communication;
- Proceed to the next location where it is safe to stop and attempt to restore communication.

If unable to restore communication, position a crewman at the rear of the train to help establish or confirm brake pipe continuity. If brake pipe continuity is confirmed, the train may continue to a location where the failed device can be replaced or repaired, whichever is reached first, observing the restrictions above.

In all cases, the engineer and train crew will follow all requirements for:

- Displaying and inspecting markers;
- Conducting air brake tests;
- Reporting clear of limits.

Trains that must be divided into multiple sections in order to traverse a grade are exempt from the requirement for the use of a two-way end-of-train device. This exemption applies only to the extent necessary to traverse the grade and only while the train is divided into multiple sections for such purposes.

Note: Normal LCU to EOT communications is at a much lower strength than the command to initiate an emergency application from the LCU to the EOT. In the event of a need to utilize the emergency feature of the EOT, the command to initiate an emergency must be attempted even if no communication is indicated at the LCU.

Conductors are responsible for the care and proper handling of their end-of-train device (EOT).

- Always carry the EOT by the handle with the light and reflector toward your body. EOT must be handled carefully at all times to prevent damage.
- Cars or locomotives must not be permitted to couple to the end of car attached to the EOT.
- Follow instructions posted at locations where EOTs are stockpiled for recharging and storage information.

Spare End-of-Train (EOT) devices are located in the following places: Talkeetna - in the section house; Hurricane - in the generator shack (southwest corner); and Healy - in the fax room at the Fire Hall.

### 86.8 BRAKE CUTOUTS ON LOCOMOTIVES

All locomotives are equipped with locomotive brake cutouts on each truck. This cutout is located on the engineer's side of the locomotive. When this cutout is used, it will only cut out the brakes on both side of that locomotive truck.

The Mechanical Department has made a modification to this and has added a brake cutout on each locomotive truck located on the fireman's side of the locomotive. If this cutout is used, it will only cut out the brakes on the fireman's side of that locomotive truck.

If a problem should arise and the brakes on the locomotive need to cut out, the brake cutout on the engineer's side must be utilized. Also, when performing a locomotive air brake test, both sides of the locomotive must be checked to ensure that the locomotive brakes are applying on each side.

| Courtesy |
| :---: |
| and |
| Common Sense |
| Promote Safety. |

> The road to the finish line is not always smooth. A positive attitude will set the right mood

### 90.0 HAZARDOUS MATERIAL HANDLING

### 90.1 HAZARDOUS MATERIAL HANDLING INSTRUCTIONS BOOKLET

[^1]
## Communicate Assume Nothing

## Appendix A.

## JOB BRIEFING

## 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 0:300-0:500 (alertness), or end of shift ("go home" moves).
8. Safety or personal protective equipment required.
C. Consider how work assignments will be made:
9. Group assignments: remember that the whole crew is a team and will be held jointly responsible.
10. Individual assignments: (who checks for what?) Engineers need to check with crew about the status of the gates, switches, derails, hand brakes, how much room, how many cars?
11. 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), 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.
8. Make sure employees understand assignments
9. Ask questions of the "how" and "why" type.
D. If special tools, material equipment, or methods are to be used, make sure employees know how to proceed safely.
E. Issue all instructions clearly and concisely, check to see that they are understood.
STEP 3: Job brief for special conditions:
A. Complex jobs:
10. Brief only a portion of the job.
11. 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).
STEP 4: Follow up: Supervisor:
A. It is important that frequent checks be made as the work progresses to ensure that:
12. Your plans are being followed and correct work methods used.
13. Each individual is carrying out the assignment responsibilities.
14. 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.

Constant Communication is Necessary and Required.

> Job briefing...
> An injury
> prevention device

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## SPEED TABLE

| Time Per Mile Min Sec |  | Miles Per Hour | Time <br> Min | Mile Sec | Miles Per Hour |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1 | 59 | 2 | 37 | 22.9 |
| 1 | 5 | 55.4 | 2 | 44 | 22 |
| 1 | 10 | 51.4 | 2 | 52 | 20.9 |
| 1 | 15 | 48 | 3 | 0 | 20 |
| 1 | 20 | 45 | 3 | 10 | 19 |
| 1 | 25 | 42.4 | 3 | 20 | 18 |
| 1 | 30 | 40 | 3 | 32 | 17 |
| 1 | 35 | 37.9 | 3 | 45 | 16 |
| 1 | 40 | 36 | 4 | 0 | 15 |
| 1 | 43 | 35 | 4 | 17 | 14 |
| 1 | 45 | 34.3 | 4 | 36 | 13 |
| 1 | 50 | 32.7 | 5 | 0 | 12 |
| 1 | 55 | 31.3 | 5 | 27 | 11 |
| 2 | 0 | 30 | 6 | 0 | 10 |
| 2 | 5 | 28.8 | 6 | 40 | 9 |
| 2 | 10 | 27.7 | 7 | 30 | 8 |
| 2 | 15 | 26.7 | 8 | 34 | 7 |
| 2 | 20 | 25.7 | 10 | 0 | 6 |
| 2 | 24 | 25 | 12 | 0 | 5 |
| 2 | 30 | 24 | 15 | 0 | 4 |

Note: Speed can also be estimated by counting number of rail joints, on tangent track, passed over in $27 \frac{1}{2}$ seconds. This number will equal approximate miles per hour.

## Note:

. 1 mile equals 528 feet
. 2 mile equals 1056 feet
.3 mile equals 1584 feet
.4 mile equals 2112 feet
.5 mile equals 2640 feet
.6 mile equals 3168 feet
.7 mile equals 3696 feet
.8 mile equals 4224 feet
.9 mile equals 4752 feet
1.0 mile equals 5280 feet

> G.O.A.L.S.-
> Good Overall Attitude Leads to Success.

## Rule 9.1 Signal Aspects and Indications

DISTANT SIGNALS: Any signal aspect more favorable than Restricting may be displayed with a " $D$ " sign on the signal mast to identify the signal as a distant signal. When a " $D$ " sign is displayed, if train is delayed per GCOR Rule 9.9 between a distant signal and the next signal, proceed prepared to stop short of the next signal.

Aspects shown with indicate the light will flash.

| Rule | Aspect | Name | Indication |
| :---: | :---: | :---: | :---: |
| 9.1.1 | G | DISTANT SIGNAL CLEAR | Proceed. If delayed as per Rule 9.9 or Rule 9.9.1 between this signal and block or interlocking signal, proceed prepared to stop at next signal. |
| 9.1.2 | $\begin{aligned} & \mathbf{Y} \\ & 1 \\ & \hline 1 \end{aligned}$ | DISTANT SIGNAL APPROACH | Approach next signal prepared to stop short of signal. |
| 9.1.3 |  | CLEAR | Proceed. |
| 9.1.6 |  | APPROACH MEDIUM | Proceed prepared to pass next signal not exceeding 30 MPH and be prepared to enter diverging route at prescribed speed. |
| 9.1.7 |  | APPROACH RESTRICTING | Proceed prepared to pass next signal at restricted speed. |
| 9.1.8 |  | APPROACH | Proceed prepared to stop at next signal; trains exceeding 30 MPH immediately reduce to that speed. |
| 9.1.9 |  | DIVERGING CLEAR | Proceed on diverging route not exceeding prescribed speed through turnout. |

G=GREEN Y=YELLOW R=RED

| Rule | Aspect | Name | Indication |
| :---: | :---: | :---: | :---: |
| 9.1.11 |  | DIVERGING APPROACH MEDIUM | Proceed on diverging route not exceeding prescribed speed through turnout prepared to pass next signal not exceeding 35 MPH. |
| 9.1.12 | $\frac{R}{Y}$ | DIVERGING APPROACH | Proceed through <br> diverging <br> prescribed <br> route; <br> speed <br> through turnout; <br> approach next signal  <br> prepared to stop. If  <br> exceeding 30 MPH <br> immediately reduce to  <br> that speed.  |
| 9.1.13 |  | RESTRICTING | Proceed at restricted speed. |
| 9.1.14 |  | STOP AND PROCEED | Stop, then proceed at restricted speed. |
| 9.1.15 |  | STOP | Stop. |

Asking me to overlook an UNSAFE WORK PRACTICE is like asking me to overlook the value I place on your LIFE.


## Don't make your last move, your last move.

## I CHOSE TO LOOK THE OTHER WAY

I chose to look the other way
I could have saved a life that day, But I chose to look the other way.

It wasn't that I didn't care, I had the time, and I was there. But I didn't want to seem a fool, Or argue over a safety rule. I knew he'd done the job before, If I called it wrong, he might get sore.
The chances didn't seem that bad,
I've done the same, he knew I had.
So I shook my head and walked on by, He knew the risks as well as I.
He took a chance, I closed an eye, And with that act I let him die. I could have saved a life that day, But I chose to look the other way. Now every time I see his wife, I'll know I should have saved his life.
That guilt is something I must bear, But it isn't something you need to share.

If you see a risk that others take,
That puts their health or life at stake,
The question asked, or the thing you say,
Could help them live another day.
If you see a risk and walk away,
Then hope you never have to say,
I could have saved a life that day,
But I chose to look the other way.

## WIND CHILL

The wind chill is based on the rate of heat loss from exposed skin caused by the combined effects of wind and cold temperatures. As the wind increases heat is carried away from the body at an accelerated rate, driving down the body temperature. A strong wind combined with a temperature of just below freezing can have the same effect as a still air temperature which is $\mathbf{3 5}$ degrees colder. People and animals are affected by wind chill but inanimate objects (such as vehicles) are not.

## WIND CHILL CHART

## TEMPERATURE ( ${ }^{\circ}$ F)

$$
\begin{array}{llllllllllllll}
35 & 30 & 25 & 20 & 15 & 10 & 5 & 0 & -5 & -10 & -15 & -20 & -25 & -30
\end{array}
$$

|  |  | I |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W | 5 | \| 31 | 25 | 19 | 13 | 7 | 1 | -5 | -11 | -16 | -22 | -28 | -34 | -40 | -46 |
| I |  | I |  |  |  |  |  |  |  |  |  |  |  |  |  |
| N | 10 | \| 27 | 21 | 15 | 9 | 3 | -4 | -10 | -16 | -22 | -28 | -35 | -41 | -47 | -53 |
| D |  | I |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 15 | 125 | 19 | 13 | 6 | 0 | -7 | -13 | -19 | -26 | -32 | -39 | -45 | -51 | -58 |
| S |  | I |  |  |  |  |  |  |  |  |  |  |  |  |  |
| P | 20 | 124 | 17 | 11 | 4 | -2 | -9 | -15 | -22 | -29 | -35 | -42 | -48 | -55 | -61 |
| E |  | I |  |  |  |  |  |  |  |  |  |  |  |  |  |
| E | 25 | 123 | 16 | 9 | 3 | -4 | -11 | -17 | -24 | -31 | -37 | -44 | -51 | -58 | -64 |
| D |  | I |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 30 | 122 | 15 | 8 | 1 | -5 | -12 | -19 | -26 | -33 | -39 | -46 | -53 | -60 | -67 |
| M |  | I |  |  |  |  |  |  |  |  |  |  |  |  |  |
| P | 35 | \| 21 | 14 | 7 | 0 | -7 | -14 | -21 | -27 | -34 | -41 | -48 | -55 | -62 | -69 |
| H |  | I |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 40 | 120 | 13 | 6 | -1 | -8 | -15 | -22 | -29 | -36 | -43 | -50 | -57 | -64 | -71 |
|  |  | I |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 45 | \| 19 | 12 | 5 | -2 | -9 | -16 | -23 | -30 | -37 | -44 | -51 | -58 | -65 | -72 |

+20 TO - 18 Work outside becomes unpleasant. Hats, coats and gloves are needed.

- 19 TO - 34 Work outside becomes more hazardous. Heavy outer wear clothing is needed.
- 35 TO - 49 Frostbite can occur with prolonged exposure. Heavy outer clothing is essential.
- 50 TO - 79 Frostbite can occur within a minute. Face protection is important. Multiple layers of clothing are essential.
- 80 TO - 99 Frostbite can occur in 30 to 60 seconds. Work outside is dangerous.
Less than -99 Frostbite occurs in less than 30 seconds. People working outside will become easily fatigued. Outdoor work or travel is very dangerous.


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[^0]:    * designates avalanche areas.

[^1]:    The Hazardous Material Handling Instructions booklet, issued November 1, 1998, is in effect. This document is separate from, but is an integral part of the Timetable, and this Timetable cannot be considered complete without it.

