NATIONAL RAILROAD PASSENGER CORPORATION



MICHIGAN SUBDIVISION EMPLOYEE TIMETABLE NO. 6

Effective 12:01 AM, Central Standard Time Monday, June 17, 2024



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5

REVISION BULLETIN

3 ABBREVIATIONS & GLOSSARY

New abbreviations & glossary page. Definition added for Tracks on \"Hold\".

4 STATION PAGE

Station page format is new.

5 MICHIGAN SUBDIVISION SPECIAL INSTRUCTIONS

1.14 is deleted. GCOR applies. 1.22 is deleted & contained in the Amtrak System General Order. 2.10 is deleted & contained in the Amtrak System General Order. 4.1.1 is deleted. GCOR applies. 8.12 is deleted. 10.3.1 is deleted. Moveable bridge instruction is relocated to the Chicago Train Movement Manual for Train Director use.

6.3 MAIN TRACK AUTHORIZATION

Main Track Authorization is new & designates the method of operation. CTC rules apply. NS, GDLK, & JAIL Foreign Railroad Operations have been modified.

6.31 MAXIMUM AUTHORIZED SPEEDS

CP 9 is now MP 9.5. MP 9.5 and MP 9.7 is moved up in the table before CP 9. CP 9 is now MP 9.7. MP 37.4 is now MP 37.3. MP 37.4 is now MP 37.3. MP 75.5 is now MP 75.3. MP 75.5 is now MP 75.3. CP 78 and MP 81.8 speed is 105 MPH. CP 78 to MP 88.9 of 79 MPH is modified with multiple segments & speed changes. MP 81.8 and MP 83.0 speed is 95 MPH. MP 83.0 and MP 84.9 speed is 110 MPH. MP 84.9 and MP 85.9 speed is 95 MPH. MP 85.9 and MP 86.2 speed is 110 MPH. MP 86.2 and MP 88.9 speed is 85 MPH. MP 88.9 and MP 91.2 speed is 75 MPH. MP 91.2 and MP 93.2 is 100 MPH. MP 93.2 and MP 94.3 is 90 MPH. MP 95.7 is now MP 95.8. MP 95.8 now extends to CP 96. MP 96.2 is now CP 96. MP 127.5 is now MP 127.6. MP 127.5 is now MP 127.6. MP 142.9 is now CP 143. MP 142.9 is now CP 143. MP 30.6 now extends to MP 34.5. Speed is 35 MPH. MP 77.3 is now MP 77.5. MP 77.3 and MP 77.5 is removed. MP 77.5 and CP 78 is removed. MP 95.7 is now MP 95.8. MP 95.7 is now MP 95.8. MP 119.0 is now MP 118.9. MP 119.0 is now MP 118.9 CP 28 is now MP 25.8. CP 18 and MP 25.8 Track 1 is 40 MPH. CP 18 and MP 25.8 Track 2 is 50 MPH. New restriction for ITCS Freight between MP 25.8 to CP 28. CP 28 and MP 30.6 Speed is 40 MPH. MP 30.6 now extends to MP 34.5. Speed is 35 MPH. MP 33.3 and MP 36.9 is removed. MP 34.5 and MP 35.1 Speed is 40 MPH



MP 33.3 and MP 36.9 is removed.

MP 35.1 and MP 36.9 Speed is 50 MPH. MP 37.8 and CP 72 is removed. MP 37.8 and MP 38.6 is 40 MPH. MP 37.8 and CP 72 is removed. MP 38.6 and MP 46.6 is 50 MPH. MP 37.8 and CP 72 is removed. MP 46.6 and MP 49.6 is 40 MPH. MP 37.8 and CP 72 is removed. MP 46.6 and CP 72 is 50 MPH. MP 74.0 and MP 77.5 is removed. MP 74.0 and MP 74.4 is 45 MPH. MP 74.0 and MP 77.5 is removed. MP 74.4 and MP 77.5 is 40 MPH. MP 95.7 is now MP 95.8. MP 95.7 is now MP 95.8. MP 119.0 is now MP 118.9. MP 119.0 is now MP 118.9. 15 MPH changed to 10 MPH through turnout to Niles Yard.

6.31.1 PERMANENT SPEED RESTRICTIONS

Removed AMT-3 reference. Changed from \"non-amtrak\" to \"freight\". Removed \"unless otherwise authorized by the Train Director\" Changed from \"non-amtrak\" to \"freight\".

6.29.2 HBD/DED TRAIN INSPECTION BY CREW MEMBERS

Requirement for \"Both sides of the train twenty axles ahead and behind the reported location\". Detector removed from Service instruction is new.

1.36 EQUIPMENT RESTRICTIONS

Equipment Restrictions relocated from 6.31. Relocated from IMCS section.

1.3.1 RULES, REGULATIONS AND INSTRUCTIONS

Rule is revised. Amtrak System General Order houses other various manuals/rulebooks in effect for Amtrak employees.

1.3.2 GENERAL ORDERS

Rule is revised.

1.3.3 CIRCULARS, INSTRUCTIONS AND NOTICES

Rule is revised.

1.44 DISPATCHERS: ASSIGNED TERRITORIES

Revised to show Train Director territory limits.

1.47 DUTIES OF CREWMEMBERS

Removed job briefing & crew member communications in locomotive cab. Both instructions are contained in the System General Order for Amtrak employees.

2.18 MALFUNCTIONING RADIO

Rule is revised.

2.21 ELECTRONIC DEVICES

To allow for the device to be used to reference a railroad rule, special instruction, timetable, or other directive for locomotives and on-track equipment.

5.10.1 HIGHLY VISIBLE MARKERS

Highly visible markers will be illuminated at all times on the rear of all passenger trains so equipped.

6.2 INITIATING MOVEMENT

Added requirements to verify DTB with Train Director. Added requirement for information must also be provided at the beginning of tour of duty. Removed Amtrak employee SAP numbers. Removed off duty time.

6.28 MOVEMENT ON OTHER THAN MAIN TRACK

Other than Main Track rules apply to yard, yard lead, and industrial tracks.

6.30 RECEIVING OR DISCHARGING PASSENGERS



Modified to add Station Stop Markers & Ann Arbor ADA moveable platform operation instructions. Station stop markers to assist in spotting trains.

6.32.2 ROAD CROSSINGS-AUTOMATIC WARNING DEVICES

10.15 is now 10.08 29.43 N. RIVER ST. is removed. 95.44 MONROE ST. is removed. 142.90 is now 142.95 143.00 is now 143.05 143.37 is now 143.38 143.55 is now 143.50 143.80 is now 143.78 Modified from AM to AA. 182.80 is now 182.90 185.40 is now 185.35 Modified from AM to AA. 207.18 is now 207.10 Modified from AM to AA. 215.68 is now 215.62 216.14 is now 216.05 Modified from AM to AA.

6.32.2 A AUTOMATIC WARNING DEVICES MALFUNCTIONING

Rule is revised. Exceptions for Crossings in 6.28 \"Other than Main Track\" territory.

8.3 MAIN TRACK SWITCHES AND DERAILS

A note has been added to indicate the switches and derail(s) equipped with electric lock(s). MP 16.9 is now MP 17.1. MP 19.3 Cogswell Crossover\" is deleted. MP 54.2 Chelsea Crossover is deleted. South Pass changed to East End South Siding. South pass changed to West End South Siding. Note 1 is added for MP 160.8, 168.5, 178.9, 179.2, 200.2, 206.2, 212.0, 228.0, 228.8, 240.0. 178.6 is removed. MP 228.2 is now MP 228.8.

9.12 STOP INDICATIONS

GCOR 9.12 Stop Indications is relocated from the Amtrak System General Order.

9.13 WHEN INSTRUCTED TO OPERATE DUAL CONTROL SWITCHES BY HAND

CP 160, CP 161 are new. CP 160, CP 161 are new.

10.3 TRACK AND TIME



Rule is revised. Acceptable Supplemental Locations (ASLs) is relocated to \"Other Subdivision Special Instructions\". **10.3.3 JOINT TRACK AND TIME** Rule is revised. \"On-track equipment\" added. **15.1 TRACK BULLETINS** Blocking Device Protection for DTB Additions is relocated to the Chicago Train Movement Manual for Train Director use. New IMCS instruction relocated from Chicago Train Movement Manual for Train Director use. 15.4 PROTECTION WHEN TRACKS REMOVED FROM SERVICE New rule. Fixed signal is removed. WL or EL of a Control Point is added. **18.1. POSITIVE TRAIN CONTROL TERRITORY** New rule. **18.1.1 GOVERNING PTC SYSTEMS** New rule. 18.2.1 TRAINS AUTHORIZED TO OPERATE WITH I-ETMS New rule. **18.6 CONSIST DATA** New rule. **18.9 USE OF RESTRICTED MODE** New rule. **18.10 WORKING WITH MANNED HELPERS** New rule. **18.11 CRITERIA FOR DETERMINING INOPERATIVE I-ETMS** New rule. **18.12 MOVEMENTS WITH INOPERATIVE PTC SYSTEM** New rule. **18.13 MOVEMENTS WITHOUT PTC** New rule. **TELEPHONE NUMBERS** Rule is revised. HANDLING OF HAZMAT, EXCESSIVE WEIGHT, OR EXCESSIVE DIMENSION CARS HAZMAT rule is new and relocated from Amtrak System General Order. ACCEPTABLE SUPPLEMENTAL LOCATIONS (ASLs) Acceptable Supplemental Locations (ASLs) instruction is relocated from the 10.3 \"track and time\" section. ASLs may be utilized for 10.3 (Track and Time) and 15.4 (Protection when Tracks removed from Service). "TRACKS ON HOLD" New rule. 595 MOVEMENT WITH INOPERATIVE ITCS ON-BOARD

Engineer's Responsibility, Dispatcher's and Operators Responsibilities are revised. Authorizations for Movement is deleted. Speed is now 59 MPH. Engineers must not pass a Restricting or Stop and Proceed signal unless authorized by the dispatcher. New line added: \"The Dispatcher must not grant permission for such movements to pass a Stop Signal, Stop and Proceed, or Restricting signal, until he has determined that the block to be entered is not occupied. In an emergency, the Dispatcher may authorize movement into an occupied block, after advising the train of the occupancy and the reason for the exception (e.g., to rescue a disabled train).\"



596 OPERATIONS WITH ITCS TEMPORARILY SUSPENDED

ITCS rule numbers are modified.

600 ITCS MANUAL TRACK LOCATION DETERMINATION (MTIE)

New rule.

MITE locations deleted. Engineer will be unable to MITE at CP 10th Street (Westbound) and CP 147 (Westbound) New Procedure for 111E/W _ _ _: when CLD prompts for Section ID, \"0 1 5\" must be entered. New procedure for 131E/W _ _ : when CLD prompts for Section ID, \"0 1 5\" must be entered. Willow Run Yard at CP25 C0252EB (Eastbound). Jackson Yard Lead at CP72 is C0722EC (Eastbound). 8 I-ETMS POSITIVE TRAIN CONTROL (PTC) SYSTEM RULES

PTC SYSTEM SOFTWARE DOWNLOADS AND INSTALLS is removed & contained in the Amtrak System General Order.

ENTERING PTC TRACK

New rule.

PTC ENFORCEMENTS

New rule.

OPERATIVE BRAKE LIMITATIONS ON PTC EQUIPPED TRAINS

New rule.

INITIALIZING PTC WITH MULTIPLE LOCOMOTIVES IN TRAIN CONSIST

New rule.

I-ETMS SYSTEM SOFTWARE DOWNLOADS AND INSTALLS

New rule

PTC TROUBLESHOOTING

New rule

PTC ISSUE AND ANOMALY REPORTING

New rule

AUTHORITY TO PASS STOP INDICATION

New rule

PTC CLEARANCE NUMBERS

FOREIGN TRAINS AND AMTRAK YARD ASSIGNMENTS WITHOUT CLEARANCE NUMBERS OR EXPERIENCE ISSUES WITH CLEARANCE NUMBERS is retitled to \"PTC CLEARANCE NUMBERS\".

FOREIGN TRAINS AND AMTRAK YARD ASSIGNMENTS WITHOUT CLEARANCE NUMBERS OR EXPERIENCE ISSUES WITH CLEARANCE NUMBERS

New rule.

9 INFRASTRUCTURE MAINTENANCE & CONSTRUCTION SERVICES SPECIAL INSTRUCTIONS

9

8

1.3.2-IMCS is deleted. Michigan Subdivision Special Instruction 1.3.2 applies. 1.49-IMCS is deleted and incorporated into 1.47-IMCS 5.4.1-IMCS is deleted. GCOR rule 5.4.1 applies. 6.3.4-IMCS is deleted. RWP manual applies. 6.40-IMCS is deleted. Brandt truck information relocated to Subdivision Special Instruction 1.36. All other information relocated to 6.22-IMCS. 9.13-IMCS is deleted. This rule is found in 9.13 under Michigan Subdivision Special Instructions. 10.3-IMCS is deleted. This rule is found in 10.3 under Michigan Subdivision Special Instructions.

1.47-IMCS. DUTIES OF CREW MEMBERS

Rule is revised & combined with 1.49-IMCS.

2.5-IMCS. COMMUNICATION REQUIREMENTS FOR TRACK CARS AND ROADWAY WORKERS

New rule.

5.4.7-IMCS. DISPLAY OF RED FLAG

New rule.



6.3.3-IMCS. ESTABLISHING WORKING LIMITS

The use of Foul Time is added. Foul time can be used to provide adjacent track protection to IMCS.

6.22-IMCS. MAINTAINING CONTROL OF ON-TRACK EQUIPMENT

Rule is revised.

6.31-IMCS. MAXIMUM AUTHORIZED SPEED

1 MPH \"Operating through self-guarded frogs and switch pointguards, or diverting through spring frogs\" 1 MPH \"Operating through self-guarded frogs and switch pointguards, or diverting through spring frogs\"

6.41-IMCS. HIGH-RAIL OPERATIONS

New rule.

8.3-IMCS. WORKING LIMITS - POSITION OF MAIN TRACK HAND OPERATED SWITCHES

New rule.

9.5.3-IMCS. PROTECTION DURING REPAIRS

Rule is revised.

15.1-IMCS. TRACK BULLETINS

Rule is revised.

12 PC CHANGES

Permanent Physical Characteristics changes is new.



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1 DEPARTMENT INFORMATION

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AMTRAK'S VALUES

Put Customers First Do the Right Thing Excel Together

OUR VISION

Moving America where it wants to go

OUR MISSION

Delivering intercity transportation with superior safety, customer service and financial excellence

Amtrak operating employees are bound to comply with the rules and instructions contained within this Employee Timetable. Any exceptions to operating rules and instructions not listed herein or by General Order, must be authorized by an accountable Amtrak Officer and must be approved by the Director of Operating Practices



TRACK DIAGRAMS

Track Diagrams for the Amtrak Michigan Subdivision are contained in a separate document in Comply365.

Physical Characteristics:

The railroad mileposts contained within the timetable are to be utilized as general information purposes. The footage of a railroad milepost can vary, along with distances measured by different technology.

For tasks that involve the use of on-track protection or the safety of train movements, such as establishing temporary speed restrictions (TSR's), employees must verify the specific milepost(s) and PC location(s) with the appropriate PTC system.



3 ABBREVIATIONS & GLOSSARY

A Abbreviations

Abbreviations			
ASL	Acceptable Supplemental Location		
AVE	Avenue		
BLVD	Boulevard		
CAD	Computer Aided Dispatch		
CS	Chicago Subdivision		
DTB	Daily Track Bulletin		
NOUPT	New Orleans Union Passenger Terminal		
EL	East Limits		
EXT	Extension		
FLGM	Flagman		
FRMN	Foreman		
IMCS	Infrastructure Maintenance and Construction Services		
М	Manual Interlocking		
MTIE	ITCS - Manual Track Location Determination		
МТО	Manager Train Operations		
PS	Passenger Station		
NL	North Limits		
RD	Road		
RRX	Railroad Crossing		
RWIC	Roadway Worker in Charge		
RWP	Roadway Worker Protection		
SBB	South Branch Bridge		
SL	South Limits		
ST	Street		
TD	Train Director		
TSR	Temporary Speed Restriction		
WL	West Limits		
WIC	Worker-in-Charge		
X	In service continuously		



B Glossary

1) Control Point Limits

The tracks between the outer opposing absolute signals of a control point.

2) Roadway Worker

Any employee of a railroad, or of a contractor to a railroad, whose duties include inspection, construction, maintenance or repair of railroad track, bridges, roadway, signal and communications systems, electric traction systems, roadway facilities or roadway maintenance machinery on or near track or with the potential of fouling a track, and flagmen and watchmen/ lookouts.

3) **RWP Authority**

A form of authority granted to a RWIC by name which establishes Exclusive Track Occupancy, as required by the Amtrak IMCS Department RWP Manual. Forms of RWP Authority include GCOR 10.3 Track and Time Authority, GCOR 15.4 Protection When Tracks Removed from Service, and Foul Time Authority.

4) MTO on Duty

The individual MTO responsible for overseeing Train Movement operations at any given time.

5) Track Barricade

A designated sign or obstruction fastened to a track that prevents access to the track.

6) **Clearance Point**

The location near a turnout beyond which it is unsafe for passage on an adjacent track(s). Where a person is permitted by a railroad's operating rules to ride the side of a car, a clearance point shall accommodate a person riding the side of a car.

7) Track(s) on "Hold"

Are in-service, dispatcher-controlled track(s), that are not available or suitable for train movement due to suspected or known defect, or are ordered by a qualified Amtrak IMCS/Capital Delivery employee. Such tracks must remain protected by blocking devices, under the charge of the dispatcher, holding all train movements clear until the unsafe condition has been resolved or returned to normal service by a qualified Amtrak IMCS/Capital Delivery employee.



STATION PAGE

STATIONS	MP	MANUAL INT	METHOD OF OPERATION	PS	NOTES
CP TOWNLINE (CONRAIL)	7.4				3, 4
Dearborn	9.7			Х	
CP 9	9.8				
CP 18 (CSX)	18.1	Х			1, 6
CP 21	21.7				
CP 25	25.8				
CP 28	28.2				
Ann Arbor	35.0			Х	
CP 37	37.9				
CP 52	52.0				
Chelsea Siding (21,045 ft)					
CP 56	56.0				
CP 72	72.7		СТС		
Jackson Yard Lead					10
Jackson	75.5			Х	10
CP 75	75.7				10
Lansing Secondary (JAIL)					
CP 78	78.6				
Albion	95.8				
CP 96	96.2				
Albion Siding (12,516 ft)			CN Rules apply		
CP 99	98.8				
CP 116	116.2				
Baron (CN)	119.6				2,7
Battle Creek	175.8 (CN)			Х	
Gord (CN)	121.4				2,8
CP 124	124.4		СТС		



STATIONS	MP	MANUAL INT	METHOD OF OPERATION	PS	NOTES
CP 140	139.9		070		
Botsford Yard & Siding (5200 ft)			CTC		
CP 142	142.5		-		
CP 143 (BO Secondary, CK&S Branch, Kalamazoo Branch)	143.1	X	-		1
Kalamazoo	143.4			Х	3
CP 147	147.1		-		
CP 160	160.2				
Lawton Siding (6158 ft)			-		
CP 161	161.5		-		
CP 171	171.4		-		
Glenwood Siding (6700 ft)			-		
CP 172	172.6		-		
CP 178	178.1		-		
Dowagiac	179.5		-	Х	
Dowagiac Siding (10560 ft)	179.5		-		
CP 180	180.2		-		
CP 190	190.4		-		
Niles	191.9			Х	
Niles Siding (8976 ft)	191.9				
CP 192	192.2				
CP 200	200.5				
Dayton Lake Siding (8700 ft)					
CP 202	202.1			-	
CP 211	211.6				
Three Oaks (9000 ft)					



STATIONS	MP	MANUAL INT	METHOD OF OPERATION	PS	NOTES
CP 213	213.9		OTO		
New Buffalo	218.9		- CTC		
IN / MI State Line	222.7		-		
CP 226	226.2		-		
Michigan City Siding (11,900 ft)					
CP 228 (Br)	228.5	Х	_		1
Michigan City	228.9		-		9
CP 10th Street (CSS & SB Crossing)	229.8	Х			1
CP 238	238.9		_		
Chesteron Siding (3325 ft)			-		
CP 239	239.7		-		
CP 482 (NS) Jct. NS Chicago Line	240.57		NS Rules apply		
Notes				-	
Train movements t rules.	between MP 7.4 and	d MP 119.6, and be	etween MP 121.4 an	d MP 240.57 are g	overned by ITCS
Note 1: RR Crossi	ng at Grade or Mov	eable Bridge			
Note 2: Controlled	by the CN Train Dis	spatcher			
Note 3: MDOT pro	perty boundaries ar	e as follows: Betwe	een MP 145.06. and	MP 7.4, excluding	CN
Note 4: Controlled	by the Conrail Detr	oit Train Dispatche	r		
Note 5: Hand oper	ated switch and/or o	derail on main tracl	k or controlled siding	g equipped with ele	ctric lock.
Note 6: The Wayn Limits	e Industrial track wi	thin limits of CP 18	is designated CTC	Main Track with M	anual Interlocking
Note 7: CN MP eq	uivalent at Gord is ²	175.3			
Note 8: CN MP eq	uivalent at Baron is	176.9			
Note 9: Michigan (City Passenger Stat	ion removed as a s	scheduled station sto	op.	
Note 10: CCOR ru	lles apply in the con	fines of Jackson V	ard		



MICHIGAN SUBDIVISION SPECIAL INSTRUCTIONS

Unless otherwise specified, this section contains Subdivision Specific Instructions related to GCOR rule additions, modifications, and/or deletions. All other portions of the rule remain in effect.

6.3 MAIN TRACK AUTHORIZATION

Method of Operation

Centralized Traffic Control (CTC) rules are in effect between CP Townline (Conrail), exclusive and CP Baron (CN), exclusive, and between CP Gord (CN), exclusive, and CP 482 (NS), exclusive.

Manual Interlocking limits are in effect at CP 18, CP 143, CP 228, CP 10th St.

Foreign Railroad Operations: Norfolk Southern (NS) operates over the Amtrak Michigan Subdivision between CP 482 and Gord, and between Baron and CP Townline.

Note: NS trains operating exclusively between NS CP 482 and CP 143 (exclusive) must have operative ITCS. (Rules 590-599 apply.) NS trains operating between CP Townline and CP 143 (inclusive) must have operative I-ETMS (exempt from ITCS rules 590-599)

Chicago South Shore (CSS) operates over the Amtrak Michigan Subdivision between CP 10th Street and CP 226. **Note:** CSS trains operating exclusively between switch MP 228.8 (Franklin Street) and switch MP 228.0 (Controlled Siding Michigan City) are exempt from the requirements of Rules 590-599 (ITCS).

Conrail (CR) operates CP Townline (inclusive) eastward.

CSX operates within the limits of CP 18. Restrictions at CP 18 will be conveyed by the Amtrak Michigan Subdivision Train Director to the CSX RN Dispatcher who will issue the restriction. CSX employees are not required to carry Amtrak Timetable, Special Instructions, or Amtrak DTB.

Grand Elk Railroad (GDLK): Operates over the Amtrak Michigan Subdivision between CP 140 (exclusive) and CP 143 (inclusive).

Note: GDLK trains operating exclusively between CP 140 (exclusive) and CP 143 (inclusive) are exempt from the requirements of Rules 590-599 (ITCS) and I-ETMS.

Jackson and Lansing Railroad Company (JAIL): Operates over Amtrak Michigan Subdivision between CP 56 (exclusive) and CP 75 (inclusive).

Note: JAIL trains operating exclusively between CP 56 (exclusive) and CP 75 (inclusive) are exempt from the requirements of Rules 590-599 (ITCS) and I-ETMS.

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6.31 MAXIMUM AUTHORIZED SPEEDS

Maximum Speeds – Passenger

Between/ At:	Main Trk	No. 1 Trk	No. 2 Trk
\	Speed Restrictions	are listed in bold font.	
Conrail CP Townline Non- inclusive and MP 9.5		79	79
MP 9.5 and MP 9.7		50	50
MP 9.7 and CP 18		79	79
CP 18		60	60
CP 18 RRX		30	30
CP 18 and CP 21		60	79
CP 21 and CP 25 (inclusive)		60	79
CP 25 and CP 28		79	79
CP 28 and MP 29.3	55		
MP 29.3 and MP 32.5	60		
MP 32.5 and MP 34.5	65		
MP 34.5 and MP 35.6	60		
MP 35.6 and MP 36.9	65		
MP 36.9 and MP 37.3	55		
MP 37.3 and MP 37.8	40		
MP 37.8 and MP 38.6	55		
MP 38.6 and MP 43.3	65		
MP 43.3 and MP 45.0	70		
MP 45.0 and MP 47.7	65		
MP 47.7 and MP 49.6	60		
MP 49.6 and MP 52.0	79		
MP 52.0 and MP 52.3	75		
MP 52.3 and MP 67.7	79		
MP 67.7 and MP 68.3	75		
MP 68.3 and CP 72	79		
CP 72 and MP 74.4		70	79
MP 74.4 and MP 75.3		45	45

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Between/ At:	Main Trk	No. 1 Trk	No. 2 Trk
	Speed Restrictions	are listed in bold font.	
MP 75.3 and CP 78		70	70
CP 78 and MP 81.8	105		
MP 81.8 and MP 83.0	95		
MP 83.0 and MP 84.9	110		
MP 84.9 and MP 85.9	95		
MP 85.9 and MP 86.2	110		
MP 86.2 and MP 88.9	85		
MP 88.9 and MP 91.2	75		
MP 91.2 and MP 93.2	100		
MP 93.2 and MP 94.3	90		
MP 94.3 and MP 95.8	25		
MP 95.8 and CP 96	40		
CP 96 and CP 99	70		
CP 99 and MP 99.2	85		
MP 99.2 and MP 102.3	100		
MP 102.3 and MP 103.1	90		
MP 103.1 and MP 106.8	105		
MP 106.8 and MP 107.5	70		
MP 107.5 and MP 108.6	100		
MP 108.6 and MP 112.6	110		
MP 112.6 and MP 113.3	100		
MP 113.3 and MP 113.8	70		
MP 113.8 and CP 116	79		
CP 116 and MP 117.7		60	60
MP 117.7 and MP 118.9		40	40
MP 118.9 and CN Baron CN speeds apply		25	25
CN Gord and MP 121.7		20	20
MP 121.7 and CP 124		79	79
CP 124 and MP 127.6	79		
MP 127.6 and MP 129.4	75		



Between/ At:	Main Trk	No. 1 Trk	No. 2 Trk			
Speed Restrictions are listed in bold font.						
MP 129.4 and MP 130.3	70					
MP 130.3 and CP 140	110					
CP 140 and MP 140.3		60	79			
MP 140.3 and MP 142.0		79	79			
MP 142.0 and MP 142.3		70	70			
MP 142.3 and CP 143		60	60			
CP 143 and MP 143.6		30	30			
MP 143.6 and MP 145.0		45	45			
MP 145.0 and MP 146.2		75	75			
MP 146.2 and CP 147		80	80			
CP 147 and MP 149.5	95					
MP 149.5 and MP 191.3	110					
MP 191.3 and MP 192.3	80					
MP 192.3 and MP 193.1	70					
MP 193.1 and MP 194.5	80					
MP 194.5 and MP 198.9	90					
MP 198.9 and MP 218.1	110					
MP 218.1 and MP 218.9	95					
MP 218.9 and MP 228.0	110					
MP 228.0 and MP 229.9	50					
MP 229.9 and MP 230.5	90					
MP 230.5 and MP 240.5	110					
MP 240.5 and MP 240.57	79					

Maximum Speeds – Freight

Between/ At:	Main Trk	No. 1 Trk	No. 2 Trk				
	Speed Restrictions are listed in bold font.						
Conrail CP Townline Non- inclusive and MP 9.5		50	50				
MP 9.5 and MP 9.7		40	40				
MP 9.7 and CP 18		50	50				
CP 18		30	30				
CP 18 RRX		30	30				

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Between/ At:	Main Trk	No. 1 Trk	No. 2 Trk
	Speed Restrictions	are listed in bold font.	
CP 18 and MP 25.8		40	50
MP 25.8 and CP 28		50	50
CP 28 and MP 30.6	40		
MP 30.6 and MP 34.5	35		
MP 34.5 and MP 35.1	40		
MP 35.1 and MP 36.9	50		
MP 36.9 and MP 37.3	40		
MP 37.3 and MP 37.8	30		
MP 37.8 and MP 38.6	40		
MP 38.6 and MP 46.6	50		
MP 46.6 and MP 49.6	40		
MP 49.6 and CP 72	50		
CP 72 and MP 74.0		50	50
MP 74.0 and MP 74.4		45	45
MP 74.4 and MP 77.5		40	40
MP 77.5 and CP 78		50	50
CP 78 and MP 94.3	50		
MP 94.3 and MP 95.8	25		
MP 95.8 and CP 99	40		
CP 99 and CP 116	50		
CP 116 and MP 118.9		40	40
MP 118.9 and CN Baron CN speeds apply		25	25
CN Gord and MP 121.7		20	20
MP 121.7 and MP 123.6		40	40
MP 123.6 and CP 124		40	50
CP 124		40	50
CP 124 and CP 140	50		
CP 140		40	40
CP 140 and MP 142.3		40	40
MP 142.3 and MP 142.9		30	30

5 - Page 6 6.31 MAXIMUM AUTHORIZED SPEEDS MICHIGAN SUBDIVISION SPECIAL INSTRUCTIONS



Between/ At:	Main Trk	No. 1 Trk	No. 2 Trk
	Speed Restrictions are listed in bold font.		
MP 142.9 and MP 144.6		25	25
MP 144.6 and MP 145.0		40	40
MP 145.0 and CP 147		50	50
CP 147 and MP 228.0	50		
East limits CP 160 and West limits CP 161	45		
MP 228.0 and MP 228.4	30		
MP 228.4 and MP 228.6	20		
MP 228.6 and MP 229.9	30		
MP 229.9 and MP 240.6	50		

Maximum Speeds – Freight ITCS

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Between/ At:	Main Trk	No. 1 Trk	No. 2 Trk
	Speed Restrictions are listed in bold font.		
Conrail CP Townline Non- inclusive and CP 18		50	50
CP 18		30	30
CP 18 RRX		30	30
CP 18 and MP 25.8		40	50
MP 25.8 and CP 28		50	50
CP 28 and MP 30.6	40		
MP 30.6 and MP 34.5	35		
MP 34.5 and MP 35.1	40		
MP 35.1 and MP 36.9	50		
MP 36.9 and MP 37.8	30		
MP 37.8 and MP 38.6	40		
MP 38.6 and MP 46.6	50		
MP 46.6 and MP 49.6	40		
MP 49.6 and CP 72	50		
CP 72 and MP 74.0		50	50
MP 74.0 and MP 74.4		45	45
MP 74.4 and MP 77.5		40	40
MP 77.5 & CP 78		50	50

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Between/ At:	Main Trk	No. 1 Trk	No. 2 Trk
Speed Restrictions are listed in bold font.			
CP 78 and MP 94.3	50		
MP 94.3 and MP 95.8	25		
MP 95.8 and CP 99	40		
CP 99 and CP 116	50		
CP 116 and MP 118.9		40	40
MP 118.9 and CN Baron CN speeds apply		25	25
CN Gord and MP 121.7		20	20
MP 121.7 and MP 123.6		40	40
MP 123.6 and CP 124		40	50
CP 124		40	50
CP 124 and CP 140	50		
CP 140		40	40
CP 140 and MP 142.3		40	40
MP 142.3 and MP 144.6		30	30
MP 144.6 and MP 145.0		40	40
MP 145.0 and CP 147		50	50
CP 147 and MP 228.0	50		
East limits CP 160 and West limits CP 161	45		
MP 228.0 and MP 228.4	30		
MP 228.4 and MP 228.6	20		
MP 228.6 and MP 229.9	30		
MP 229.9 and MP 240.6	50		

Maximum Speeds – Controlled Sidings

Controlled Sidings	Psgr (MPH)	Frt (MPH)
-	45	40

Maximum Speeds – Other Tracks

Between/At	All Trains/Equipment
CP 190: Through turnout to Niles Yard	10
Decatur Industrial Lead, Jackson Yard Lead, Lansing Secondary, and turnouts leading toward yards at CP 142, CP 75, CP 72, CP 25, and CP 18.	10



Between/At	All Trains/Equipment
Wayne Industrial	10
All other tracks	10



6.31.1 PERMANENT SPEED RESTRICTIONS

A Amtrak Engines and Equipment – Maximum Speeds:

Amtrak engines and equipment will be governed by speeds contained the Amtrak System General Order.

Passenger trains operating with Freight locomotives must not exceed 50 MPH.

B Freight Engines and Equipment-Maximum Speeds:

Engines and equipment of other railroads will be governed by speeds contained in their respective instructions, subject to the following maximum speeds:

Engines/Equipment	МРН
Lite or Multiple Lite (Less than 4 units)	25
Multiple Lite (Min. of 4 units)	50
With Freight Train *Except when limited by speed of locomotive, passenger trains being operated with freight units	*50

C Minimum Consist Restrictions:

- A Trains consisting of any combination of engines and cars totaling three or less must not exceed 25 MPH.
- B Trains other than passenger trains, required to comply with ITCS Instructions (Rules 590- 599) must not have less than two locomotives in their consist when entering the Amtrak Michigan Subdivision. Locomotives must be configured to allow for the lead unit to be ITCS equipped and operated in the forward direction regardless of train direction.



6.29.2 HBD/DED TRAIN INSPECTION BY CREW MEMBERS

Detectors are installed at the following locations.

MP	Tracks	Туре
14.0	Both	
24.9	Both	
35.0	Main	
47.3	Main	
67.1	Main	HBD/DED
87.7	Main	
107.7	Main	
128.8	Main	
148.6	Main	
230.6	Main	

A Hot Box Detectors and Recorders

Trains must receive a "No Defects" radio transmission after passing over detectors. Trains must be stopped as soon as possible when:

- 1) Radio message from the detector indicates a defect.
- 2) Radio message indicating "Integrity Failure" is received.
- 3) Radio message indicating "No Defects" is not received.

Note: If items (2) or (3) occur, notify the Train Director and inspect entire train. If, on observation, no exception is taken to the reported defect location, crew members will inspect both sides of the train twenty axles ahead and twenty axles behind the reported defect location.

After the examination of a hot journal has been completed, the following information must be reported to the Train Director:

- (a) Confirmation of the location of suspected car(s) in train.
- (b) The initial and number of car(s) and waybill information.
- (c) Condition of journal(s).
- (d) Location of hot journals to include the following:
 - Truck (lead or trailing)
 - Wheel (lead or trailing)
 - Side (north, east, south, west)
- (e) Type of packing if friction type bearing
- (f) Type of bearing (friction or roller)

"No Defects" Message is Not Received:

The detectors in the list below are equipped to rebroadcast messaging feature. If a train passes over a detector and no message is received, the crew must immediately request a repeat of the detector voice message by entering 001 on the radio keypad and comply with the retransmitted detector message. If a retransmission detector message is not available, train crews must proceed according to item (3) above.

Detectors equipped with re-transmission feature
14.0
24.9
35.0
47.3
67.1
87.7
107.7
128.8

B Detector removed from Service

When a Track bulletin or General Order instructs crews that a detector is out of service, crews must:

- 1) Proceed at maximum authorized speed unless otherwise instructed.
- 2) If the next consecutive detector(s) fails, crews must stop and inspect the entire train.

C Use of Tempilstik

Employees must obtain and carry with them while on duty a 200, 212 or 219 degree Tempilstik (Amtrak crews - 212 or 219 degree Tempilstik).

D System Overheated Bearings - Engines

When engine develops an overheated axle bearing or motor axle suspension bearing enroute, engine will be isolated, if possible, or traction motor circuit cut out and operated with caution not exceeding a speed of 10 MPH to the next point w here instructions can be received or where engine may be set off. Any engine reported having an overheated axle bearing or motor suspension bearing or found overheated on inspection must not be dispatched.

E Hot Box Indicators, Alarms, and Hot Journals

On a car known to have a hot journal, the air brakes must be cut out and all air released from reservoirs as promptly as practicable.

Engines or cars equipped with smoke and/or odor hot box indicators will release a strong penetrating odor and/or a volume of dense white smoke when bearings become overheated. When either of these indications is observed, train must be stopped and a prompt report made to the Train Director.

The use of sand or dirt for extinguishing fires in journal boxes is prohibited. Water or snow should not be used for cooling hot journals except in an emergency and when used, journal should be cooled as slowly as conditions will permit.

When a journal equipped with a lubricating pad is found overheating enroute, train must be stopped and examination made. The lubricating pad must be adjusted or replaced with an oil saturated pad in good condition it this will overcome trouble. If cause of heating cannot be corrected in this manner or car cannot be moved to the next terminal through use of cooling compound, car should be set out.

Cooling compound shall be used for emergency treatment of overheated journals of cars enroute and should be used before journal becomes red.



Journals with broken brasses shall not be treated with cooling compound.

When applying cooling compound, it shall be placed along full length of rising side of journal, particular attention to be given to placing compound at back or inside end of journal. Cars having journals treated with cooling compound shall be tagged in a prominent place near journal, using prescribed form at time compound is applied.

When cars with hot journals are set out where inspectors do not take immediate charge, the crew must make a careful inspection of the underside of wooden flooring to determine that it has not been ignited by the blaze from the hot journal and must extinguish all fire before proceeding with the train and the journal should be left in such condition as to avoid damage to car by fire.

Conductor must make prompt report to Train Director of cars treated enroute or set out account overheated journal stating whether treated by cooling compound, by water or snow, also

whether heating was detected by odor or smoke or hot box alarm.

F Wayside Hot Box Detectors – 2 Consecutive Actuations

Note: The procedures outlined in this instruction apply equally to cars and engines.

When the same car of a train actuates 2 consecutive wayside hot box detectors which require the train to be stopped and inspected, and no hot bearing or other defect which may have caused the hot box detectors to actuate (i.e., sticking brakes) is found on that car or the 2 cars ahead and behind it, the following actions must be taken:

- 1) The train must not exceed 30 MPH for the next 5 miles.
- 2) The train must be stopped at that point and all bearings of the car reported to have actuated the detector reexamined. The 2 cars ahead and behind the reported car need not be reexamined during the 5 mile inspection.
- 3) If no hot bearing is found during the 5 mile inspection:
 - (a) The Train Director must be promptly notified.
 - (b) The Train must not exceed 80 MPH, and
 - (c) The car must be set out at the next major terminal.

When a train actuates the last wayside hot box detector before a crew change location, the relieving crew must be advised of the car that actuated the detector so that they can follow the above procedure if the car actuates the next wayside hot box detector enroute.

Note: Refer to the Equipment Advisory in the AMT-3 for instructions regarding On-board Hot Box Detectors.



1.36 EQUIPMENT RESTRICTIONS

A Trail Creek Moveable Bridge at MP 228.5

Unnecessary stopping on moveable bridge is prohibited.

B CWR-Rail Trains

When operating Amtrak CWR-Rail Trains loaded or empty, brake pipe pressure will be maintained and set for 110 lbs. over the entire Amtrak Michigan Subdivision. When the CWR-Rail Train is loaded and working without a buffer car as the rearmost car of the train, the maximum authorized speed is 20 MPH.

C Freight Train Maximum Weights

Prior to departing the crew's initial terminal, Engines or Equipment other than those listed below must not operate on the Amtrak Michigan Subdivision unless authorized by the Amtrak Clearance Department and the Train Director.

- Freight Equipment 286,000 or less gross weight (lbs.)
- Freight Equipment no less than 44' 4" coupler to coupler in length.

D Freight Train Maximum Dimensions

Prior to departing the crew's initial terminal, Engines or Equipment other than those listed below must not operate on the Amtrak Michigan Line unless authorized by the Amtrak Clearance Department and the Train Director.

- Between CP 239 to CP 147 equipment limited to Plate F (17' 2" TOFC).
- Between CP 147 to CP Town Line equipment limited to Plate J (19' 1" Trilevel Autorack).

E IMCS Equipment

Brandt Truck / Nordco Car Mover Tonnage Limits

EQUIPMENT	Amtrak Ballast or Other Track Material (OTM) Cars Not Exceeding 100 Tons	Herzog Ballast Cars Not Exceeding 131.5 Tons
500HP Brandt Truck	9	7
On Track Grades of 1% or greater (see the following table)	6	5
475HP Brandt Truck (AX26441, AX25481, AX24769) or Nordco Car Mover	7	5
On Track Grades of 1% or greater (see the following table)	4	3
Note: For movements operating under Train Director authority, the RWIC in charge must report the car		

Note: For movements operating under Train Director authority, the RWIC in charge must repo count to the Train Director.

Track Grade locations 1% or greater:

Subdivision	FROM	то
Michigan	MP 57.0	MP 57.5





1.3.1 RULES, REGULATIONS AND INSTRUCTIONS

The following rules and instructions govern all movements over the Amtrak Michigan Subdivision. The date of the current book or instruction in effect will be shown in the Michigan Subdivision General Order.

- General Code of Operating Rules (GCOR)
- Amtrak Chicago Michigan Timetable

In addition, the following rules and instructions govern Amtrak employees:

- Central Division Train Movement Manual (Train Directors and employees whose duties require)
- North American Emergency Response Guidebook (Train Directors and employees whose duties require)
- Hazardous Materials Rules (Applies only to employees involved in movement of Hazardous Materials)

Qualification in Amtrak Michigan Subdivision

Unless otherwise specified, all Train and Engine service employees must be qualified on the rules and special instructions of the Amtrak Michigan Subdivision before accepting an assignment to work on the property.

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1.3.2 GENERAL ORDERS

General Orders will be issued and canceled by System Operating Practices. General Orders will be numbered consecutively, with the number prefixed by the number of the current timetable.

System General Orders, Central-Northwest Division General Orders, Michigan Subdivision General Orders, Chicago Control Center General Orders will be issued as required.

Summary General Orders, when issued, will be followed with the letter "SUM" and will supersede any previous General Orders. General Orders in effect will be listed on the current DTB.

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1.3.3 CIRCULARS, INSTRUCTIONS AND NOTICES

Michigan Subdivision General Notice:

Michigan Subdivision General Notices will be issued as needed, summarized periodically, and contain information affecting the Michigan Subdivision. Each new Summary General Notice will have its number followed by the letters "SUM" and will contain all current information. Summary General Notices will supersede the previous Summary General Notice and all previous Supplemental General Notices.

Physical characteristics changes over 60 days old but less than 180 days old that do not involve a change to a timetable special instruction will be listed in the current Amtrak Michigan Subdivision General Notice.



1.17 HOURS OF SERVICE LAW

All crews must notify Amtrak Michigan Subdivision Train Director 3 hours prior to expiring on the hours of service law.



1.20 ALERT TO TRAIN MOVEMENT

Close Clearance

Due to close clearance, employees are prohibited from riding the side of moving equipment at the following locations:

- (a) Jackson Yard
- (b) Botsford Yard
- (c) Hinman Yard
- (d) No cars can be ridden in the yard unless the adjacent track to which you are riding is clear. If you cannot see if the adjacent track is clear due to inclement weather or darkness, the track must be preceded. Do not depend on inventory or yard turnover information.

Not all close clearances are bulletined or posted. Be alert for close clearance signs or close clearance locations or situations created by outside interference.



1.39 ACCURACY OF SPEED INDICATOR

Location of Test Mile signs:

- MP 12.0 to MP 13.0
- MP 24.0 to MP 25.0
- MP 64.0 to MP 65.0
- MP 83.0 to MP 84.0
- MP 111.0 to MP 112.0
- MP 132.0 to MP 133.0
- MP 185.0 to MP 186.0
- MP 235.0 to MP 236.0

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1.44 DISPATCHERS: ASSIGNED TERRITORIES

Where the Operating Rules make reference to the Train Dispatcher or Control Operator, such reference will also apply to Train Director.

DISPATCHER	TERRITORY
Desk 1	Baron (CN), exclusive, to CP Townline (Conrail), exclusive.
Desk 2	CP 482 (NS), exclusive, to Gord (CN), exclusive.

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1.47 DUTIES OF CREWMEMBERS

A All Crew Members Responsibility

Communication - Signals

For each signal affecting the movement, the Engineer will also communicate by radio as soon as the signal becomes visible and the Conductor will repeat:

- 1) Train Identification
- 2) Signal Name (based on aspect displayed)
- 3) Location
- 4) Track designation, when operating in multiple track territory.



1.48 TIME

Employees will calibrate their watch daily and may use the correct-time recording from the U.S. Naval Observatory (202-762-1069)

All railroad watches must be set for Eastern Standard Time, based on the time provided by the official time recording. Employees will use 24 hour military time when issuing, releasing, and voiding all mandatory directives.

Effective 0200 Hours on the second Sunday of March, Standard Time must be advanced one hour. Effective 0200 Hours on the first Sunday of November, Standard Time must be set back one hour.



2.3 REPETITION

Trains receiving a transmission from a trackside warning detector must acknowledge such transmission over the radio by stating train identification and message received.



2.16 ASSIGNED FREQUENCIES

The following radio channels are in service at the locations indicated:

	RADIO CHANNELS	
DEPARTMENT	TX/RX	IN SERVICE BETWEEN / AT
Road	093-093	CP 482 & Gord, Baron and Conrail CP Townline.



2.18 MALFUNCTIONING RADIO

When a locomotive radio failure occurs en-route, a portable radio must be provided on the leading end of the movement at the next location where portable radios are available.

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2.21 ELECTRONIC DEVICES

The following is added to GCOR 2.21 C. Railroad Supplied Electronic Devices.

C. Railroad Supplied Electronic Devices

Railroad operating employees must not use a railroad supplied electronic device for purposes other than which it was intended or while:

• Operating the controls of a moving locomotive or On-Track Equipment unless device is being used to reference a railroad rule, special instruction, timetable, or other directive.



5.5 PERMANENT SPEED SIGNS

Permanent Speed Signs will not be used within the Amtrak Michigan Subdivision.



5.8.1 RINGING ENGINE BELL

Ring the engine bell when approaching all employee crossings when engine is leading movement soon enough before the crossing to provide warning, and continue until crossing is occupied.

Engine Bell on Trains Making Station Stops and operating over Moveable Bridges:

The bell of equipped trains must be sounded when approaching a station platform, or operating over a moveable bridge. The bell must continue to be sounded until the train has stopped.



5.8.2 SOUNDING WHISTLE

A **Portable Whistle Signs**:

Portable Whistle Signs are used by the IMCS Department employees to provide Locomotive Engineers with advance warning that MW employees are working ahead. These signs have a reflective orange background, are oval in shape (1 foot wide by 2 feet high), and display a black letter "W" in the middle. They are placed to the right of affected tracks, and sufficiently in advance of the work area to provide adequate warning. Engineers observing a Portable Whistle Sign on any track must sound the engine whistle or horn in accordance with Rule 5.8.2 (8), and must be prepared to sound the whistle or horn again upon sighting Roadway Workers on or near the tracks.

B Required Whistle Signal

Whistle signal (7) is changed to read as follows:

When approaching public crossings at grade with the engine in front, sound signal as follows:

- A At speeds in excess of 60 MPH, start signal at or about the crossing sign but not more than 1/4 mile before the crossing.
- B At speeds of 60 MPH or less, start signal at least 15 seconds, but not more than 20 seconds, before entering the crossing.
- C If no crossing sign start signal at least 15 seconds, but not more than 20 seconds before entering crossing but not more than 1/4 mile before the crossing.
- D If movement starts less than 1/4 mile from a crossing, signal may be sounded less than 15 seconds before the crossing when it is clearly seen traffic is not approaching the crossing, traffic is not stopped at the crossing or when crossing gates are fully lowered.

Prolong or repeat signal until the engine completely occupies the crossing(s).

- E When a train or engine is stopped at a location such that it will take less than 15 seconds for the movement to occupy a public grade crossing, the whistle signal may be sounded for less than 15 seconds provided:
 - (a) The public grade crossing is equipped with automatic flashing lights and gates, and the gates are fully lowered; **or**
 - (b) there are no conflicting highway movements approaching the public grade crossing.



5.8.3 WHISTLE FAILURE

In the event of a whistle failure, in addition to compliance with Rule 5.8.3 Whistle Failure, notify the Train Director immediately.



5.9.5 DISPLAYING DITCH LIGHTS

Auxiliary Lights:

Engines that are equipped with strobe lights alone (i.e., no ditch lights, crossing lights or oscillating light) must not exceed 40 MPH when operating over public crossings at grade.

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5.10.1 HIGHLY VISIBLE MARKERS

Highly visible markers will be illuminated at all times on the rear of all passenger trains so equipped.

Light Sensitive Portable Marking Devices: Passenger trains with a non-passenger carrying car on the rear may operate with a light sensitive portable marking device that illuminates only at night or when otherwise activated by low light conditions.



5.13.2 RWP FLAGS and TAGS

RWP flags and tags are used in conjunction with certain Roadway Worker Protection (RWP) safety procedures. An RWP flag is a reflectorized orange flag with black letters "RWP." An RWP tag is a fluorescent orange tag with the words "RWP PROTECTION. DO NOT REMOVE" on one side, and "DO NOT REMOVE. EMPLOYEE AT WORK" on the reverse side.

RWP flags are erected at derails applied to prevent entrance to track segments fouled by Roadway Workers, to make the derail more visible to approaching trains. RWP tags are fastened to locks or other securing devices applied to switches or derails positioned to prevent entrance to track segments fouled by Roadway Workers, to prevent unauthorized employees from removing the securing device.

RWP tags are also attached to the controls of unattended engines that are located within a track segment fouled by Roadway Workers, to prevent unauthorized movement.

Engines with an RWP tag attached to the controls must not be moved. RWP flags and tags may be removed only by the Roadway Worker in charge of the working limits, or by another Roadway Worker who has been authorized by the Roadway Worker in charge of the working limits.



6.2 INITIATING MOVEMENT

Before initiating movement on a main track, a crew member must:

- Receive the DTB in effect, and
- Contact the Train Director or other designated employee if any General Orders, Track Bulletins, or DTB restrictions or instructions are needed.

In addition, the following information must also be provided at the beginning of tour of duty:

Tenant Railroad Trains:

The crew must provide the Train Director the following:

- Consist, including all required information on hazardous material, excessive weight or excessive dimension.
- Names of crew members
- Time on duty

Amtrak Passenger or Work/Wreck Trains:

The crew must provide the Train Director the following:

- Train Number or Job Symbol
- Crew names
- Time on duty

Track Bulletins are electronically transmitted to Chicago, Pontiac, Battle Creek, and Port Huron. Conductor/Engineer must examine Track Bulletins for completeness and legibility; contact the Train Director to verify the number and date of each Track Bulletin received.



6.5 SHOVING MOVEMENTS

In addition to the requirements contained in the Amtrak System General Order, the following instructions apply.

A. When cars or engines are shoved, a crew member or other qualified employee must be in position to protect the movement by:

- · Visually observing leading end of the movement to location that movement will be stopped, or
- · Being on equipment to observe leading end of movement in the direction of movement, or
- Preceding the movement.

Employee must visually determine switches and derails are properly lined for movement.

B. Cars or engines must not be shoved to foul other tracks until it is known that switches are properly lined and it is safe to do so.



6.12 FRA EXCEPTED TRACK

None



6.21 PRECAUTIONS AGAINST UNUSUAL CONDITIONS

Bridge Strikes

Trains notified that this Special Instruction is in effect must operate at Restricted Speed not exceeding 5 MPH over the bridge specified, or between the locations named.

As used in this Special Instruction, a "bridge strike" is defined as any physical contact between a vessel or vehicle and the structure of an under-grade bridge, excluding contact with the fender system of a bridge over a waterway or the abutment of a bridge over a highway.

Train Directors who are advised of an alleged bridge strike must immediately take the following actions:

- 1) If the bridge is on the subdivision's Critical Bridge List (see list below), hold all trains clear of the bridge.
- 2) If the bridge is not on the subdivision's Critical Bridge list:
 - (a) Instruct the crews of affected trains to add the location of the restriction on the pre-printed "Bridge Strike" line at the bottom of their DTB, in accordance with DTB addition procedures outlined in SI 15.1 A. **OR**
 - (b) Issue a Track Bulletin to crews of the affected trains, in the following format: Bridge strike SI 6.21 A in effect at/between [location(s)].
- 3) Continue to provide the protection described in item 1 or 2 above until the bridge has been released by the Division Engineer, or his duly appointed representative.

Note: A bridge number can be used to designate the location of the restriction only when the number is clearly stenciled on the bridge, and the number conforms to the bridge's approximate mile post location. Otherwise, the restriction must extend between the first readily identifiable physical characteristic locations on each side of the bridge.

CRITICAL BRIDGE LIST

Trail Creek Moveable Bridge (CP228) at MP 228.5 St. Joseph River Bridge at MP 192.33



6.27 MOVEMENT AT RESTRICTED SPEED

In an effort to ensure that trains required to operate at Restricted Speed or on Other than Main Track are able to stop short of a Stop Signal or equipment fouling the track, Amtrak supervisors conducting operational tests will be placing a Temporary Operational Test Barricade in the gauge of the track ahead of trains which are required by rule or special instruction to operate at Restricted Speed or when operating on Other Than Main Track.

- A Temporary Operational Test Barricade Sign is an octagonal reflectorized red metal sign which has the word "BARRICADE" or "STOP" stenciled on it in white letters.
- A Temporary Operational Test barricade Sign is a rectangular reflectorized white sign which has the words "STOP OBSTRUCTION" stenciled on it in red letters.

For the purpose of monitoring compliance with Restricted Speed, the Temporary Operational Test Barricade will be considered a fixed signal representing a "Stop Signal" and an "Obstruction." Movements required to be observing Restricted Speed must stop short of the Temporary Operational Test Barricade to be in compliance with the operational test.

The Operational Test Barricade Signs may be erected at any time and at any location where Restricted Speed or Other than Main Track is required.



6.28 MOVEMENT ON OTHER THAN MAIN TRACK

Operational tests referenced in 6.27 also apply to 6.28 territory.

Rule 6.28 Movement on Other Than Main Track rules apply on any track other than designated as main track or controlled siding.

6.30 RECEIVING OR DISCHARGING PASSENGERS

The following stations are designated as those where scheduled trains normally receive and discharge passengers across a track between the train and the station platform. Protection against other trains is not required when trains make scheduled stops at these stations.

Trains operating on tracks across which passengers are normally received must approach prepared to stop until the engineer has determined by visual inspection that no passenger train is occupying the station. If a passenger train is in the station, be governed by GCOR Rule 6.30B.

Station	Passengers received or discharged across:	NOTES
Jackson	Main Track 1	
Kalamazoo	Main Track 2	1
Dowagiac	Controlled Siding	
Niles	Controlled Siding	

Note 1: When eastward trains are required to hold out of the Kalamazoo station, trains should stop just east and clear of CP 147, whenever possible. This will avoid unnecessary operation of automatic warning devices.

Station Stop Markers

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A green sign marked with a white reflective "number" is located on the field side beyond the station platform(s). Engineers may stop the locomotive cab side window adjacent to the corresponding sign as the guide for spotting trains.

Station
New Buffalo
Dowagiac
Kalamazoo
Ann Arbor
Albion

Ann Arbor Station: ADA Movable Platform Operation

After arrival in Ann Arbor station, all doors must remain closed until the Conductor has communicated with the Station personnel/Customer Service representative and assurance has been received that movement of the ADA movable platform into its extended position has completed.

If the ADA movable platform fails to extend:

- 1) The Amtrak Conductor or the designated Assistant Conductor will advise passengers to board/alight from the low level platforms at the ends of the two cars that are adjacent to the ADA movable platform.
- 2) In the event there are passengers requiring a wheeled mobility device to board or detrain, the train will need to be re-positioned at the east end of the station to enable use of the station-based mobile lift.
- 3) The Conductor and/or station personnel must report to CNOC that the ADA movable platform failed to extend.

When station work has been completed and all train doors have been closed, the Conductor or designated Assistant Conductor must so advise the Station personnel/Customer Service representative, and request to be notified as soon as the ADA movable platform has been fully retracted.

1) If the shuttle platform fails to retract when commanded, the Station personnel/Customer Service representative will utilize the manual hand crank mechanism to retract the platform.



- 2) In the event that the platform cannot be manually retracted, the Station personnel/Customer Service representative will so notify the Conductor.
- 3) The Conductor must notify the NS dispatcher Amtrak Michigan Subdivision Train Director as soon as possible that the ADA movable platform at Ann Arbor station cannot be retracted. (NS Amtrak Train Director will then restrict freight trains to 10 MPH at Ann Arbor station until the ADA movable platform edge has been retracted, to avoid damage to the movable platform.) In the event that communication with the NS dispatcher Amtrak Train Director cannot be established, CNOC must be notified of the movable platform's failure to retract.



6.32.2 ROAD CROSSINGS-AUTOMATIC WARNING DEVICES

A **Power Indicators at Crossings**

A bright white (lunar) indicator has been installed on the track side of the crossing control housings at crossings equipped with automatic warning devices. These lights indicate the power state of the crossing protection, as follows:

- Steady AC power is on
- Flashing AC power off
- Dark AC & Battery power off

If this indicator is flashing, or is dark, inform the Train Director who will notify C&S.

B Interruption Devices

Legend for type of interrupter control as listed in following table:

A: No Interrupter

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AA: Automatic Interrupter - rule 6.32.2

AM: Manual Interrupter – rule 6.32.5. With train on crossing approach but at least 200 feet from crossing, red button will raise gates, black button will lower gates.

- 1) "AM" on main track, "AA" on controlled siding
- 2) "AM" westward, Shape

"AA" eastward (after 3 minutes)

МР	*	Crossing Name	City
7.40		CP TOWNLINE (CR)	Dearborn
9.80		CP 9	
10.00	AA	MONROE ST.	
10.08	AA	MASON ST.	
12.32	AA	GULLEY RD.	
12.60	AA	BEECH DALY RD.	Inkster
13.10	AA	JOHN DALY RD.	
14.07	AA	HARRISON AVE.	
15.10	AA	HENRY RUFF RD.	
15.60	AA	MERRIMAN RD.	Wayne
16.00	AA	WINIFRED ST.	
16.39	AA	VENOY RD.	
16.88	AA	HOWE RD.	
17.28	AA	2ND ST.	
17.70	AA	ELIZABETH ST.	



МР	*	Crossing Name	City
18.10		CP 18	Wayne
19.70	AA	HANNAN RD.	
20.20	AA	LOTZ RD.	Canton
20.83	AA	HAGGERTY RD.	
21.25	AA	LILLEY RD.	
21.70		CP 21	
22.23	AA	SHELDON RD.	Van Buren Township
23.80	AA	BECK RD.	
24.87	AA	DENTON RD.	
25.84		CP 25	
28.20		CP 28	
29.48	AA	RIVER/CROSS ST.	Ypsilanti
29.75	AA	E. FOREST AVE.	
30.30	AA	LEFORGE RD.	
31.13	AA	SUPERIOR RD.	
35.00	AA	GALLUP PARK PATHWAY	Ann Arbor
37.86		CP 37	-
40.50	AA	N. MAPLE RD.	-
41.50	AA	W. HURON RIVER DR.	
42.60	AA	E. DELHI RD.	-
44.20	AA	ZEEB RD.	Ann Arbor
46.50	AA	CENTRAL ST.	Dexter
46.95	AA	BROAD ST.	
48.50	AA	WYLIE RD.	-
49.80	AA	N. DANCER RD.	
51.05	AA	N. LIMA CENTER RD.	Chelsea
51.22	AA	DEXTER CHELSEA RD.	
51.96	AA	N. FLETCHER RD.	
51.98		CP 52	
53.40	AA	FREER RD.	



City	Crossing Name	*	MP
Chelsea	MCKINLEY ST.	AA	53.95
	N. MAIN ST.	AA	54.08
	HAYES ST.	AA	54.50
	CLEVELAND ST.	AA	54.90
	CP 56		56.03
	PIERCE RD.	AA	56.88
	FAHRNER RD.	AA	58.30
	HOPPE RD.	AA	59.00
Grass Lake	NOTTEN RD.	AA	60.06
	N. FRANCISCO RD.	AA	61.00
	KALMBACH RD.	AA	62.50
	MAUTE RD.	AA	62.95
	SAROSSY LAKE RD.	AA	63.88
	N. UNION ST.	AA	64.70
	N. LAKE ST.	AA	65.28
	WILLIS RD.	AA	66.00
	CRAFT RD.	AA	66.50
Leoni	MILL ST.	AA	68.05
	PORTAGE RD.	AA	68.22
Michigan Center	PAGE AVE.	AA	70.80
	6TH ST.	AA	71.40
	5TH ST.	AA	71.55
	FACTORY RD.	AA	71.95
	FELTERS RD.	AA	72.20
Jackson	FALAHEE RD.	AA	72.50
	CP 72		72.70
	S. ELM AVE.	AA	74.60
	S. EAST AVE.	AA	75.10
	COOPER ST.	AA	75.50
	E. MICHIGAN AVE.	AA	75.55
	CP 75		75.68



MP	*	Crossing Name	City
75.68	AA	N. MARTIN LUTHER KING JR. DR.	Jackson
76.18	AA	N. BLACKSTONE ST.	
76.40	AA	STEWARD AVE.	
77.00	AA	N. WISNER ST.	
77.20	AA	WILDWOOD AVE.	
78.00	AA	LAURENCE AVE.	
78.60		CP 78	
78.80	AA	WILDWOOD AVE.	
79.08	AA	WOODVILLE RD.	
80.56	AA	PRIVATE CROSSING	
80.75	AA	GLASGOW RD.	
81.67	AA	N. SANDSTONE RD.	Parma
82.70	AA	N. DEARING RD.	
84.50	AA	N. HARRINGTON RD.	
85.08	AA	HENDERSHOT RD.	
85.90	AA	PRIVATE CROSSING	
86.10	AA	N. UNION ST.	
87.38	AA	LITLE RD.	
87.50	AA	ERIE RD.	
89.10	AA	N. CONCORD RD.	
92.15	AA	BATH MILLS RD.	Albion
94.15	AA	NEWBURG RD. 29 ½ MILE RD	
95.00	AA	S. HANNAH ST.	
95.05	AA	E. ERIE ST.	
95.30	AA	S. HURON ST.	
95.45	AA	E. CASS ST.	
95.65	AA	N. SUPERIOR ST.	
95.75	AA	N. CLINTON ST.	
95.85	AA	N. EATON ST.	
96.10	AA	N. ALBION ST.	



MP	*	Crossing Name	City
96.20		CP 96	Albion
97.80	AA	B DRIVE N.	
98.75		CP 99	
101.05	AA	STATE ST. (23 MILE RD.)	Marango
102.06	AA	B DRIVE N.	Marshall
103.24	AA	PRIVATE CROSSING	
105.60	AA	PRIVATE CROSSING	
106.50	AA	REUSS RD.	
107.04	AA	S. MARSHALL AVE.	
107.62	AA	S. KALAMAZOO AVE.	
107.90	AA	S. LINDEN ST.	
108.60	AA	WEST DR.	
109.35	AA	15 MILE RD.	Ceresco
111.73	AA	PRIVATE CROSSING	
112.68	AA	C. DRIVE N.	
112.97	AA	12 MILE RD.	
114.27	AA	11 MILE RD.	
115.60	AA	F DRIVE N.	Battle Creek
116.00	AA	WATTLES RD. (9 1/2 MILE RD)	
116.20		CP 116	
119.20	AA	E. MICHIGAN AVE. (M 96)	
119.6		BARON (CN)	
121.4		GORD (CN)	
121.55	AA	KENDALL ST. S.	Rumley
121.95	AA	ANGELL ST.	
122.70	AA	20TH ST. N.	Springfield
122.98	AA	24TH ST. N.	
123.65	AA	HELMER RD. N.	
124.4		CP 124	Custer
125.28	AA	RIVER RD. W.	

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MP	*	Crossing Name	City
126.10	AA	CUSTER DR.	Custer
127.23	AA	PRIVATE CROSSING	
128.83	AA	PRIVATE CROSSING	Augusta
129.28	AA	PRIVATE CROSSING	
129.70	AA	DICKMAN RD.	
130.28	AA	S. CHURCH ST.	
131.82	AA	PRIVATE CROSSING	
133.58	AA	PRIVATE CROSSING	Galesburg
133.95	AA	MCCOLLUM ST.	
134.48	AA	BURGESS DR.	
134.70	AA	PEARL ST.	
135.28	AA	N. 35TH ST.	
136.03	AA	N. 33RD ST.	
137.52	AA	N. 30TH ST.	Comstock
138.51	AA	N. 28TH ST.	
139.50	AA	N. 26TH ST.	
139.9		CP 140	
140.10	AA	E. MICHIGAN AVE.	
142.5		CP 142	Kalamazoo
142.95	AA	HARRISON ST.	
143.05	AA	WALBRIDGE ST.	
143.1		CP 143	
143.10	AA	PORTER ST.	
143.19	AA	N. PITCHER ST.	
143.30	AA	N. EDWARDS ST.	
143.38	AA	N. BURDICK ST.	
143.45	AA	N. ROSE ST.	
143.50	AA	N. CHURCH ST.	
143.60	AA	N. PARK ST.	
143.75	AA	N. WESTNEDGE AVE.	
143.78	AA	W. KALAMAZOO AVE.	

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City	Crossing Name	*	MP
Kalamazoo	ELM CROSSOVER	AA	143.97
	ELM ST.	AA	144.00
	WEST MAIN ST.		144.08
	ACADEMY ST.	AA	144.20
	W. LOVELL ST.	AA	144.35
	W. MICHIGAN AVE.	AA	144.65
	OLIVER ST.	AA	144.90
	HOWARD ST.	AA	145.55
	CP 147		147.1
	S. DRAKE RD.	AA	147.33
	S. 11TH ST.	AA	147.70
Oshtemo	W. ML AVE.	AA	150.70
	S. 4TH ST.	AA	151.90
Mattawan	E. MCGILLEN AVE.	AM	155.70
	WEBSTER ST.	AM	156.15
Lawton	N. NURSERY ST.	AA	160.15
	CP 160		160.2
	N. MAIN ST.	(1)	160.65
	WALKER ST.	(1)	160.88
	CP 161		161.5
	C.R. 665	AM	162.95
Decatur	38TH ST.	AM	164.78
	39TH ST.	AA	165.31
	S. GEORGE ST.	AA	168.15
	S. WILLIAMS ST.	AA	168.42
	45TH ST.	AA	169.15
	46TH ST.	AA	169.48
Glenwood	CP 171		171.3
	CP 172		172.7
	GLENWOOD RD.	AA	172.72
	DEWEY LAKE ST.	AA	173.15
Twin Lakes	TWIN LAKES RD.	AA	174.45

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MP	*	Crossing Name	City
174.96	AA	MORTON ST.	
176.22	AM	GAGE ST.	Dowagiac
178.1		CP 178	
178.67	AA	E. PRAIRIE RHONDE ST.	
179.30	AA	E. DIVISION ST.	
179.60	AA	PARK PLACE	
179.65	AA	E. HIGH ST.	
180.1		CP 180	
181.66	AM	PEAVINE ST.	
182.90	AM	BEESON ST.	
184.80	AM	WELLS ST.	Pokagon
185.35	AM	POKAGAN HWY.	
187.05	AA	THOMPSON RD.	Niles
187.80	AM	WHITE ST.	
188.96	AM	KORN ST.	
190.5		CP 190	
192.01	AA	N. 5TH ST.	
192.2		CP 192	
192.60	AA	N. LINCOLN AVE.	
193.97	AA	S. PHILIP RD.	
195.53	AA	PORTAGE RD.	
196.30	AA	MAYFLOWER RD.	
198.45	AA	S. RED BUD TRAIL	Buchanan
200.15	AA	BAKERTOWN RD.	
200.5		CP 200	
201.75	AA	PRIVATE CROSSING	
202.2		CP 202	
202.50	AA	PRIVATE CROSSING	
204.80	AA	GARDNER RD.	Galien
206.05	AA	CLEVELAND AVE.	
207.10	AA	SMITH RD.	

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MP	*	Crossing Name	City	
207.85	AA	PARDEE RD.	Three Oaks	
209.80	AA	S. AVERY RD.		
210.85	AA	FLYNN RD.		
211.8		CP 211		
211.88	AA	N. ELM ST.		
212.50	AA	S. SCHWARK RD.		
213.32	AA	PRIVATE CROSSING		
213.67	AA	PRIVATE CROSSING		
213.7		CP 213		
213.95	AA	S. BASSWOOD RD.		
214.18	AA	PRIVATE CROSSING		
214.87	AA	LAKESIDE RD.		
215.20	AA	PRIVATE CROSSING	Three Oaks	
215.62	AA	PRIVATE CROSSING		
216.05	AA	PRIVATE CROSSING		
218.90	AA	N. WHITTAKER ST.	New Buffalo	
219.18	AA	N. WILLARD ST.		
219.48	AA	N. EAGLE ST.		
220.31	AA	FOREST BEACH DR.		
221.88	AA	GRAND BEACH RD.	Grand Beach	
224.00	AA	OLD GRAND BEACH RD.	Michiana Shores	
224.58	AA	DUNELAND BEACH RD.		
224.95	AA	MOORE RD.		
226.10	AA	N. KARWICK RD.		
226.2		CP 226		
226.83	AA	WOODRUFF RD.		
227.38	AA	WASHINGTON PARK BLVD.		
228.5		CP 228		
228.30	AA	CENTER ST.		
228.77	AA	FRANKLIN ST.		

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МР	*	Crossing Name	City
228.95	AA	WABASH ST.	Michigan City
229.13	AA	W. MICHIGAN BLVD.	
229.58	AA	W. 8TH ST.	
229.68	AA	W. 9TH ST.	
229.70	AA	W. 10TH ST.	
229.8		CP 10TH STREET	
229.84	AA	CHICAGO/GREEN STS.	
230.10	AA	WESTERN AVE.	
230.39	AA	HITCHCOCK ST.	
231.67	AA	N. COUNTY LINE RD.	
232.71	AA	ARDENDALE RD.	Porter
233.36	AA	S. RAILROAD AVE.	
233.98	AA	BROWN RD.	
235.59	AA	N. 365 E.	
236.30	AA	N. 310 E.	
236.75	AA	BRUMMIT RD.	
237.71	AA	N. 200 E.	
238.02	AA	E. 1400 N	
238.9		CP 238	
239.7		CP 239	
240.19	AA	N. WAVERLY RD.	
240.49	AA	FRANCIS ST.	

C * type of interrupter control for automatic warning devices.

The following crossings are within the limits of CP 143 on No. 6 track and are maintained by Amtrak. When the Michigan Subdivision Train Director receives a report of a malfunction or incident at these crossings, protection is only required for north and south movements

MP	*	Crossing Name	City
GDLK MP 54.37	AA	EAST WATER ST.	Kalamazoo
GDLK MP 54.45	AA	KALAMAZOO ST.	Kalamazoo

D AA: Automatic Interrupter – Required Special Procedures



Under the following conditions a train must not foul a highway crossing at grade equipped with automatic warning devices until it is ascertained that the warning devices have been operating at least 20 seconds, or the gates (if equipped) are in the horizontal position.

1) **Making a Reverse Movement** – when a train passes entirely over a highway crossing and then is going to make a reverse move.

Exception: If the entire train has cleared the crossing by at least 1.2 miles, it may make a reverse move over the crossing without following special procedures.

- 2) **Approaching at Restricted Speed** When a train is approaching at Restricted Speed.
- 3) Increasing Speed in an Approach Circuit with Automatic Interruption When a train stops or increases speed by more than 5 MPH within 0.6 miles of a highway crossing at grade equipped with apparatus that will automatically interrupt the operation of the crossing warning, including motion sensing detectors.
- 4) **Passing Warning Device Reactivation Point on Main Track or Controlled Siding** When a train proceeds past a warning devices reactivation point on a main track or controlled siding after having been stopped or delayed within 1.2 miles of the crossing.
- 5) **Passing Warning Device Activation Point on Track Other than Main Track or Controlled Siding** – When a train proceeds past a warning device activation point on other than a main track or controlled siding.

Performing Switching within 1.2 Miles of Crossing – When a train has performed switching within 1.2 miles of the crossing

E AM: Manual Interrupter – Required Special Procedures

When a train is on a crossing approach but at least 200 feet from crossing the red button will raise gates and the black button will lower gates. At locations where apparatus is provided to manually interrupt the operation of the automatic highway crossing warning, instructions are posted or the "Raise" and "Lower" buttons are marked for each track.

When the apparatus is operated manually, no movement may be made over the crossing until:

- 1) Warning is provided by on-ground personnel, (**OR**)
- 2) The automatic operation of this warning has been reestablished and operating for at least 20 seconds, **(OR)**
- 3) If equipped with gates, they are in the horizontal position and crossing lights are flashing.

Whenever a crossing warning is operated manually or manually interrupted, it must be restored to normal after movement is completed. Control boxes must be locked.

At crossings where the apparatus interrupts the automatic warning on adjacent tracks, the employee interrupting the warning must remain at the crossing to reestablish automatic warning to normal operation when a train is approaching on an adjacent track.



6.32.2 A AUTOMATIC WARNING DEVICES MALFUNCTIONING

6.32.2 A. is revised to read:

Employees must observe crossing warning devices and report any that are malfunctioning, damaged or missing to the train dispatcher or proper authority by the first available means of communication. Notify all affected trains as soon as possible.

A Automatic Warning Devices

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 with 3,000 feet of the crossing and speed has increased by more than 5 MPH.
- · Movement is closely following another movement.
- Movement is on other that the main track or siding.
- Movement enters a main track or siding with 3,000 feet of the crossing.

or

• Movements operating under Rule 15.4 Protection When Tracks are Removed From Service: If the automatic highway crossing warning devices are not operating, the movement must not be made until protection is provided by on-ground personnel.

MP	Crossing Name	DOT #
17.28	Second St.	545188L
17.70	Elizabeth St.	545190M
130.28	Private Xing	545419S
168.15	George St.	545509R
168.42	Williams St.	545511S
179.30	Division St.	545525A
240.20	Waverly Rd.	548528F

• For a minimum of 20 seconds at the following crossings:

B Crossing Warning Devices Disabled, Malfunctioning, Damaged or Missing

Train Director Instructions

Once notified of crossing warning devices disabled, malfunctioning, damaged or missing, the Train Director must issue a Track Bulletin (or an additional restriction to the DTB, as prescribed in Special Instruction 15.1 A, "Adding or Voiding Restrictions") to all trains that will operate over the affected crossing. Crossing Malfunctions

Procedure 1: Stop and Protect

Unless otherwise instructed on the Track Bulletin, train movement must stop before occupying the crossing, even if devices are seen to be working. After a train crew member provides on-ground warning at the crossing, proceed not exceeding 15 MPH until the leading end of train operates through the crossing.

Procedure 2: Contact Flagger / Stop and Protect



Unless otherwise instructed on the Track Bulletin, train movement must proceed prepared to stop before occupying the crossing. Train movement may proceed through the crossing, not exceeding 15 MPH without stopping, after the train crew communicates with a signal department employee or equipped flagger providing protection at the crossing. The communication must include a job safety briefing in which it is confirmed that the crossing is protected by the signal department employee or equipped flagger.

If communication with the signal department employee or equipped flagger is not made, the train crew must comply with the procedures outlined in Procedure 1: Stop and Protect.

C Flaggers

An equipped flagger is a person at a crossing, other than a crew member, who is equipped with a vest, shirt, or jacket of a high visibility color appropriate for daytime flagging such as orange, yellow, strong yellow, green or fluorescent versions of these colors. At night, similar outside garments must be retro reflective. The flagger must have a red flag or stop paddle by day and a light at night.

Follow Procedure 2, outlined above in section B "Crossing Warning Devices, Disabled, Malfunctioning, Damaged or Missing" when an equipped flagger is protecting the crossing.



7.6 SECURING CARS OR ENGINES ON MAIN TRACK OR SIDING

A **Authorization Required**

In the application of GCOR 7.6, leaving a train, car(s) or on-track equipment unattended on a main track or siding is prohibited unless authorized by the Train Director.

The Train Director must not authorize equipment to be left unattended on a main track or siding outside of designated terminals except:

- 1) To allow pick-ups or set-outs at industry tracks, or permit the repositioning of equipment at other locations when operationally necessary (e.g. run around equipment); or
- 2) An emergency situation exists, such as equipment failure or extreme weather conditions; or
- 3) An extended maintenance project requires the equipment to be stored when workers are off duty.

B Job Briefing Requirements

Prior to leaving equipment unattended on a main track or siding, crews must conduct a job briefing.

C Securement Requirements

Trains, car(s) or on-track equipment left unattended on a mainline track or mainline siding must be secured in accordance with the securement procedures for that equipment. Amtrak employees must secure the equipment in accordance with the applicable Amtrak securement procedures. Non-Amtrak employees must follow the securement procedures specified by their employer. A qualified employee must test the securement to ensure it is sufficient to prevent unintended movement prior to leaving the equipment unattended.

When a train is left unattended on a main track or siding with the locomotive, the controlling locomotive cab must be locked if possible. If not possible to lock locomotive door, the reverser must be removed from the control stand and secured.

Prior to leaving any such equipment unattended:

- 1) A qualified employee who participated in the securement, or who has knowledge of the procedures that were followed, must verify with the Train Director that the required securement procedures have been followed and the securement has been tested and is known to be effective.
- 2) The Train Director must confirm receipt of the information that the equipment has been secured properly.

D Reporting Requirements When Certain Hazmat Cars Are in The Consist

A qualified employee who participated in the securement, or who has knowledge of the procedures that were followed, must communicate the specific information included in this section to the Train Director if their train's consist includes:

- Five or more tank car loads of any one or any combination of materials poisonous by inhalation as defined in 49 CFR 171.8, including anhydrous ammonia (UN 1005) and ammonia solutions (UN 3318); or 20 rail car loads or intermodal portable tank loads of any one or any combination of materials listed in (a) above, or,
- 2) Any Division 2.1 flammable gas, Class 3 flammable liquid or combustible liquid, Class 1.1 or 1.2 explosive, or hazardous substance listed in 49 CFR 173.31(f)(2).

The communication must include:

- (a) The number of hand brakes applied, and chocks, if used;
- (b) The tonnage and length of the train or vehicle;
- (c) The type and location of cars containing hazardous materials;



- (d) The grade and terrain features of the track, such as an ascending or descending grade;
- (e) Any relevant weather conditions.

E Train Director's Record

Train Directors must record the information provided by crews in the relevant CAD software Train Symbol boxes if the equipment to be left unattended includes:

- 1) Five or more tank car loads of any one or any combination of materials poisonous by inhalation as defined in 49 CFR 171.8, including anhydrous ammonia (UN 1005) and ammonia solutions (UN 3318); or
- 2) 20 rail car loads or intermodal portable tank loads of any one or any combination of materials listed in (a) above, or,
- 3) Any Division 2.1 flammable gas, Class 3 flammable liquid or combustible liquid, Class 1.1 or 1.2 explosive, or hazardous substance listed in 49 CFR 173.31(f)(2).
- 4) If equipment is to be left standing unattended between the change of shifts, the outgoing Train Director must include this information on the electronic turnover in the ARINC system and must discuss with the incoming Train Director.

F Requirements When Emergency Responders Work on Equipment

Prior to leaving trains, car(s) and other on-track equipment unattended, it must be inspected by a qualified employee when it is known that an emergency responder was on, under, between, or otherwise manipulated the equipment. Any Amtrak employee who has knowledge of an emergency responder being on, under, between or otherwise manipulating equipment must report their observation to the Train Director, who must ensure the equipment is inspected by a qualified employee for proper securement.



8.2 POSITION OF SWITCHES

Approaching Facing Point Switches in Non-Signaled Territory

Trains operating under non-signaled TWC rules must not pass over facing point switches not protected by a block signal or Switch Point Indicator until it is ascertained that the switch is properly lined. In the case of hand-operated switches designed and permitted to be trailed through, do not allow movement to foul a track until route is seen to be clear or the train has been granted movement authority.

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8.3 MAIN TRACK SWITCHES AND DERAILS

An employee granted permission to occupy the working limits of another employee, or who is working under 6.3.1 Train Coordination, must report to the employee in charge the position of any main track switches operated, before reporting clear of the working limits.

The following table shows the location of hand operated main track switches, ITCS switch ID (if applicable), and indicates if they are equipped with an electric lock:

HAND OPERATED SWITCHES AND DERAILS					
MP	Track	Location/ Name	Electric Lock	ITCS ID	Note
9.1	Main 2	Greenfield Village	Yes	N/A	
16.3	Main 2	Cul-Mac	Yes	N/A	
17.1	Main 1	Wayne Yard	Yes	L0171E	
19.2	Main 1	North Pass/ Cogswell	Yes	L0192W	
19.3	Main 2	South Siding/ Wayne	Yes	L0193W	
19.5	Main 1	Hannan Rd/ Wayne Yard	Yes	L0195W	
21.1	Main 1	Procoil	Yes	N/A	
24.7	Main 1	Contractors Steel	Yes	N/A	
26.5	Main 1	East End North Pass	Yes	L0265E	
27.0	Main 2	Wiard Rd./ Willow Run Yard	Yes	L0270W	
27.6	Main 2	Willow Run Yard/ West Switch	Yes	L0275W	
27.6	Main 1	North Pass West Switch	Yes	L0276W	
29.5	Main	YPSI Lead	Yes	N/A	
37.8	Main	Ann Arbor Railroad	Yes	L0378E	
51.4	Main	Dexter	Yes	N/A	
54.2	CS	Jiffy Lead	Yes	L0542E	
54.3	Main	Chelsea Lead	Yes	L0543E	
64.8	Main	Grass Lake Stub	Yes	N/A	
86.1	Main	Parma Stub	Yes	N/A	
96.3	Main	East End South Siding	Yes	L0963E	



	1	AND OPERATED SWITC			
96.7	CS	American Colloid Co.	Yes	N/A	
96.8	Main	West End South Siding	Yes	L0968W	
96.8	CS	Georgia Pacific	Yes	N/A	
97.7	Main	Anderson	Yes	L0977W	
107.8	Main	Marshall Lead	Yes	N/A	
117.9	Main 1	East End Hinman Yard	Yes	L1179E	
119.1	Main 1	West End Hinman Yard	Yes	L1191W	
121.8	Main 2	Kendall St. Lead	Yes	L1218E	
124.9	Main	Fort Custer Lead	Yes	N/A	
130.2	Main	Knappen Milling	Yes	L1302E	
141.3	Main 2	E. End Botsford Yard/ Hawthorne Lead	Yes	L1413E	
141.6	Main 1	E. End North Pass	Yes	L1416E	
142.3	Main 1	W. End North Pass	Yes	L1423W	
160.8	CS	Lawton – Welch's Lead	Yes	N/A	1
168.5	Main	Decatur	Yes	N/A	1
178.9	CS	Dowagiac– House Track	Yes	N/A	1
179.2	Main	Dowagiac– Ameriwood	Yes	N/A	1
200.2	Main	Dayton Lake – Bakertown Sw.	Yes	N/A	1
206.2	Main	Galien - House Track	Yes	N/A	1
212.0	CS	Three Oaks - House Track	Yes	N/A	1
228.0	CS	Michigan City - Yard	Yes	N/A	1
228.8	Main	Michigan City- Franklin St. Sw.	Yes	N/A	1



HAND OPERATED SWITCHES AND DERAILS				
240.0 Main Porter - Lead Yes N/A 1				
Note 1: Switch and derail each equipped with electric lock. Switch locks must be removed from both switch and derail before either is operated. After movement is completed, both switch and derail must be restored to normal position before inserting switch lock at switch or derail.				



8.20 DERAIL LOCATION AND POSITION

Location of Derails All derails must be left in the derailing position unless otherwise required for movement. Derails are required to be locked if equipped with a lock.

*All interlocked derails listed are marked with signs that state "DERAIL."

Power Derails (*interlocked) within Control Points		
CP 18		
CP 25		
CP 72		
CP 75		
CP 142		
CP 143		
Hand Operated Derails (non-interlocked) within Control Points		
CP 96 (Governing Lansing Industrial Track)		
Hand Operated Derails (*interlocked) outside Control Point Limits		
CP 190 – Niles Yard Lead located east of the west bound absolute signal.		

Operation of the Niles Yard Derail

In order to line the derail to the "non-derailing" position, permission must be obtained from the Michigan Subdivision Train Director and the No. 2 switch at CP 190 must be in the reverse position lined for the Niles Yard Lead.



9.12 STOP INDICATIONS

Authority to pass a Stop Signal must not be given or accepted until the train has stopped at the signal.

The procedure below must be complied with prior to accepting authority for movement past a stop signal. The train director must issue the authority to pass a stop signal as prescribed in GCOR 9.12.

(EX. "After stopping, (IDTX 4612) at (CP Canal) has authority to pass signal displaying Stop indication, on Main No. 2 track proceeding east to Main No. 2 track).

Adding additional information to the requirements of GCOR 9.12 as prescribed must be avoided, and such information must be conveyed during a job briefing, prior to movement. The receiving employee must precisely repeat the authority as dictated by the train director.

The train director will confirm the instruction was properly repeated, and movement may begin after the train director transmits, "you may proceed."

Note: In the application of GCOR 9.12, Restricted Speed applies.

Trains authorized to pass a signal displaying Stop indication must move at Restricted Speed, not exceeding 15 MPH until the entire train has cleared all switches within control point limits, then continue at Restricted Speed until the leading wheels have either passed the next governing signal or the end of the block system.



9.13 WHEN INSTRUCTED TO OPERATE DUAL CONTROL SWITCHES BY HAND

After the entire movement has cleared the switch, the employee must return the switch to power unless otherwise instructed by the control operator.

Location of Dual Control Switches	Note
CP 9	
CP 18	1
CP 21	
CP 25	
CP 28	
CP 52 and CP 56	
CP 72	
CP 75	2
CP 78	
CP 96 and CP 99	
CP 116	
CP 124	
CP 140	
CP 142	
CP 143	
CP 147	
CP 160	
CP 161	
CP 171 and CP 172	
CP 178 and CP 180	
CP 190 and CP 192	
CP 200 and CP 202	
CP 211 and CP 213	
CP 226 and CP 228	
CP 238 and CP 239	
Note 1: Dual Control operation only applies to switche	s 1 and 9
Note 2: Dual Control operation does not apply to the N	lo 1. crossover (west).



Location of Dual Control Derails
CP 18
CP 25
CP 72
CP 75
CP 142
CP 143



10.3 TRACK AND TIME

The Train Director may authorize a train, on-track equipment or employees to occupy a track or tracks within specified limits for a certain time period. Authority must include track designation, track limits, and a time limit. When track and time will be issued for an indefinite time period, the words "Until Released" may be used instead of an actual time. The track or tracks may be used in either direction within the specified limits according to signal indication until the limits are verbally released.

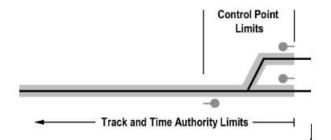
1) Requesting Track and Time and Designating Limits

The employee in charge requesting Track and Time and the Train Director must have a job briefing to properly identify the actual work location as well as the limits being requested to ensure that the limits will protect the actual work location.

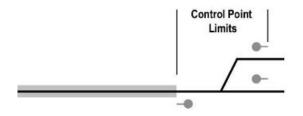
The limits of track and time must be designated by using the East or West limits of a control point or Acceptable Supplemental Locations (ASLs) and must include the name of the corresponding Control Point in which the ASL is located.

Acceptable Supplemental Locations (ASLs) may be used, provided that the M/W or C/S employee obtaining the authority can confirm that they understand the limits. These ASLs will correspond to the end of track circuits at the locations noted below to facilitate the use of Track and Time Blocking on the Train Dispatching (CAD) System.

If the limits of the control point are included in the track and time, authority extends to the opposing absolute signal(s) of the specified control point.



If the limits of the control point are not included in the track and time, authority extends only to the signal governing movement into the control point limits.

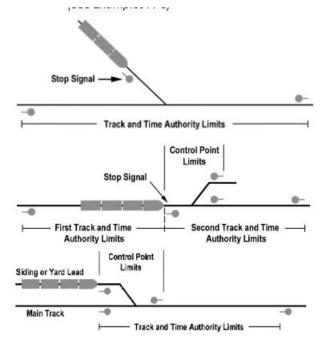


2) Passing Signal Displaying Stop Indication

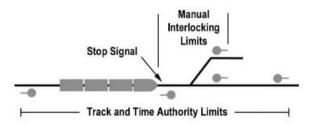
Trains and on-track equipment granted track and time:



After stopping at a controlled signal displaying a Stop indication, must be granted verbal authority to pass a signal displaying stop indication to enter Track and Time limits at any location. All equipment must move at restricted speed. (See the following examples)



After stopping at a controlled signal displaying a Stop indication within manual interlocking limits, must be granted verbal authority to pass a signal displaying stop indication to enter manual interlocking limits. All equipment must move at restricted speed. (See Example below)



- (a) After stopping at a controlled signal displaying a Stop indication within Track and Time limits which does not govern manual interlocking limits, verbal authority is not required to then proceed. All equipment must move at restricted speed.
- (b) Must observe requirements for inspection of spring switches.
- (c) May pass a signal within the limits displaying Stop and Proceed indication without stopping.

3) Time Limits

Trains, on-track equipment or employees must release track and time before the time granted expires. When necessary to extend the expiration time, the employee granted track and time, and the Train Director must communicate before time expires to extend the time granted. If the employee cannot contact the Train Director and the time limit expires, authority is extended until the Train Director is contacted.

4) Releasing When Within the Limits

Partial release of track and time limits will not be permitted in territory governed by the Chicago Control Center. Track and time will be released in the following manner:

(Amtrak, RWIC, employee last name) releases Track and Time Authority (number), (track limits).



The Train Director will repeat the release information and give the time released.

If correct, employee releasing track and time must confirm with "That is correct" and enter time received from Train Director on the form the track and time is recorded on.

A train within the limits may release its track and time to move in a specified direction if no other train, ontrack equipment or employee has received track and time within the same limits. Signal indications will then govern the train. The Train Director must verbally authorize the release, specifying direction of movement.



10.3.2 PROTECTION OF MACHINES, TRACK CARS OR EMPLOYEES

- Employees or on-track equipment will receive track and time in the same manner as trains.
- Employees or on-track equipment must be clear of the limits before the employee granted track and time releases the authority. If track and time is granted to protect maintenance work, the employee must notify the Train Director when the work is complete and the track is safe for train passage.
- The employee granted track and time may authorize the Train Director to change the position of a switch that is within the limits after all employees working within the limits are advised that the switch will be operated. Inform the Train Director when the operation of the switch is no longer required.
- The roadway worker in charge of Track and Time authority must list names and record time approved for all other roadway workers that have requested to work within the established limits on the Track and Time form. Before releasing Track and Time authority, the Roadway Worker in charge must ensure clearance and record time clear of all roadway workers and equipment listed on Track and Time form.
- Train Directors must brief with the RWIC of hi-rail equipment to ensure that limits of Track and Time include sufficient additional territory to facilitate immediate movement off of the island circuits where equipment will set on.



10.3.3 JOINT TRACK AND TIME

- Trains and on-track equipment must move at restricted speed within joint track and time limits.
- If Joint Track and Time is granted to a train and a RWIC at any time within the same limits, all affected trains and RWICs must be notified.
- Trains or on-track equipment must not enter or make any movements within the limits of Track and Time which is jointly occupied with a RWIC until the RWIC is contacted.
- RWICs granted Joint Track and Time with a train already within the limits must not enter the limits or foul the track until contacting the train and reaching a clear understanding of conditions and movements to be made.
- If the limits of Track and Time will be jointly occupied, and the track is not safe for movement at 20 MPH, protect the track by placing red flags as per Rule 5.4.7 (Display of Red Flag).



14.2 DESIGNATED LIMITS

In the application of TWC rules, Train Directors issuing Track Warrant line 2 for movement in TWC territory may use any station or whole mile post as the end point of the line 2 authority.



14.5 PROTECTING MEN OR EQUIPMENT

Trains must not enter or make any movements within the same or overlapping limits of a track warrant which is jointly occupied with an employee until the employee in charge is contacted.



15.1 TRACK BULLETINS

A DTB - Daily Track Bulletin Effective Times

DTB will be effective at 0500 daily. Each day's DTB will supersede the previous day's DTB, and contain all current information. Crew members must have a copy of the DTB prior to leaving the initial terminal.

B **DTB Usage and Delivery:**

Temporary speed restrictions will be issued by DTB, except when it is more efficient to issue a restriction by Track Bulletin. DTB's will also be used to indicate whether a Supplemental General Order is in effect on the subdivision on which the DTB applies. If one or more Supplemental General Orders are in effect, a line located near the top of the DTB will list their number(s). If no Supplemental General Orders are in effect, the word "None" will be shown.

Employees whose duties are affected must obtain a copy of the applicable DTB(s) when reporting for duty, and must have it with them while on duty. DTB will be electronically transmitted to all major signup locations. Crews must examine DTB to ensure that it is current, complete, and legible. If a train originates at a location where DTB is not available, the crew must contact the Train Director for instructions.

When it is necessary to issue a Track Bulletin, the employee receiving a Track Bulletin must copy the information transmitted by the Train Director on the prescribed form, the back of the DTB or on any sheet of paper, all of the information transmitted by the Train Director, including Track Bulletin number, date, address, OK time (effective time) and Train Director's initials. Track Bulletin Form C may be used for all purposes except as prescribed by Rule 15.2 Protection by Track Bulletin Form B. "Number of Lines Used" applies only when Track Bulletin is electronically transmitted.

1) Use of Track Flags

Speed restrictions must be listed in sequential order. The limits of the restriction must be designated by Timetable locations, mile post locations, signal locations or bridge numbers. When track flags cannot be displayed immediately, the Train Director must not use portions of a mile on the DTB, unless used in conjunction with a physical characteristic location.

2) Trains Enroute at Effective Time

Conductors and Engineers of trains enroute at the time a new DTB becomes effective will be governed by the DTB in their possession, until they receive a copy of the current DTB. If the Train Director directs the crew to obtain the new DTB at a location enroute, the crew must verify receipt with the Train Director.

3) Adding or Removing Restrictions

Temporary speed restrictions will be added or voided on the DTB, except when it is more efficient to add or void restrictions by Track Bulletin.

- (a) Additions to a DTB must not be copied by an employee operating the controls of a moving train or on-track equipment.
- (b) When dictating or repeating changes to a DTB:
 - GCOR Rule 2.14.1 applies.
 - Only authorized abbreviations may be used in a DTB.

When a restriction is to be added, the Train Director, must dictate the restriction to the Conductor, Engineer or other qualified employee on the affected train. The receiving employee must copy the additional restriction in the space provided on the DTB.

Note: Additional restrictions may be written on the reverse side of the DTB, if all space provided on the DTB has been filled.

When a restriction is to be voided, the Train Director will advise the Conductor, Engineer or other qualified employee on affected trains as to which restriction(s) must be voided.



Additional restriction(s) or void information must be:

- Correctly repeated to the Train Director before "OK time" or "Void time" is given.
- When giving the "OK time" or "Void time", the Train Director must state their initials.
- The receiving employee must copy the time in the space provided on the DTB, then repeat the "OK time" or "Void time" and the Train Directors initials.
- The Train Director must acknowledge that the time and the initials were repeated correctly before the addition or removal may be acted upon.
- After the Void time and initials have been acknowledged, the receiving employee must draw a line through the affected restriction(s).
- If communication fails before "OK time" is received, the train must not proceed until communication has been reestablished.

4) "OK" or "VOID" times added to a DTB by the Train Director

The "OK" or "VOID" time added to a DTB by the Train Director will reflect the time at which the addition or void time was repeated back correctly to the Train Director.

5) Effective Period of Added Restrictions

Speed restrictions added to a DTB remain in effect until voided.

6) Dictation to Other Affected Employees

The receiving employee must dictate addition or void information to affected crew members before that information must be acted upon. When addition or void information is relayed between employees, the dictating employee must follow the procedure outlined above for Train Directors.

7) Relieved Enroute, or Tour of Duty Ends at Outlying Point

When a Conductor or Engineer is relieved enroute, or their tour of duty ends at an outlying point, the DTB must be delivered to and discussed with the relieving Conductor or Engineer. When physical delivery is impractical, the Conductor or Engineer must leave a copy of the DTB in the operating compartment of the controlling engine. When the Conductor or Engineer of the relieving crew is unable to communicate with the crew they are to relieve, a member of the relieving crew must contact the Train Director to ensure they have received all current information before proceeding.

8) **Retention of a DTB**

Upon completion of their tour of duty at other than an outlying point, Conductors and Engineers may discard their copy of the DTB.

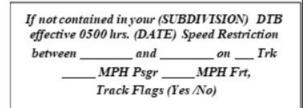
Exception: When restrictions have been added or voided enroute, the last employee to possess the modified DTB must retain it for 7 days.

9) Corrections to DTB

When errors are discovered in the DTB, the error must be corrected by Track Bulletin, or by a DTB addition and/or voiding of the restriction. When two or more DTB's with conflicting restrictions are sent, a Track Bulletin must be issued as follows:



For addition:



For removing or voiding:

If contained	in your (SUBD	IVISION)	DTB
effective 050	Ohrs. (DATE) S	peed Restr	iction
between	and	011	Trk
MPH	Psgr M	PH Frt is	void.

10) **IMCS instructions**

IMCS employees should call in planned restrictions for the next day's operation to Train Directors by 2001 Central Time for inclusion into the next day's DTB. Train Directors should verify with any RWIC that may impose a restriction for the next day's operation prior to issuance.

Note: Timely Receipt - Foremen asking to remove a track from service for maintenance or who will be performing work under a Form B track bulletin must be advised that any speed restrictions imposed by them on the track involved must be received by 6:00 PM the previous day, to avoid delay in issuing DTB's and Track Bulletins to all affected locations. Failure to comply with this directive must be reported to the Manager on Duty for handling.

C Overlapping Temporary Speed Restrictions

Train Directors must take the following actions when issuing a temporary speed restriction by Track Bulletin or DTB addition that changes any portion of a previously issued Track Bulletin or DTB:

- 1) Issue a Track Bulletin or DTB addition to cover the entire affected track area, AND
- 2) Issue a Track Bulletin or DTB line to void the previously issued speed restriction(s).

Exception: These procedures are not required when issuing a temporary speed restriction of a short duration or emergency nature (e.g., heat order, rough track, bridge strike, etc.). When two or more temporary speed restrictions overlap or conflict, employees will be governed by the more restrictive speed.



15.2 PROTECTION by TRACK BULLETIN FORM B

A Stop Column

"STOP" will be written in the Stop column of all Form B's.

B Control Point or Manual Interlocking

If the track bulletin Form B extends through a control point or manual interlocking, control operator will apply blocking to all power switches within the limits. Position of these switches must not be changed until employee in charge of work gives permission. This does not relieve an employee from getting permission from the control operator to operate a dual control switch by hand.



15.4 PROTECTION WHEN TRACKS REMOVED FROM SERVICE

A Issuance and Protection When Tracks Are Removed From Service

A General Order or Track Bulletin Form C will be used to remove a track(s) from service.

No movements or work may be performed within an Out of Service track unless a Form C is issued to an Employee in Charge. Prior to issuance of either General Order or Track Bulletin Form C, train directors must ensure:

- 1) Track(s) are clear of all equipment not part of the work group.
- 2) Display Stop signals and apply blocking devices to all appliances (e.g. switches, signals, derails, moveable bridges) leading to and within the limits. (Use applicable electronic track blocks, switch blocks and bridge blocks when available.)
- 3) All appliances (e.g. switches, derails, moveable bridges) within the limits must be lined for track Out of Service limits. (e.g. to allow equipment movement within the limits).

B Establishing Track Out of Service Limits

Each end of a track removed from service must be defined by one of the following physical features:

- 1) Whole MP
- 2) A station or other physical characteristic location. (e.g. WL or EL of a Control Point, Acceptable Supplemental Locations ASL's)
- 3) Track barricade may be used as one end or both ends of the limits

Note: When a barricade is used to define one or both ends of tracks removed from service, the Train Director must know that the barricade(s) is in position before making the Track Bulletin effective.

C Operation Within Out of Service Limits

- 1) All movements must operate at Restricted Speed.
- 2) Switches, derails and moveable bridges within track Out of Service limits must not be repositioned without the permission of the employee in charge.

D Admitting Additional Equipment into an Out of Service Track

- Before permitting any additional equipment to enter an Out of Service Track from a point controlled by the Train Director, the Train Director must personally confirm with the employee in charge, that they have permission to do so. This authorization must be confirmed before authority to pass a stop signal (9.12) is given to the additional equipment to enter the out-ofservice track.
- 2) The employee in charge of an Out of Service track must advise the employee in charge of all equipment entering the Out of Service limits, as well as all conditions that may affect movement in the Out of Service track. This includes the location of Barricades, Roadway Workers, Equipment and the Condition of the Track and Structures.
- 3) The employee in charge of an Out of Service track must ensure that any barricades removed to admit additional equipment are re-applied and their shunt is verified with the Train Director, as soon as the equipment enters the work area.
- 4) Part a) of this instruction must be followed when equipment clears an Out of Service track and a request is made to re-enter the Out of Service track.

E Movement within In-Service Portion of Track

Movements operating in the Out of Service portion of the track, must not enter the in-service portion of track, without permission of the Train Director.



F Movements in the Direction of an Out of Service Track

Movements made in the direction of an Out of Service track, must be notified by General Order or Track Bulletin Form C, of the limits of the Out of Service track. Train Directors must not display signals, nor give authority for movement in the direction of the Out of Service track, until the Track Bulletin Form C has been delivered, or they have verified that the Engineer is aware of the General Order item.

G Returning the Track to Service

When the track is to be returned to service, the employee in charge of the Out of Service track must take the following actions:

- 1) Notify the Train Director of any restrictions necessary for the safe passage of trains.
- 2) Make certain that all trains and on-track equipment are clear of the track and notify the Train Director that they are clear.
- 3) Make certain that track barricades and track circuits are clear.

H Foreman Going Off Duty

1) Track Remains Out of Service

If track work is to be suspended, the track must remain protected from all movements due to equipment occupying the track or due to track conditions:

- (a) The train director must ensure that blocking device protection remains applied.
- (b) The RWIC must ensure that barricades erected to protect non-shunting equipment or track conditions are re-positioned, adjacent to the non-shunting equipment and/or track requiring protection and must verify with the train director that the barricades properly shunt.
- (c) The RWIC must contact the train director and track supervisor in charge of the territory and advise them of all conditions affecting the track or track structure on the Out of Service track(s), including the location of barricades and any equipment. This information must be recorded by the train director and repeated back to the RWIC for verification.

Once steps a through c are complete, the Track Bulletin must be voided and no further movements shall be permitted or maintenance performed on the affected track until a Track Bulletin Form C or Track and Time Authority is issued to a qualified RWIC.

2) Transfer of Authority

When a track is out of service by Form C and the RWIC is to go off duty, a new Form C must be issued to another qualified RWIC if work is to continue. The relieving Foreman must complete a "Roadway Worker in Charge Transfer of Authority Form" (NRPC 3471) in the presence of the foreman going off duty in accordance with RWP 318(b). A job briefing must be conducted between the train director, the RWIC going off duty and the RWIC copying the new Form C.

Form C transfer can be completed as follows: The new Form C may include an instruction that states, *"Form C number [####] is Void."* The Form C previously issued to the RWIC now going off duty will be made void at the OK Time of the new Form C.

Roadway Worker in Charge Transfer of Authority Form (NRPC 3471) The Form must be retained and held available for inspection by both Foreman for a period of 7 days.



18.1. POSITIVE TRAIN CONTROL TERRITORY

PTC territory is specified in special instructions. A train must not be operated in PTC territory if the controlling locomotive is not equipped with an operable PTC system unless otherwise authorized by rule, special instructions, or the Train Director. PTC does not authorize train movement.

ITCS timetable speeds and rules are in effect between MP 7.4 and MP 240.57.

GCOR Chapter 18 and all related Amtrak I-ETMS Special Instructions are in effect on all main tracks between MP 7.4 and CP 143.



18.1.1 GOVERNING PTC SYSTEMS

Amtrak Trains

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Amtrak trains are governed by the ITCS system between MP 7.4 and MP 240.57. To properly enforce PTC at boundary transition with CN at CP baron and CP Gord, Amtrak trains must initialize and operate the I-ETMS and ITCS systems on Amtrak main track at specific locations listed in item II, paragraph A, of this GO. I-ETMS WILL NOT be the governing PTC system for Amtrak trains when both systems are enforcing PTC near CN boundary locations.

I-ETMS inoperative system conditions and reporting procedures are governed by GCOR Chapter 18 and all related Amtrak I-ETMS Special Instructions.

NS Freight Trains

NS freight trains are governed by the ITCS system between MP 240.57 and CP 143. NS freight trains are governed by GCOR Chapter 18 and all related Amtrak I-ETMS Special Instructions between CP 143 and MP 7.4.



18.2.1 TRAINS AUTHORIZED TO OPERATE WITH I-ETMS

The controlling engine of all trains must be equipped with an onboard I-ETMS system that is cut in and initialized, except when system becomes inoperative. Trains are governed by all GCOR Chapter 18, and Amtrak related Special Instructions. Train crews are required to conduct a safety briefing at the beginning of each tour of duty regarding PTC equipment on their train and the PTC territory traversed on the train's route.

Amtrak Trains

Amtrak trains will utilize the current PTC clearance logic and format. Trains not listed must contact the appropriate Amtrak Train Director to receive an Amtrak clearance number.

Amtrak Train No.	
350-355	
364-365	

NS Freight Trains

- 1) The PTC clearance number for foreign trains will be 8 digits in length, using a predetermined number format.
- 2) When selecting the Amtrak Train ID during initialization, the train ID selected should correspond to the predetermined train/clearance number association.
- 3) Trains and associated clearance numbers are listed below. Trains not listed must contact the appropriate Amtrak Train Director to receive an Amtrak clearance number.

Norfolk Southern			
Train ID	Clearance *		
878	00002300		
879	00012300		
880	00022300		
881	00032300		
882	00042300		
883	00052300		
10R	00062300		
33G	00072300		
60A	00082300		
60E	00092300		
60F	00102300		
60G	00112300		
60Q	00122300		
60U	00132300		
60X	00142300		
61F	00152300		
61G	00162300		



Norfolk Southern				
61L	00172300			
61N	00182300			
61R	00192300			
61T	00202300			
61U	00212300			
61X	00222300			
64T	00232300			
65D	00242300			
65E	00252300			
65K	00262300			
65T	00272300			
65Z	00282300			
66E	00292300			
66T	00302300			
67E	00312300			
67T	00322300			
67X	00332300			
67Z	00342300			
68N	00352300			
B17	00362300			
B18	00372300			
B19	00382300			
B25	00392300			
B33	00402300			
B34	00412300			
B57	00422300			
B90	00432300			
BC02	00442300			
BC06	00452300			
BC27	00462300			
60R	00472300			
60V	00482300			



Norfolk Southern				
61A	00492300			
61M	00502300			
BC05	00512300			
S82	00522300			
60M	00532300			
60T	00542300			
66K	00552300			
67R	00562300			
68M	00572300			
B2T	00582300			
S80	00592300			
S81	00602300			



18.6 CONSIST DATA

I-ETMS consist data must reflect accurate train make-up. Consist discrepancies or consist anomalies that prevent system initialization must be reported to the Amtrak Train Director and respective foreign railroad for correction. When initializing, or when taking charge of a train, and after any pickups or setouts, the engineer must:

- 1) Review the consist data displayed by the PTC system.
- 2) Correct the consist data displayed, if inaccurate.



18.9 USE OF RESTRICTED MODE

Prior to performing work events requiring return movements, set outs, and pick-ups, the engineer must place the I-ETMS System in Restricted Mode. While operating in Restricted Mode, all movements must be made at Restricted Speed. After the work events are completed and prior to departing the location, Restricted Mode must be turned off and exited. Upon exiting Restricted Mode, the engineer must update the onboard consist information, track selection, and timetable direction in order for the PTC System to resume an Active state. 

18.10 WORKING WITH MANNED HELPERS

GCOR 18.10 does not apply on Amtrak Controlled Territory.



18.11 CRITERIA FOR DETERMINING INOPERATIVE I-ETMS

Conditions for Determining Inoperative I-ETMS

I-ETMS will be considered inoperative if any of the following conditions occur:

- 1) I-ETMS system is cut out using "cut out key" on the onboard display.
- 2) I-ETMS system fails to initialize.
- 3) A Subdivision on the train's route fails to synchronize immediately after initialization.
- 4) The (SYNC) flag illuminates while active on a subdivision and does not extinguish within two minutes.
- 5) Fails to transition to the ACTIVE state after having been initialized within I-ETMS territory and the locomotive has moved more than 100 feet.
- 6) Transitions from the ACTIVE state to another state for 30 seconds or more while in I-ETMS territory, other than due to engineer logoff or entering Restricted Mode for work events.
- 7) One or more ONBOARD DISPLAY device(s) is not intelligible or dark.
- 8) System fails to sound an audible indication in conjunction with a visual warning.
- 9) ONBOARD DISPLAY displays track conditions that do not conform at two (2) consecutive block or interlocking signal locations.
- 10) The penalty brake switch is cut out.
- 11) Any part of the I-ETMS system is damaged.

If the On-board I-ETMS system fails en route, the Engineer will operate according to GCOR and Amtrak Special Instruction 18.12 (below)

Conditions Requiring I-ETMS System Cut Out

I-ETMS will be considered inoperative and must be cut out if any of the following conditions occur:

- 1) One or more ONBOARD DISPLAY device(s) is not intelligible or dark.
- 2) System fails to sound an audible indication in conjunction with a visual warning.
- 3) The penalty brake switch is cut out.
- 4) Any part of the I-ETMS system is damaged.



18.12 MOVEMENTS WITH INOPERATIVE PTC SYSTEM

In the Application of GCOR Rule 18.12, the following instruction is revised.

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

Note: If the PTC system display indicates FAILED and cannot be corrected, or cannot transition to Active state prior to entering PTC territory, the reason for failure, if known, must be communicated to the Train Director. When the PTC System on the controlling locomotive becomes inoperative while en route, the following speeds will govern:

In non-signaled territory, or when operating against the current of traffic in Rule 9.14 (Movement with the Current of Traffic) territory:			
Trains transporting one or more loaded cars containing TIH/PIH	30 MPH		
All other trains	40 MPH		
In signaled territory:			
Freight trains transporting one or more loaded cars containing TIH/PIH	40 MPH		
Freight trains not transporting loaded cars containing TIH/PIH	49 MPH		
Passenger trains	59 MPH		
Where cab signal system is in effect with Automatic Train Control (ATC) in use:			
All trains 79 MPH			



18.13 MOVEMENTS WITHOUT PTC

GCOR 18.13 does not apply on Amtrak Controlled Territory.

END OF SECTION





OTHER SUBDIVISION SPECIAL INSTRUCTIONS

This section contains Other Subdivision Specific Instructions.

TELEPHONE NUMBERS

Contact	Control Limits/Location	Telephone No.
Michigan Line Train Director – Desk 1	Conrail CP Townline to CN CP Baron	(312) 655-2244
Michigan Line Train Director – Desk 2	CN CP Gord to NS CP 482	(312) 655-2245
Michigan Line Train Director – Fax	Chicago Control Center	(312) 655-1312
Amtrak Police	-	(800) 331-0008
Amtrak National Operations Center (CNOC)	-	(800) 424-0217 Ext. 2308
Michigan Line Train Director – Desks 1 & 2	Backup Control Center	(312) 655-3752
Michigan Line Train Director – Fax	Backup Control Center	(312) 655-3753



HANDLING OF HAZMAT, EXCESSIVE WEIGHT, OR EXCESSIVE DIMENSION CARS

Trains containing hazardous material, excessive weight or excessive dimension cars must not occupy an Amtrak main track or running track until the Conductor or Engineer has communicated with the train director and ensured that the train director has received the required restricted car information.

Prior to permitting trains containing hazardous materials to occupy Amtrak main tracks or running tracks, the train director must confirm receipt of the trains complete consist.



ACCEPTABLE SUPPLEMENTAL LOCATIONS (ASLs)

ASLs :

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Acceptable Supplemental Locations (ASLs) are fixed physical characteristic locations which may be used to define the start or end location of Temporary Speed Restrictions for track conditions, "Slow By" Speed Restrictions, Rule 10.3 "Track and Time Authority", and Rule 15.4 "Protection When Tracks Removed from Service".

Designating Acceptable Supplemental Locations (ASLs):

Limits designated by ASLs will be treated the same as those designated by signals. The locations of the ASLs located at GDLK RRX and CSX RRX will be denoted by signs as noted above.

List of Acceptable Supplemental Locations (ASLs):

- GDLK 6 RRX (MT 1, MT2) CP 143
- GDLK 8 RRX (MT 1, MT2) CP 143
- West Limits CSX RRX (Wayne Industrial, MT 1, MT2) CP 18
- East Limits CSX RRX (Wayne Industrial, MT 1, MT2) CP 18



"TRACKS ON HOLD"

In cases where authorized personnel need to use main tracks, the employee in charge may contact the Train Director to request a "hold" on Main Tracks for operations involving:

Amtrak Police

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- Fueling by the Mechanical Department
- IMCS Forces Traveling between Locations
- Emergency Situations
- Other operational needs

END OF SECTION



7 INCREMENTAL TRAIN CONTROL SYSTEM (ITCS) RULES

INCREMENTAL TRAIN CONTROL SYSTEM (ITCS) RULES

ITCS RULES

Incremental Train Control System (ITCS) Rules apply only where designated by Timetable or Track Bulletin/General Order instruction. ITCS will automatically apply the brakes of an equipped train if the Engineer fails to comply with signal or track speed limits, or the Engineer fails to stop short of a signal requiring a stop. The required speed limits (in MPH) will normally be displayed in the cab, along with the distance to lower speed "targets" (in feet) and the time to a penalty brake application (in seconds).

Typical "targets" are shown in ITCS Rule 592. ITCS will pre-activate highway crossing warning systems under conditions described in ITCS Rule 598.

ITCS enforcement of track speeds and signal indications does not relieve employees from their responsibility for maintaining thorough knowledge of physical characteristics and track speeds. ITCS is intended to supplement, not replace, employee knowledge and skills.



590 TRAINS EQUIPPED WITH ITCS APPARATUS

All trains operating in ITCS territory must be equipped with ITCS apparatus, unless otherwise authorized by Track Bulletin or General Order. Track Bulletin or General Order may be issued only after the Dispatcher has obtained approval from the proper authority.



591 TESTING THE ITCS APPARATUS

Departure Test The ITCS apparatus on the controlling engine of each train that is required to be equipped with ITCS, must be tested and operational within 24 hours before the engine departs its initial terminal. The employee performing the test must post a signed copy of the test results in the cab of the engine, using MAP 100 form (Amtrak) or ME-60 form (NS). The correct locomotive ID, Train ID and Train Type must be verified before the locomotive departs the initial terminal. A completed departure test as indicated on the MAP 100 may be used to fulfill this verification requirement.

Operating from Equipped Unit Without Departure Test

If necessary enroute to operate from an equipped unit or end without a valid departure test, the ITCS apparatus must be considered inoperative. ITCS Rule 595, "Movement with Inoperative ITCS On- Board Apparatus," must be observed.



592 TYPICAL "TARGETS"

Typical "Targets" displayed on the ITCS display unit in the cab are:

ITCS DISPLAY TARGET	PROMPT
ITCS IN	Prompt to place ITCS switch IN
RESTRCT	Immediately reduce to Restricted Speed
AUTOSIG	Approaching Automatic Block Signal
HOMESIG	Approaching Control Point or Interlocking Signal
XING	Highway Crossing Warning System Operation may be causing restriction, or, a Crossing Malfunction Track Bulletin is in effect protecting a malfunctioning crossing
TRK SPD	Approaching Permanent Track Speed Restriction
TMP SPD	Approaching Temporary Track Speed Restriction or Out- of-Service Track.
TMP APP	Train is approaching an area where ITCS may not display or enforce temporary speed restrictions. Engineer must immediately begin reduction to the speed required by any temporary speed restrictions that may be in effect, not exceeding 40 MPH. Dispatcher and Conductor must be notified as soon as possible without delay to the train. After reviewing the content of any temporary speed restrictions with the train crew, Dispatcher may authorize movement at Maximum Authorized Speed, not exceeding 79 MPH.
TMP UNK	Train is within an area where ITCS will not display or enforce temporary speed restrictions. Engineer must immediately reduce to the speed required by any temporary speed restrictions that may be in effect, not exceeding Restricted Speed. Dispatcher and Conductor must be notified as soon as possible without delay to the train. After reviewing the content of any temporary speed restrictions with the train crew, Dispatcher may authorize movement at Maximum Authorized Speed, not exceeding 79 MPH.
S.O.XX	Stop Override Countdown ("xx" seconds until Stop Override Button may be operated)
EXIT	Approaching End of ITCS Territory
ITCSOUT	Prompt to place ITCS switch OUT
NO ACK	Failure to Acknowledge caused penalty
ΝΟ ΜΑΡ	ITCS has failed to verify database for next Server Section
FAILCAL	Automatic Wheel Calibration Failure



ITCS DISPLAY TARGET	PROMPT
F-XXXX C-XXXX I-XXXX	On board failure with error codes indicating type and/or location of failure. These codes should be included in report of failure to Dispatcher or Operator.



593 ITCS OPERATIONS

A ITCS NORMAL/OUT Switch

1) Switch Position within ITCS Territory

The ITCS NORMAL/OUT switch must always be placed in the "NORMAL" position when operating within ITCS territory, or occupying CN South Bend Subdivision main tracks between CP Baron and CP Gord. This does not apply if operating under ITCS rules 595 and 599.

B Switch Position Outside of ITCS Territory

The ITCS NORMAL/OUT switch must be placed in the "OUT" position once the ITCS CLD displays "???" and the leading end of train movement has reached the following locations:

- (a) Westbound train movements after the leading end passing the outer opposing signal (WL) at CP Porter.
- (b) Eastbound train movements after the leading end reaches MP 178.6 on the CN South Bend Subdivision.
- (c) Eastbound train movements after the leading end passes the outer opposing signal (EL) at CP Townline.

C ITCS Conforms with Fixed Signals and Known Track Speeds

- 1) The ITCS speed limit display will conform to all permanent and temporary speed restrictions and all fixed signal indications within 100 feet after passing into the next speed restriction or after passing a fixed signal. When approaching a target location where the track speed or fixed signal indication is more restrictive, the ITCS will display the next target speed prior to reaching the restriction if a reduction in speed is required.
- 2) When ITCS conforms with fixed signals and known track speeds, the fixed signals and known track speeds will govern.
- 3) When ITCS displays a more restrictive target speed, the audible indicator will sound until the new target speed is acknowledged. Failure to acknowledge within 10 seconds will result in a penalty application of the brakes.
- 4) When ITCS changes to a more favorable speed, speed must not be increased until the entire train has cleared turnouts or previous lower speed restriction. The audible indicator will transmit a short sound to draw attention to the upgrade, but this will not require acknowledgment.
- 5) When entering ITCS Territory or experiencing restoration of ITCS operation, "ITCS IN" will appear as a target. Failure to operate the "NORMAL/OUT" switch to the "NORMAL" position within 10 seconds will result in a penalty application of the brakes.
- 6) When approaching a Stop Signal, Stop and Proceed signal, Crossing Malfunction or the entrance to an out-of-service track, the ITCS display unit will conform by displaying a target speed of "0" (zero).
- 7) When exiting ITCS Territory, a lower exit speed (if required) will be displayed with the target "EXIT". Upon closely approaching or passing "END ITCS" sign, "ITCSOUT" will appear as the target. Failure to operate the NORMAL/OUT switch to the "OUT" position and actuate the acknowledger button within 10 seconds will result in a penalty application of the brakes.
- 8) When backing to clear a fixed signal, clear the fixed signal a minimum of 100 feet when practical. Resumption of forward movement must be made at Restricted Speed prepared to stop at the fixed signal. If ITCS Mode Light extinguishes, see Paragraph 10 below.
- 9) When lining a Hand Operated switch follow these steps in order:
 - (a) Hand Operated Switches between CP Porter and CP 143



- (a) Stop at the clearance point.
- (b) Fully apply the Independent brake.
- (c) Line the switch for intended route.
- (d) Set the Reverser for direction of travel.
- (e) Wait a minimum of ten seconds before re-initiating movement.
- (f) Release the Independent brake.
- (g) Proceed

(b) Hand Operated Switches between CP 143 and CP Townline

- (a) Stop at the clearance point
- (b) Fully apply the Independent brake
- (c) Center the Reverser
- (d) Line the switch for intended route
- (e) Enter the correct switch ID using the Manual Location Determination feature on the ITCS CLD (Switch ID's are indicated in Timetable Special Instruction rule 8.3).
- (f) Set the Reverser for direction of travel
- (g) Release the Independent brake
- (h) Proceed

When re-entering a main track or controlled siding at a hand-operated switch, movement must proceed at Restricted Speed prepared to stop at the first signal. If ITCS Mode Light extinguishes, see section 10 below.

10) When the ITCS Mode Light extinguishes during switching movements or reverse movements, this must be reported to the Train Director ` without delay to the train, but before reaching the first signal if possible. The Train Director must acknowledge this report and enter it on the Record of Train

Movements. However, this event is not to be reported as a failure system failure.

D ITCS Does Not Conform with Fixed Signals or Known Track Speeds: More Restrictive Speed Governs

Note: Trains that are not able to reduce speed to prevent a full service application of the brakes must make an initial reduction to prepare for penalty.

- 1) If the ITCS speed limit display does not conform with fixed signal or next track speed restriction within 100 feet after passing fixed signal or after entering next track speed restriction, the more restrictive speed will govern throughout the block or the track speed restriction.
- 2) ITCS will display "0" (zero) speed target approaching a fixed signal requiring a STOP, a malfunctioning crossing protected by Track Bulletin, or approaching an out-of-service track. If ITCS fails to display "0" (zero) approaching one of these locations, or displays "0" (zero) at a location where a stop is not required, the train must be stopped. See ITCS Rule 594.
- 3) The Engineer must notify the Train Director immediately, giving location, track and description of the nonconformity.
- 4) The Train Director must promptly message out the location and description of the nonconformity.

E ITCS Mode Light Extinguishing

Except during switching movements, engineers must take the following actions if the ITCS mode light extinguished:

- 1) Immediately reduce to Restricted Speed.
- 2) Operate at Restricted Speed. The train may resume the speed authorized by the last signal received when:
 - (a) The next signal is seen to display a proceed indication.
 - (b) The track is seen to be clear to the next signal. AND
 - (c) The ITCS Mode Light illuminates, transitioning the system back to "ITCS IN" mode.
- If ITCS did not change to "ITCS IN", with the mode light illuminating after passing three consecutive signals ITCS must be cut out, and movement will be governed by ITCS Rule 595, "Movement with Inoperative ITCS On- board Apparatus". Notify Dispatcher and Conductor which rule that the train is operating under, and why, as soon as possible without delay to the train.

F ITCS Displays "NO MAP"

Engineers must take the following actions if the ITCS displays "NO MAP":

- 1) Stop within 1500 feet of the target as indicated on the ITCS display.
- If ITCS display indicates a distance to target of 1500 feet or less, press the Stop Override Button. This will cause ITCS to display "RESTRCT" with a speed limit of 20 MPH. Restricted Speed must be observed.
- 3) Proceed at Restricted Speed until ITCS mode light extinguishes. (This will occur within 1500 feet).
- 4) Proceed according to ITCS Rule 596, "Operation with ITCS Temporarily Suspended."
- 5) If the ITCS mode light does not extinguish the ITCS must be cut out, and movement will be governed by ITCS Rule 595, "Movement with Inoperative ITCS On-board Apparatus."

Notify Dispatcher and Conductor which rule that the train is operating under, and why, as soon as possible without delay to the train.

G ITCS Does Not Conform at Entrance to ITCS Territory

If ITCS display fails to change from "ITCSOUT" to "ITCS IN" at the entrance to ITCS territory, the train may proceed according to ITCS Rule 596, "Operation with ITCS Temporarily Suspended." The Engineer must notify the Dispatcher and Conductor that he is operating under ITCS Rule 596 as soon as possible without delay to the train.

H ITCS Does Not Conform At Fixed Signal After Making a Reverse Movement

If ITCS mode light fails to illuminate after making a reverse movement, the train may then proceed according to ITCS Rule 596, "Operation with ITCS Temporarily Suspended." The Engineer must notify the Dispatcher and Conductor that he is operating under ITCS Rule 596 as soon as possible without delay to the train.

Note: If the reverse movement is unable to clear the fixed signal associated with the normal re- entry point by the minimum of 100 feet (see ITCS Rule 593.b.8), and ITCS mode light fails to come on at the normal re- entry point, the train may not proceed according to ITCS Rule 596.

I ITCS Speed Changes Between Fixed Signals

If ITCS changes speed between fixed signals, ITCS speed will govern, subject to the following restrictions:

- 1) <u>ITCS Downgrades to Lower Speed:</u> When ITCS downgrades to a lower speed between fixed signals, the Engineer must take action at once to reduce to the lower speed indicated.
- 2)



<u>ITCS Upgrades to a Higher Speed:</u> When ITCS changes to a higher speed between fixed signals, and no known condition exists which would prevent safe operation at that speed, speed may be increased to the ITCS speed indicated.

EXCEPTION: Trains operating at Restricted Speed must not increase speed until the leading wheels have passed a more favorable fixed signal.

J Delay in a Block in ITCS Territory

The restrictions listed in GCOR Rule 9.9, "Train Delayed within a Block", do not apply to ITCS equipped trains that have ITCS in service for the direction of movement. The ITCS display will govern.

Note: Trains operating in accordance with ITCS Rule 595, "Movement with Inoperative ITCS On- board Apparatus" or ITCS Rule 596, "Operation with ITCS Temporarily Suspended", will continue to be governed by all provisions of GCOR Rule 9.9.



594 TRAINS RECEIVING TARGET SPEED OR SPEED LIMIT OF "0" (ZERO)

A Approaching Stop Signal

Trains will receive a target speed of "0" (zero), with a target "HOMESIG" prior to reaching an interlocking or controlled point signal displaying Stop Signal. The train must be stopped within 1500 feet of the signal. If the signal cannot be displayed for movement, the Engineer must take the following actions:

- 1) Obtain verbal permission from the Dispatcher to pass the Stop Signal, in accordance with GCOR Rule 9.12. After the "S.O.XX" display count reaches "0" (zero), press the Stop Override button. This will cause ITCS to display "RESTRCT," the target speed to go blank, and the speed limit to display 15 MPH. Proceed at Restricted Speed. After passing through the interlocking, the speed limit will upgrade to 20 MPH while continuing to display "RESTRCT". Continue to proceed at Restricted Speed.
- 2) If the train still cannot be moved, the ITCS must be cut out, and movement will be governed by ITCS Rule 595, "Movement with Inoperative ITCS On-Board Apparatus.

B Approaching Stop and Proceed Signal

Trains will receive a target speed of "0" (zero) with a target "AUTOSIG," prior to reaching an automatic block signal displaying Stop and Proceed. Approximately 3 seconds after the train has come to a complete stop within 1500 feet of the signal, the "0 MPH" will upgrade to "20 MPH" and "RESTRCT". Proceed at Restricted Speed.

(a) If the ITCS display fails to upgrade within 3 seconds after the train has stopped, the Engineer must take the following actions:

- Press the Stop Override Button. This will cause the ITCS to display "RESTRCT", the target speed to go blank, and the speed limit to display 20 MPH. Proceed at Restricted Speed.
- If the train still cannot be moved, the ITCS must be cut out, and movement will be governed by ITCS Rule 595, "Movement with Inoperative ITCS On-board Apparatus."

C Approaching Crossing Malfunction Protected by Track Bulletin or Mandatory Directive

1) **PROCEDURE 1 CROSSING MALFUNCTION – STOP & PROTECT**

Trains will receive a target speed of "0" (zero) with a target "XING," prior to reaching the malfunctioning crossing specified by Track Bulletin or Mandatory Directive. After the train has come to a complete stop within 1500 feet of the crossing, the "S.O.X.X" display count down will commence. The engineer must NOT center the reverser after stopping. Once the countdown expires and the crossing is protected per rule 6.32.2, the engineer may acknowledge the "enter crossing" prompt and confirmation on the ITCS CLD using the Select and scroll keys. After prompt execution, the ITCS target will change to RESTRCT and ITCS will permit movement through the crossing not exceeding 15 MPH.

If the train still cannot be moved after the ITCS CLD prompts are acknowledged, ITCS must be cut out, and movement will be governed by ITCS Rule 595, "Movement with Inoperative ITCS On-Board Apparatus."

2) **PROCEDURE 2 CROSSING MALFUNCTION – CONTACT FLAGGER/ STOP & PROTECT**

Trains will be prompted to confirm if flaggers (signal department employee) have been contacted at the malfunctioning crossing specified in the Track Bulletin 3 miles from the crossing. If flaggers have been contacted, prior to occupying the crossing, the engineer is may acknowledge the corresponding ITCS CLD prompts. ITCS will permit train movement through the crossing not exceeding 15 MPH without stopping. If flaggers are not contacted prior to arriving the



malfunctioning crossing or if the "NO" ITCS CLD prompt is acknowledged, <u>the procedures for</u> <u>Procedure 1 Crossing Malfunction will apply.</u>

Approaching Out-of-Service Track

- A Trains may receive a target speed of "0" (zero), with a target "TMP SPD," prior to reaching a portion of track designated as out-of-service by Track Bulletin or General Order. After the train has come to a complete stop, the Engineer must take the following actions:
 - A 1) Notify the employee in charge of the out-of- service track of the train's arrival at the out- of-service track location.
 - 2) If the employee in charge of the out-of-service track gives permission to enter the out-of- service track, after the "S.O.XX" display count reaches zero, press the Stop Override button in order to proceed at Restricted Speed in accordance with GCOR Rule 15.4.
 - 3) If the train still cannot be moved, the ITCS must be cut out in accordance with ITCS Rule 595, "Movement with Inoperative ITCS On- board Apparatus", and GCOR Rule 15.4 will govern through the out-of-service track.

B At Other Locations

If a train receives a target speed or a speed limit of "0" (zero) at a location other than a Stop Signal or Stop and Proceed signal, or other than a point where the track is out of service by General Order or Track Bulletin, the Engineer must take the following actions:

- 1) If ITCS fails to upgrade to "RESTRCT" with appropriate speed limit of 15 MPH or 20 MPH within 20 seconds, press the Stop Override Button.
- 2) If ITCS upgrades to "RESTRCT" with appropriate speed limit of 15 MPH or 20 MPH, Engineer may proceed at Restricted Speed.
- 3) If the train still cannot be moved, the ITCS must be cut out, and movement will be governed by ITCS Rule 595, "Movement with Inoperative ITCS On-board Apparatus."



595 MOVEMENT WITH INOPERATIVE ITCS ON-BOARD

This rule applies to trains with ITCS on-board apparatus that has failed enroute, and to detour trains authorized by the Dispatcher to operate without ITCS on-board apparatus, in accordance with ITCS Rule 590.

The ITCS apparatus on the controlling engine of trains required to be equipped with ITCS, must be cut in and functioning when the engine leaves its initial terminal.

A Criteria for Determining ITCS On-Board Apparatus Failure

The ITCS on-board apparatus will be considered as having failed if any of the following conditions occur:

- 1) The audible indicator fails to sound when the ITCS display changes to a more restrictive speed.
- 2) The audible indicator continues to sound even though the ITCS change was acknowledged and the speed of the train was reduced to the speed required by ITCS.
- 3) The ITCS fails to conform with two fixed signals in succession.
- 4) Damage or fault occurs to any part of the ITCS on-board apparatus.
- 5) Speed limit or target speed displays "0" (zero) and fails to upgrade after pressing Stop Override button. ITCS displays error codes (e.g., "F-XXXX", "C-XXXX" or "I-XXXX") resulting in a penalty; and fails to reset after the train has stopped, and the reverser handle has been moved in and out of the neutral position.
- 6) ITCS displays "FAILCAL," resulting in a penalty.
- 7) ITCS fails to change to "ITCSIN" with Time to Penalty count down when the NORMAL/OUT switch is moved to the "OUT" position while in ITCS territory.
- 8) ITCS mode light extinguishes and does not illuminate after passing three block signals in succession.
- 9) ITCS displays "NO MAP" and ITCS fails to permit movement past the "NO MAP" target after performing the Stop Over Ride Sequence.
- 10) ITCS mode light does not extinguish after passing a "NO MAP" target in accordance with ITCS rule 593d.
- 11) Stop Override Sequence does not allow train movement as outlined in ITCS rule 594.

B Engineer's Responsibility

If the ITCS on-board apparatus fails enroute, the Engineer must take the following actions:

- Proceed governed by fixed signal indications and track speed limits, not exceeding 59 MPH. Engineers must not pass a Restricting or Stop and Proceed signal unless authorized by the dispatcher.
- C **Dispatcher's and Operator's Responsibility** Dispatchers or Operators who are notified of an ITCS onboard apparatus failure must promptly:
 - 1) Record the failure on the Record of Train Movements.
 - 2) Notify appropriate Mechanical and C&S personnel of the description and location of the failure.
 - 3) Notify the Dispatcher of the connecting dispatching district.
 - 4) The Dispatcher must not grant permission for such movements to pass a Stop Signal, Stop and Proceed, or Restricting signal, until he has determined that the block to be entered is not occupied. In an emergency, the Dispatcher may authorize movement into an occupied block, after advising the train of the occupancy and the reason for the exception (e.g., to rescue a disabled train).





596 OPERATIONS WITH ITCS TEMPORARILY SUSPENDED

A Rules Authorizing ITCS Suspension

This rule applies to movements operating in ITCS territory with the on-board apparatus cut in, but with the ITCS Mode Light is not illuminated due to a degraded PTC condition as indicated by the following:

- 1) ITCS Rule 593d, "ITCS Mode Light Extinguished",
- 2) ITCS Rule 593e, "ITCS Displays "NO MAP",
- 3) ITCS Rule 593f, "ITCS Does Not Conform at Entrance to ITCS Territory,"
- 4) ITCS Rule 593g, "ITCS Does Not Conform at Fixed Signal After Making a Reverse Movement,"

B Engineer's Responsibility

When ITCS has been temporarily suspended, the Engineer must take the following actions:

- 1) Proceed governed by fixed signal indications and track speed limits, not exceeding Restricted Speed.
- 2) Do not pass a Restricting or Stop and Proceed signal unless authorized by the Dispatcher.

C Dispatcher's Responsibility

The Dispatcher must not grant permission for such movements to pass a Stop Signal, Stop and Proceed, or Restricting signal, unless the block to be entered is not occupied. In an emergency, or where operationally necessary, the dispatcher may authorize movement into an occupied block, after advising the train of the occupancy and the reason for the exception (e.g. to rescue a disabled train, or to couple back on to their own cars).

D Resumption of Normal ITCS Operation

If the ITCS mode light illuminates the Engineer must acknowledge within 10 seconds to avoid a penalty application of the brakes. When ITCS resumes its normal operational display while in ITCS territory, the train may resume normal ITCS operation in accordance with ITCS rule 593, and the requirements of this rule will no longer apply.



597 CIRCUMSTANCES IN WHICH ITCS MAY NOT INDICATE CURRENT WAYSIDE CONDITIONS

Under the following circumstances, ITCS may not indicate current wayside conditions:

- 1) When a train reverses direction, the move must be made at Restricted Speed, observing GCOR Rule 6.4 as applicable.
- 2) When a train exits the main track or a controlled siding at a hand operated switch to enter a yard track or industrial track, the move must be made at Restricted Speed regardless of the ITCS display.
- 3) When a fixed signal displays "Advance Approach," ITCS will allow maximum track speed after passing signal. This does **not** relieve Engineer from complying with the signal indication shown in the timetable special instructions rule 9.1.2.



598 ITCS ACTIVATION OF HIGHWAY CROSSING WARNING SYSTEMS

ITCS is designed to pre-activate highway crossing warning systems at speeds exceeding 79 MPH, and may preactivate highway crossing warning systems at speeds between 5 MPH and 79 MPH. If this pre- activation feature fails, the ITCS display unit will display "XING" and a target speed of 79 MPH, or a lower speed if the highway crossing warning system's activation track circuits are designed for a lower speed. Trains operating at speeds less than 20 MPH within 3000 feet of a road crossing may be held to 15 MPH until the head end completely occupies the crossing,

Certain types of failures in the highway crossing warning system may result in ITCS displaying "XING" as a target with a target speed of 15 MPH. When "XING" is displayed with 15 MPH, the train must approach the highway crossing prepared to stop if proper train handling will permit, and, if possible, must not foul the crossing until it is determined that the warning devices have been operating at least 20 seconds, and the gates (if equipped) have been in the horizontal position for at least 5 seconds. If the warning devices fail to operate properly, the provisions of GCOR Rule 6.32.2A will apply.

Note: Trains that are not able to reduce speed to 15 MPH before reaching the crossing may experience a full-service penalty application of the brakes.

Engineers must make initial reduction to prepare for penalty. If the ITCS on-board apparatus momentarily loses radio communication with the ITCS wayside apparatus, the ITCS on-board apparatus may incorrectly display a "SPEED LIMIT" of 79 MPH or less immediately after displaying the "XING" target type of 15 MPH. In the event this ITCS anomaly is observed, trains must not exceed 15 MPH until ITCS displays a "SPEED LIMIT" more favorable than 79 MPH.



599 WAYSIDE PORTION OF ITCS NOT OPERATIVES

If the wayside portion of ITCS is inoperative, the Dispatcher may issue a Track Bulletin to temporarily suspend ITCS Rules 590 through 594, 596 and ITCS Rule 598 in the area affected by the malfunction. Track Bulletin will be issued in the following format:

"ITCS Rules temporarily suspended between _____ and _____".

The Engineer must manually cut out the on-board apparatus via the ITCS circuit breaker.

Movement within the designated limits will operate according to ITCS Rule 595.



600 ITCS MANUAL TRACK LOCATION DETERMINATION (MTIE)

A ITCS MTIE Requirements

ITCS MTIE will be used when the ITCS Mode Light does not illuminate on the ITCS territory at the following locations listed in the table below.

Note: Do not attempt MTIE if you have received an F-Speed code or an L-13 and L-55 code.

B Initiating ITCS MTIE

A Engineer Responsibilities

To initiate the ITCS MTIE process, the train must be spotted within 25 feet of the ITCS Track Entry Cab Spot sign (Figure 1 below). In locations where there is no ITCS Track Entry Cab Spot sign, train must be spotted within 25 feet (or closer) from the governing signal.

NOTE: Once the train is stopped, the Independent Brake must be applied, and the Reverser centered (neutral) for the system to permit ITCS MTIE process initiation.

"ITCS Track Entry Cab Spot"



ITCS Manual Track Location Determination (MTIE) Signal Locations

Note: The ITCS MTIE Signal Code must be 7 characters. "_" represents blank space(s).

CAB SPOT SIGN LOCATIONS					
Cab Spot Sign MP	Track	Signal Name	ITCS MTIE Signal Code	Direction	
MP 9.68	Track 1	CP 9	C0094W_	Westbound	
MP 9.68	Track 2	CP 9	C0092W_	Westbound	
MP 117.40	Track 1	Automatic Block Signal 117	1171E	Eastbound	
MP 117.40	Track 2	Automatic Block Signal 117	1172E	Eastbound	
MP 122.85	Track 1	Automatic Block Signal 122	1221W	Westbound	
MP 122.85	Track 2	Automatic Block Signal 122	1222W	Westbound	



	OTHER MTIE SIGNAL LOCATIONS WITHOUT CAB SPOT SIGN				
Track	Signal Name	ITCS MTIE Signal Code	Direction		
Track 1	CP 9	C0094E_	Eastbound		
Track 2	CP 9	C0092E_	Eastbound		
Track 1	Intermediate Signal	111E	Eastbound		
Track 1	Intermediate Signal	111W	Westbound		
	111W& 111E	: when CLD prompts for Sectior	n ID, "0 1 5" must be entere		
Track 2	Intermediate Signal	112E	Eastbound		
Track 2	Intermediate Signal	112W	Westbound		
Track 1	Intermediate Signal	131E	Eastbound		
Track 1	Intermediate Signal	131W	Westbound		
	131W& 131E	: when CLD prompts for Sectior	n ID, "0 1 5" must be entere		
Track 2	Intermediate Signal	132E	Eastbound		
Track 2	Intermediate Signal	132W	Westbound		
Track 1	Intermediate Signal	151E	Eastbound		
Track 1	Intermediate Signal	151W	Westbound		
Track 2	Intermediate Signal	152E	Eastbound		
Track 2	Intermediate Signal	152W	Westbound		
Track 1	CP 18	C0184W_	Westbound		
Track 2	CP 18	C0182W_	Westbound		
Track 2	CP 18	C0182EA	Eastbound		
Track 1	CP 18	C0184EA	Eastbound		
Track 1	Intermediate Signal	201E	Eastbound		
Track 1	Intermediate Signal	201W	Westbound		
Track 2	Intermediate Signal	202E	Eastbound		
Track 2	Intermediate Signal	202W	Westbound		
Track 1	CP 21	C0214W_	Westbound		
Track 2	CP 21	C0212W_	Westbound		
Track 1	CP 21	C0214E_	Eastbound		
Track 2	CP 21	C0212E_	Eastbound		
Track 1	Intermediate Signal	231E	Eastbound		
Track 1	Intermediate Signal	231W	Westbound		
Track 2	Intermediate Signal	232E	Eastbound		



Track	Signal Name	ITCS MTIE Signal Code	Direction	
Track 2	Intermediate Signal	232W	Westbound	
Track 1	CP 25	C0254W_	Westbound	
Track 2	CP 25	C0252W_	Westbound	
Track 1	CP 25	C0254E_	Eastbound	
Track 2	CP 25	C0252EA	Eastbound	
Willow Run Yard	CP 25	C0252EB	Eastbound	
Track 1	CP 28	C0282WB	Westbound	
Track 2	CP 28	C0282WA	Westbound	
Track 1	CP 28	C0282E_	Eastbound	
Main Track	CP 52	C052W	Westbound	
Siding	CP 52	C052EB_	Eastbound	
Main Track	CP 52	C052EA_	Eastbound	
Siding	Intermediate Signal	541E	Eastbound	
Siding	Intermediate Signal	541W	Westbound	
Main Track	Intermediate Signal	542W	Westbound	
Main Track	Intermediate Signal	542E	Eastbound	
Main Track	CP 56	C056WA_	Westbound	
Siding	CP 56	C056WB_	Westbound	
Main Track	CP 56	C056E	Eastbound	
Jackson Yard Lead	CP 72	C0722EC	Eastbound	
Main Track	CP 72	C0722W_	Westbound	
Track 1	CP 72	C0722EB	Eastbound	
Track 2	CP 72	C0722EA	Eastbound	
Jackson Yard Lead	CP 75	C0752WB	Westbound	
Track 1	CP 75	C0754W_	Westbound	
Track 2	CP 75	C0752WA	Westbound	
Track 1	CP 75	C0754EA	Eastbound	
Track 2	CP 75	C0752E_	Eastbound	
Track 1	CP 78	C0782WB	Westbound	
Track 2	CP 78	C0782WA	Westbound	
Main Track	CP 78	C0782E_	Eastbound	



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OTHER MTIE SIGNAL LOCATIONS WITHOUT CAB SPOT SIGN				
Track Signal Name ITCS MTIE Signal Code Direction				
Main Track	CP 96	C0962W_	Westbound	
Siding	CP 96	C0964E_	Eastbound	
Main Track	CP 96	C0962E_	Eastbound	
Siding	CP 99	C0992WB	Westbound	
Main Track	CP 99	C0992WA	Westbound	
Main Track	CP 99	C0992E_	Eastbound	
Main Track	CP 116	C1162W_	Westbound	
Track 1	CP 116	C1162EB	Eastbound	
Track 2	CP 116	C1162EA	Eastbound	
Track 1	Intermediate Signal	1171W	Westbound	
Track 2	Intermediate Signal	1172W	Westbound	
Track 1	Intermediate Signal	1221E	Eastbound	
Track 2	Intermediate Signal	1222E	Eastbound	
Track 1	CP 124	C1242WB	Westbound	
Track 2	CP 124	C1242WA	Westbound	
Main Track	CP 124	C1242E_	Eastbound	
Main Track	CP 140	C1402W_	Westbound	
Track 1	CP 140	C1402EB	Eastbound	
Track 2	CP 140	C1402EA	Eastbound	
Botsford Yard Lead	CP 142	C1422WB	Westbound	
Track 2	CP 142	C1422WA	Westbound	
Track 2	CP 142	C1422E_	Eastbound	
Track 1	CP 143	C1434W_	Westbound	
Track 2	CP 143	C1432W_	Westbound	
Track 2	CP 143	C1432E_	Eastbound	
Track 1	CP 143	C1434E_	Eastbound	
Track 2	Intermediate Signal	IS1452E	Eastbound	
Track 2	Intermediate Signal	IS1452W	Westbound	
Track 1	Intermediate Signal	IS1451E	Eastbound	
Track 1	Intermediate Signal	IS1451W	Westbound	
Main Track	CP 147	CP147E_	Eastbound	



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OTHER MTIE SIGNAL LOCATIONS WITHOUT CAB SPOT SIGN					
Track	Signal Name	ITCS MTIE Signal Code	Direction		
Main Track	CP 160	CP160W_	Westbound		
Main Track	CP 160	CP160EM	Eastbound		
Siding	CP 160	CP160ES	Eastbound		
Main Track	CP 161	CP161WM	Westbound		
Siding	CP 161	CP161WS	Westbound		
Main Track	CP 161	CP161E_	Eastbound		
Main Track	CP 171	CP171W_	Westbound		
Main Track	CP 171	CP171EM	Eastbound		
Siding	CP 171	CP171ES	Eastbound		
Main Track	CP 172	CP172WM	Westbound		
Siding	CP 172	CP172WS	Westbound		
Main Track	CP 172	CP172E_	Eastbound		
Main Track	CP 178	CP178W_	Westbound		
Main Track	CP 178	CP178EM	Eastbound		
Siding	CP 178	CP178ES	Eastbound		
Main Track	CP 180	CP180WM	Westbound		
Siding	CP 180	CP180WS	Westbound		
Main Track	CP 180	CP180E_	Eastbound		
Main Track	CP 190	CP190W_	Westbound		
Main Track	CP 190	CP190EM	Eastbound		
Siding	CP 190	CP190ES	Eastbound		
Siding	CP 192	CP192WS	Westbound		
Main Track	CP 192	CP192WM	Westbound		
Main Track	CP 192	CP192E_	Eastbound		
Main Track	CP 200	CP200W_	Westbound		
Main Track	CP 200	CP200EM	Eastbound		
Siding	CP 200	CP200ES	Eastbound		
Main Track	CP 202	CP202WM	Westbound		
Siding	CP 202	CP202WS	Westbound		
Main Track	CP 202	CP202E_	Eastbound		
Main Track	CP 211	CP211W_	Westbound		

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OTHER MTIE SIGNAL LOCATIONS WITHOUT CAB SPOT SIGN					
Track	Signal Name	ITCS MTIE Signal Code	Direction		
Main Track	CP 211	CP211EM	Eastbound		
Siding	CP 211	CP211ES	Eastbound		
Siding	CP 213	CP213WS	Westbound		
Main Track	CP 213	CP213WM	Westbound		
Main Track	CP 213	CP213E_	Eastbound		
Main Track	CP 226	CP226W_	Westbound		
Main Track	CP 226	CP226EM	Eastbound		
Siding	CP 226	CP226ES	Eastbound		
Main Track	CP 228	CP228WM	Westbound		
Siding	CP 228	CP228WS	Westbound		
Main Track	CP 228	CP228E_	Eastbound		
Main Track	CP 10th Street	CP10THE	Eastbound		
Main Track	CP 238	CP238W_	Westbound		
Main Track	CP238	CP238E1	Eastbound		
Siding	CP 238	CP238E2	Eastbound		
Main Track	CP 239	CP239W1	Westbound		
Siding	CP 239	CP239W2	Westbound		
Main Track	CP 239	CP239E_	Eastbound		

The ITCS Mode Light will illuminate when the MTIE initiation process, with correct signal location code entry and engineer acceptance is successful. Once the ITCS Mode Light is illuminated, the train may proceed governed by ITCS Rule 593.

Note: The engineer must ensure the correct signal ID displays in the ITCS Target Type Indicator prior to accepting the ITCS MTIE signal code entered. If the signal ID does not match the track the train is physically occupying, the MTIE process must be suspended, and the MTIE process re-initiated.

ITCS MTIE Initiation Process and Signal Code Entry Failures

Engineer Responsibilities

If the ITCS MTIE initiation process is unsuccessful after three (3) attempts (ITCS Mode Light does not illuminate after correct signal location MTIE code entry and engineer acceptance), or if the train overruns the ITCS Track Entry Cab Spot sign limits indicated in item 2 of this instruction (train stops 25 feet beyond the sign location), the engineer must report the reason of the ITCS MTIE Initiation Process failure, and the current train location to the train dispatcher.

Examples:

"ITCS MTIE process has failed after three (3) attempts at MP 117.40 Track 2"; or, "ITCS MTIE process not initiated due to train being spotted too far beyond the ITCS Track Entry Cab Spot sign at MP 9.8 Track 1".

Once the failure and reason has been communicated to the Train Dispatcher, the train may proceed governed by ITCS Rule 596.

A PTC post trip unusual event report must be completed and submitted at the end of tour of duty.

Dispatcher Responsibilities



When notified that a train has encountered an ITCS MTIE initiation process failure, if the train later reports that ITCS has failed in accordance with rule 595, the ITCS MTIE initiation failure reason must be included in the ITCS System Failure Report.

END OF SECTION



8 I-ETMS POSITIVE TRAIN CONTROL (PTC) SYSTEM RULES

This section contains Subdivision Specific Instructions related to I-ETMS PTC System Rules.

ENTERING PTC TRACK

The following tasks must be performed when entering PTC Track:

From Non-PTC Track:

- Train should be located within 1,500 feet of main track authority limit or signal governing movement onto PTC track.
- Operating at 15 MPH or less.
- Select current track location (Unless otherwise restricted, train speed may be increased immediately after track selection).
- Track Selection must be made prior to entering PTC Track, unless modified by railroad operating rules:

Amtrak Trains Entering CN at CP Gord: Eastbound trains approaching CP Gord must select I-ETMS track location between Angel St. (MP 121.9) and Kendall St. (MP 121.5). I-ETMS operation is in effect for trains re-entering the Amtrak Michigan Line at CP Baron up to MP 114.0.

Amtrak Trains Entering CN at CP Baron: Westbound trains approaching CP Baron must select I-ETMS track location between MP 119.0 and East Michigan Ave. (MP 119.2). I-ETMS operation is in effect for trains re-entering the Amtrak Michigan Line at CP Gord up to signal 126W.



PTC ENFORCEMENTS

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If a train experiences a PTC enforcement, the engineer must immediately notify the Train Director before resuming movement and provide:

- The controlling locomotive initials and number,
- Time and MP location where enforcement was initiated,
- The reason for enforcement, if known.

Freight Trains with 15 operative brakes or less, or Amtrak yard assignment trains, must not actuate the locomotive brakes once an enforcement braking action has been initiated by the PTC system. If the independent brake is initially bailed off, it must immediately be reapplied, bringing the movement to a safe and immediate stop.



OPERATIVE BRAKE LIMITATIONS ON PTC EQUIPPED TRAINS

PTC must not be initialized on any train with more than 5% of the train air brakes inoperative. When changes occur en-route that increase the number of inoperative train air brakes to 5% or more, the engineer must use the "cut out key" on the onboard display of the PTC system and notify the Train Director.



INITIALIZING PTC WITH MULTIPLE LOCOMOTIVES IN TRAIN CONSIST

Trains with multiple locomotives in their train consist that may be used in the controlling position must only have one locomotive initialized at any given time. The engineer must perform a CREW LOGOFF on the first locomotive before attempting to initialize any other locomotive in the train consist. The CDU softkey cutout function must not be used when changing controlling locomotives.



I-ETMS SYSTEM SOFTWARE DOWNLOADS AND INSTALLS

During initialization, if the ONBOARD DISPLAY prompts "Please Wait for Software Download" or "New Software Available" the locomotive engineer must not cancel the software download or install. Unless otherwise restricted, if a software download or install exceeds 10 minutes, the locomotive engineer must not cancel the download. If the software download exceeds 10 minutes, notify the Train Director, and contact foreign railroad PTC support personnel for instructions.



PTC TROUBLESHOOTING

Foreign railroads operating on Amtrak territory will contact the appropriate foreign railroad PTC help desk. Amtrak trains experiencing issues or anomalies prior to entering PTC territory will comply with current Amtrak PTC Troubleshooting procedures.



PTC ISSUE AND ANOMALY REPORTING

When any of the following issues or anomalies occur, they must be reported to the Train Director. The report must include time, date and location, Train ID, Locomotive number and count, engineer name, car count, and a description of any unusual events.

- The PTC system does not transition to an enforceable state after entering PTC track (i.e. Active state).
- PTC is suspected of not providing a warning for a target or restriction when it should have.
- A mandatory directive is received in writing which is not enforced by the PTC system.
- PTC enforcement for a mandatory directive which has not been received in writing.
- PTC system prompt or enforcement due to Non-Synchronized territory.
- PTC display information is incorrect or unintelligible.
- Switch or wayside signal discrepancies (i.e. Permissive wayside signal enforced as Stop by PTC, wayside signal does not match the PTC onboard display).
- PTC troubleshooting guidance does not correct the PTC system and permit system usage.
- PTC system failures as defined in the operating rules.



AUTHORITY TO PASS STOP INDICATION

When the Train Director is required to authorize a train with operative PTC to pass a signal enforcing a positive stop, the train must stop within 1500 feet of the signal before the train can be authorized to proceed. The Train Director will issue Verbal Authority to Pass the Stop Indication. In most cases, the PTC system will also be sent an electronic authority to pass the Stop Indication.

1) Train at Stop Signal – Electronic Authority Is Not Received:

If an electronic authority to pass the signal is not received by the PTC system, a "Pass Signal at Stop" prompt will appear once the train has been stopped within 1500 feet of the signal and 120 seconds have elapsed from the time that the train came to a stop.

2) PTC Enforcing Positive Stop at a Signal Displaying a Proceed Indication

If the PTC system enforces a positive stop at a signal that is displaying a proceed indication, the crew must stop within 1500 feet of the signal and notify the Train Director immediately. If this anomaly occurs the "Pass Signal at Stop" prompt will appear after the train has been stopped for 120 seconds. The prompt must not be acknowledged until the crew has received the Train Director's permission to acknowledge the prompt as prescribed below:

- The crew must advise the Train Director of the train's location, track, direction, and the name of the next governing signal.
- Before granting permission to acknowledge the "Pass Signal at Stop" prompt to pass a fixed signal other than Stop Signal, the Train Director must verify the train's location, track, direction and route status, and ensure that no opposing or conflicting movements have been authorized.
- Once it has been determined that it is safe to do so, permission to acknowledge the prompt to pass a fixed signal other than Stop Signal may be granted by the Train Director.
- The Train Director must record and report the occurrence.

3) "Pass Signal at Stop" Prompt Does Not Display

In the event the "Pass Signal at Stop" Prompt does not display after the train has been stopped for 120 seconds, and the Red Hash on the PTC display does not clear, the Train Director may grant verbal authority to cutout PTC using the CDU soft key cutout function. PTC must be cut in before passing the next fixed signal.



PTC CLEARANCE NUMBERS

In the event a train experiences issues with a clearance number or does not have an existing clearance number, the Train Director must create and must dictate a clearance number to the train crew.



FOREIGN TRAINS AND AMTRAK YARD ASSIGNMENTS WITHOUT CLEARANCE NUMBERS OR EXPERIENCE ISSUES WITH CLEARANCE NUMBERS

In the event a train experiences issues with a clearance number or does not have an existing clearance number, the Train Director must create and must dictate a clearance number to the train crew.

END OF SECTION

9



INFRASTRUCTURE MAINTENANCE & CONSTRUCTION SERVICES SPECIAL INSTRUCTIONS

Unless otherwise specified, the following are instructions that contain additions or revisions to the General Code of Operating Rules or Amtrak Roadway Worker Protection Manual and govern Amtrak Infrastructure Maintenance & Construction Services (IMCS) Department employees.

1.47-IMCS. DUTIES OF CREW MEMBERS

1) All Crew Members Responsibilities

To ensure on track equipment is operated safely and rules are observed, all crew members must act responsibly to prevent accidents or rule violations. Crew members in the control compartment of on track equipment must communicate to each other any restrictions or other known conditions that affect the safe operation of their equipment sufficiently in advance of such condition to allow the operator to take proper action. If proper action is not being taken, crew members must remind the operator of such condition and required action.

Crew members in the control compartment of on track equipment must remind the operator when approaching an area restricted by:

- 1) Limits of authority.
- 2) Track warrant.
- 3) Track bulletin.
- 4) General Order

or

5) Radio speed restriction

Employees in charge of the movement of on track equipment must be qualified on the operating rules and physical characteristics of the territory over which they will travel. Employees that are granted authority or protection for use in performing work must be qualified on the physical characteristics of the territory where the work is to be performed.

Track inspectors, foremen, signal maintainers and other designated employees shall:

- 1) See that their work assignments are performed in a safe and efficient manner.
- 2) Maintain required records.
- 3) Submit required reports.
- 2) When IMCS employees are operating on-track equipment under signal indication, crew members in the control compartment of on-track equipment must be alert for signals. As soon as signals become visible or audible, crew members must communicate clearly to each other the name of signals affecting their movement. They must continue to observe signals and announce any change of aspect until the equipment passes the signal. If the signal is not complied with promptly, crew members must remind the operator/ or employee controlling, piloting or leading the movement of the rule requirement. If crew members do not agree on the signal indication, regard the signal as the most restrictive indication observed.

If the operator of on track equipment fails to comply with a signal indication or take proper action to comply with a restriction or rule, crew members must immediately take action to ensure safety and stop the movement, if necessary.



2.14-IMCS. TRANSMISSION OF MANDATORY DIRECTIVES

An employee operating the controls of moving on track equipment may not copy mandatory directives. Before a mandatory directive is acted upon, employees in the control compartment of on track equipment must read and understand it.



2.5-IMCS. COMMUNICATION REQUIREMENTS FOR TRACK CARS AND ROADWAY WORKERS

All track cars moving between work locations or moving under the same authority must be equipped with a working radio.



5.2.2-IMCS. SIGNALS USED BY EMPLOYEES

The following flagging equipment must be carried on-board track equipment:

- 2 red flags.
- 2 red fusees.
- 2 white lights.



5.4.7-IMCS. DISPLAY OF RED FLAG

When red flags are displayed, they must be placed at least 1000 feet from the area of work or point where track is to be made impassable.



5.4.9-IMCS. EMERGENCY PROTECTION WITH YELLOW-RED AND RED FLAGS

When a defect in track or structures has been discovered, and it is not possible to communicate with the train dispatcher, the following may be used to provide protection:

Place yellow-red and red flags in both directions on the affected track(s) and to protect all possible other access to the restricted area. Yellow-red flags must be placed two miles in advance of the red flags, because train dispatcher will not be able to advise trains that the flags are not at the standard distance.

When possible, position a flagman to provide warning to approaching movements one mile in advance of each red flag

Employee in charge and trains will be governed by Rule 5.4.7 (Display of Red Flag).

This protection must be continued until train dispatcher can be reached and advises that all affected trains have been, or will be notified.



5.9-IMCS. HEADLIGHT DISPLAY

When on track equipment is equipped with lights, it must display a white light to the front and a red light to rear when it is being moved or while working. Hi-rail vehicles must turn on headlights and amber roof light, if equipped, at all times while on the rail. When hi-rail vehicles are operating on the highway, turn off the amber roof light.

Exception: When a hi-rail vehicle is stopped and properly protected, lights may be turned off to conserve battery.



6.3.3-IMCS. ESTABLISHING WORKING LIMITS

Working limits established on Michigan Subdivision main tracks or other than main tracks (GCOR rule 6.28) must be established as outlined in Amtrak RWP rule 319.

1) Foul Time

When working limits on a main track are established through the use of foul time, follow these procedures:

- (a) Foul Time may be issued within CTC or Manual Interlocking limits for work that will not disturb the track structure or the proper operation of the signal system. Acceptable uses for Foul Time include incidental maintenance or inspection of a switch, crossover, moveable bridge or power operated derail, or to provide Adjacent Track Protection for IMCS personnel on an adjacent track.
- (b) For incidental maintenance or inspection of a switch, crossover, moveable bridge or power operated derail, Foul Time may only be issued:
 - On one switch, or on both switches of a crossover, at a time.
 - On one power operated derail at a time.
 - On moveable bridges.
 - Moveable bridges must not be operated without permission of the employee granted Foul Time.
- (c) If the track will be disturbed or the signal system will be affected, GCOR 10.3 Track and Time Authority or GCOR 15.4 Protection When Tracks Removed from Service must be used instead.
- (d) Contact the Train Director to request foul time. Identify the switch or crossover to be fouled and the time desired.
- (e) Obtain Foul Time authority before occupying or fouling track. Foul Time will be granted in the following manner:

"Foul Time is granted to Amtrak (employee name) at (Interlocking or CP Name) on (switch number/numbers if a crossover) until (time)."

Release Foul Time when clear of track. Foul Time will be released in the following manner: "Amtrak (employee name) at (Interlocking or CP Name) releases Foul Time on (switch number/ numbers if a crossover)."

Train Director will repeat the release information and, if correct, the employee will respond with: "that is correct".

(f) Release foul time before the time granted expires, but if Train Director or control operator cannot be contacted and time limits expire, authority is extended until the Train Director or control operator is contacted.

2) Working Limits on Other Than Main Track

Working limits on other than main track (GCOR rule 6.28), must be established by making the track physically inaccessible to trains by one of the following methods:

- A flagman with instructions to hold all trains and equipment clear of the working limits.
- A switch lined against movement to that track and secured with an M/W lock and RWP tag by the roadway worker in charge of the working limits.
- A derail capable of restricting access to the portion of track where working limits are established must be placed at least 150 feet from nearest location where track may be fouled. The derail must be locked in derailing position and secured M/W lock and RWP tag by the roadway worker in charge of the working limits. A Stop barricade must be displayed at each derail.



- Where remote control switches provide direct access, the employee in charge of on-track safety must tell the switch operator what work will be done. The switch operator must then:
 - (a) Inform the employee in charge of on-track safety that the switches have been lined against movement onto the track and devices controlling the switches have been secured.
 - (b) Not remove the locking or blocking devices unless the employee in charge of on-track safety gives permission to do so.

Note: This procedure will not be utilized in the Chicago 14th St. Yard Facility. One of the other bulleted items must be utilized.

• A discontinuity in the rail capable of restricting access to the portion of track where working limits are established must be placed at least 150 feet from nearest location where track may be fouled. A red flag must be displayed at each derail.

3) Other Conditions Requiring Protection

Provide protection on Other Than Main Track (GCOR 6.28) by making the track physically inaccessible when the track is:

- Found unsafe for train or engine movements due to track condition or other reasons.
- Removed from service or
- Obstructed or made impassable with Maintenance of Way equipment.



6.3.5-IMCS. AUTHORITY FOR MOVEMENT OF ON TRACK EQUIPMENT

Outside of Yard Limits (Rule 6.13) or Restricted Limits (Rule 6.14) on track equipment must not foul or occupy main tracks for movement unless authorized or protected by a form of Exclusive Track Occupancy, which includes any one of the following:

- Rule 10.3 (Track and Time)
- Rule 14.5 (Protecting Men and Equipment)
- Rule 15.2 (Protection by Track Bulletin Form B)
- Rule 15.4 (Protection When Tracks Removed From Service)
- Special instructions or General Order

EXCEPTION: In an emergency, when unable to obtain authority and it is necessary to foul or occupy a main track, protection must be provided in both directions as outlined under Rule 6.19 (Flag Protection).

Written authorities that are no longer in effect must be retained until the end of tour of duty, unless otherwise instructed by the train dispatcher.



6.11-IMCS. MANDATORY DIRECTIVES

New bullet item added:

• Foul Time

The last sentence is revised to read:

Employees must retain mandatory directives for 7 days.



6.19.1-IMCS. PROVIDING FLAG PROTECTION

When flag protection must be provided, a flagman must immediately go at least the distance prescribed in the table below in each direction from the location to be protected.

Specified Flagging Distance:

Maximum Speed For Any Train	Flagging Distance
25 MPH or less	1 mile
Over 25 MPH	2 miles

Flagman must stop all trains approaching the location being protected and must remain until instructed by their supervisor to return.

Before Reaching Prescribed Distance

If the flagman hears or sees a train approaching before reaching the prescribed distance, the flagman must continue toward the approaching train and give stop signals.



6.19.2-IMCS. PROTECTION OF ON TRACK EQUIPMENT

Do not depend on rail detectors and on track equipment to actuate block signals, interlocking signals, or highway crossing signals or to be under the protection of such signals. Provide flag protection when required.



6.19.3-IMCS. ACKNOWLEDGMENT OF FLAGGING

When flagged, the engineer or operator of on track equipment must acknowledge stop signals promptly. The flagman must continue giving stop signals until the engineer or operator acknowledges them and reacts to them. After stopping, the engineer or operator must be told why the train or on track equipment was flagged and act accordingly.



6.19.4-IMCS. SHUNTING TRACK CIRCUITS

Within block system limits, the track may be shunted to provide immediate protection in case of emergency. However, this method may not be depended on as the only safeguard, and employees must provide additional protection as soon as possible.



6.22-IMCS. MAINTAINING CONTROL OF ON-TRACK EQUIPMENT

When multiple track cars are traveling under the same movement authority:

- 1) Prior to movement, the RWIC must:
 - (a) Discuss with all operators and any others involved in the movement:
 - 1) Equipment spacing requirements.
 - 2) Locations of all planned stops
 - 3) Any conditions that may reduce stopping effectiveness (eg. Speed, weather, equipment type, weight grades, etc.)
 - (b) Record discussed information, (in item a) above), on their job briefing form
 - (c) Precede or occupy the leading unit for the direction of travel throughout the entire movement
- 2) The RWIC or a qualified pilot must occupy the lead track car or precede the move for the direction of travel.
- 3) Equipment operators must always regulate their speed to permit stopping within one-half the range of vision, short of equipment ahead, and at a minimum, maintain the following spacing between equipment (including any attachments, extensions, trailers etc.):
 - (a) When traveling: At least 200 feet.
 - (b) If necessary to pull close: 40 feet, not exceeding restricted speed.
 - (c) If speed is 5 MPH or less, maintain sufficient distance to prevent an accident.
 - (d) When working: At least 40 feet unless otherwise specified by the RWIC.
- 4) When traveling, all stops must be announced over the radio by the equipment initiating the stop and be confirmed by each following piece, including:
 - (a) Equipment Type
 - (b) Track Car position in group
 - (c) Stopping location *Example: "Amtrak Regulator, piece number three, coming to a stop at MP13.2, over." "Roger, Regulator, piece three coming to a stop at…*"
- 5) A multiple-track car movement will operate as one unit. When a signal is displayed, or the train dispatcher authorizes verbal permission for movement, the authorization is for all pieces within the workgroup. The train dispatcher must not remove blocking device protection for any portion of the affected route until the employee in charge of the equipment has reported all pieces clear.
- 6) The RWIC of a multiple track car move, must report clear of interlockings and controlled points either by visual confirmation or by confirmation of another employee qualified on the physical characteristics occupying the last track car in the move.



6.31-IMCS. MAXIMUM AUTHORIZED SPEED

The following information is added:

Movement of on track equipment must be made at a safe speed that allows stopping within half the range of vision short of:

- Train
- Engine
- Railroad car
- Men or equipment fouling the track
- Stop signal

or

• Derail or switch lined improperly

Operators must consider track condition, visibility, grade, weather and all other conditions that may affect safe operation of the equipment.

Do not operate on track equipment in excess of the speeds permitted for trains at any location. Temporary speed restrictions for trains shown in track bulletins, track warrants or general orders must be complied with.

Within working limits make all movements under the direction of the employee in charge of the working limits. Do not exceed restricted speed unless the employee in charge of the working limits authorizes a different speed.

On track equipment must operate in a forward direction whenever possible. The following speeds must not be exceeded:

On-Track equipment type	Speed
Hi-rail vehicles with passenger-type car bodies	45 MPH
All other on track equipment	25 MPH
Over power operated switches, railroad crossings at grade, highway crossings	5 MPH
Operating through self-guarded frogs or switch pointguards, or diverting through spring frogs	1 MPH

In Forward Direction

In Reverse Direction

On-Track equipment type	Speed
All on track equipment	10 MPH
Over power operated switches, railroad crossings at grade, highway crossings	5 MPH
Self-Guarded Frogs, Point Protectors	1 MPH

In addition, take extreme care when entering or leaving a turnout equipped with spring rail or self-guarding frogs to prevent the equipment from derailing.

When operating a hi-rail vehicle on the highway, comply with all state and local laws.



6.32.7-IMCS. OPERATING ON TRACK EQUIPMENT OVER ROAD CROSSINGS

Operators of on track equipment must use caution when passing over highway crossings at grade. Flag over crossings when the amount of highway traffic makes this necessary in order to cross safely.



6.41-IMCS. HIGH-RAIL OPERATIONS

I

One authority to operate on track equipment with high-rail gear is received prior to setting on a Main Track or Controlled Siding, an SSD must be applied on the authorized track and confirm a positive shunt with the Train Dispatcher. Upon confirmation, the SSD may be disconnected but must not be removed until equipment is set on the authorized track.



8.3-IMCS. WORKING LIMITS – POSITION OF MAIN TRACK HAND OPERATED SWITCHES

When working limits are established on a main track and a track authority is issued (*i.e. GCOR Rules: 10.3-Track and Time, 15.2-Protection by Track Bulletin Form B, 15.4-Tracks Removed from Service*), and the engineering department requires switch movement, the RWIC named is responsible for the position of all hand operated switches inclusive of:

- 1) When not in use, switches must be lined and locked in normal position for main track movement and must not be repositioned without permission of the RWIC.
- 2) When switches are in use, or in the reverse position, they must not be left unattended. The RWIC must assign qualified employee(s) to attend switches.
- 3) The assigned employee(s) must announce to the RWIC when switches are returned to the normal position (lined for main track) and the RWIC must confirm this information.
- 4) Before tracks are returned to service, the RWIC and assigned employee(s) must visually confirm that all switches operated within working limits are in the normal position, locked and verification must be made with the train dispatcher or control operator. If the RWIC is unavailable for visual confirmation or unable to verify switch position with the train dispatcher, a second qualified employee must be appointed to ensure a 2person verification is accomplished.

Note: Qualified Employee is defined as an employee qualified on the operating rules relating to switch and fixed derail operation.



9.3-IMCS. WHAT SIGNALS GOVERN

Block signals, interlocking signals, or cab signals govern trains or engines.



9.5.3-IMCS. PROTECTION DURING REPAIRS

Local Control of Interlockings and Control Points by C&S Employees

A General Requirements

Before a change of control point or interlocking control is permitted, the Train Director and the C&S employee in the field must have a thorough job briefing regarding the length of time the control change is needed, the purpose of the control change and how it will affect the Train Director's display. The C&S employee and the Train Director must have a job briefing to discuss:

- 1) The identification and reason for any blocking devices applied.
- 2) The description of any routes that are displayed.
- 3) The nature of any C&S or joint C&S and MW tests or inspections to be performed and the effect that the work will have in the field and on the Train Director's model board indications.
- 4) Whether testing or inspection, activities will require RWP via the use of opposing Stop Signals to establish exclusive track occupancy protection.

The C&S employee granted local control must conduct an additional job briefing with the Train Director each time the conditions of the work change.

A C&S employee may only request permission to take local control of an interlocking or control point to:

1) Assist the Train Director when remote control is lost,

or

2) Expedite C&S or joint MW switch, signal or track circuit inspection, testing, troubleshooting, general maintenance, or repair.

C&S employees must obtain permission from the Train Director before taking local control and must follow the Train Director's instructions during that time, including the application and removal of blocking devices and display of requested routes. When local control is authorized and transferred to the C&S employee in the field, verbal confirmation that the transaction has taken place by inspection of the Train Director and C&S employee's console and control board must be made by both employees. Unless otherwise discussed, when local control is transferred to the C&S employee in the field, the Train Director will ensure all signals within the interlocking display STOP, and all switches are lined normal – this must be confirmed by both employees.

B Qualification Requirements for C&S Employees:

C&S employees who take local control must be qualified on the operating rules, all operating functions of the local control panel, and the physical characteristics of the interlocking.

C Permission to Take Local Control

- 1) The Train Director's permission to take local control must include the title and name of the employee authorized to take local control, the interlocking name, and the time permission is being given.
- 2) The receiving C&S employee must document the permission on form NRPC 3436 and correctly repeat it to the Train Director before taking local control.
- 3) Permission to take local control is for the initial request only, and once returned to the Train Director, any subsequent transfer of control must be authorized by the Train Director unless previously discussed during a job briefing.
- 4) After the above procedures have been followed, the Train Director must place a restrictive label on one of the track segments within the control point or interlocking in order to record the name of the C&S employee given local control and time local control was issued.

D Blocking Devices Applied or Ordered Applied by the Train Director



- 1) Train Director instructions regarding the application or removal of blocking devices must be correctly repeated by the C&S employee receiving them before being acted upon.
- 2) C&S employees must obtain permission from the Train Director before removing any blocking devices applied by, or ordered applied by, the Train Director.
- 3) C&S employees must keep a written record of these blocking devices on form NRPC 3436 to ensure compliance. The record must include the identification of each blocking device, the time it was applied, and the time the Train Director authorized its removal.

E Displaying Signals for Train Movements

The C&S employee must not display a signal for a train movement unless:

1) Authorized by the Train Director.

and

2) The C&S employee and the Train Director have discussed and verified the position of all switches involved in the route to be displayed.

and

3) All affected roadway workers are clear of the tracks to be used or have established alternate RWP protection.

F Authority by Stop Signals

While an interlocking or control point is in local control, Train Directors must not issue authorization passed a Stop Signal until they have contacted the C&S employee in control of the interlocking or control point to advise them of the move to be made and confirm that all employees and equipment are in the clear and that the position of all switches involved in the route are properly lined and blocked.

G On-Track Equipment Operations

Except in cases of emergency, or when remote control of an interlocking or control point is not functioning, Train Directors must not allow On-Track Equipment to operate through interlockings or control points that are in local control.

H Working Limits Within Control Point/Interlocking Limits

The Train Director must not authorize local control when a track within interlocking limits or control points is out of service by Form C or under Track and Time except:

- (a) In an emergency,
- (b) When necessary to route a train to, from, or around an out of service track on which a track circuit has been de-energized,

or

(c) When necessary to perform C&S testing.

The C&S employee authorized to take local control must receive permission from the person in charge of the out-of-service track or Track and Time and be shown or read a copy of the directive before operating any interlocking or control point appliance. The Train Director must communicate all appliances blocked, and the C&S employee must confirm them.

Appliances used for the protection of track(s) out service must not be tested by the C&S department while a Form C or Track and Time is in effect on that track(s).

If the signals and switches providing protection must be tested, the Form C or Track and Time must be canceled with the RWIC, and when necessary, alternate blocking protection must be provided before testing can occur. The Train Director and C&S employee must have a job briefing to discuss the conditions of the track and all blocking devices applied.

Roadway Worker Protection

Т



1) **Restrictions**

The C&S employee must not authorize:

- (a) Any work unrelated to C&S testing or inspection or joint C&S and MW switch inspections.
- (b) Any work that involves on-track equipment or will disturb the track so that it would be unsafe for Normal Speed.

J Exclusive Track Occupancy Using Opposing Stop Signals

In the application of Amtrak and federal Roadway Worker Protection rules, a qualified C&S employee who has local control of an interlocking or control point must use opposing Stop Signals to establish exclusive track occupancy protection. Unless alternate protection is provided, the C&S employee must:

- (a) Apply blocking devices to prevent the display of any signal leading to the limits to be protected prior to establishing working limits.
- (b) Appropriately note the use of Stop Signals for such protection, as indicated on form NRPC 3436.
- (c) Keep a written record of these blocking devices on form NRPC 3436 to ensure compliance. (The record must include the identification of each blocking device, the time it was applied, and the time removed; it is not necessary to report these blocking devices to the Train Director).
- (d) Ensure blocking devices remain applied until all employees authorized to foul the track(s) have cleared, or the employees have established alternate protection.

If the display of signals is required for the purposes of testing, such signals may only be displayed as authorized by the Train Director when assurance has been made that no train or equipment would be available to accept such signals. Tracks and routes for which signals are displayed must not be fouled by men or equipment unless alternate protection is provided.

NOTE: "Local Control" IS NOT an establishment of RWP. Proper RWP protection for roadway workers is only established through the C&S employee's use of stop signals and blocking devices under their control. When protection outside of interlocking limits and Control Points is required, permission to foul tracks must be obtained from the Train Director in the usual manner. Before granting permission to foul tracks, the Train Director must order the C&S employee who has local control of any affected interlockings to apply blocking devices to the affected controls.

K Returning Remote Control to the Train Director

Before operating the control toggle and returning "Remote Control" to the Train Director, the C&S employee in charge must:

- 1) Ensure that all affected Roadway Workers are clear of the tracks or have established alternate protection
- 2) Notify all affected roadway workers that remote control is being returned to the Train Director for the operation of trains
- 3) Notify the Train Director that all roadway workers are clear or that alternate protection is established, and that control of the interlocking is being returned.

The Train Director must not perform any functions on their console until it has been confirmed that:

1) Remote Control is restored to the Train Director both verbally and electronically, as indicated on each employee's control display

and

2) Once control of the interlocking is returned to the Train Director, the C&S employee must document the time on form NRPC 3436, draw an "X" through the blocking device record and retain the record for 7 days.



10.3-IMCS. TRACK AND TIME AUTHORITY INVOLVING CP 37

- 1) When CP 37 is included within the limits of a single Track and Time authority, trains and on- track equipment may operate beyond the absolute signal at CP 37 in accordance with GCOR Rule 10.3, part A.
- 2) When CP 37 is designated as one of the limits of two adjoining Track and Time authorities, trains and ontrack equipment may operate up to the absolute signals at CP 37 and must not pass those signals without authority from the Amtrak Michigan Line Train Director (GCOR 9.12) in order to enter the limits of the adjoining Track and Time authority.
- 3) In addition to the requirements of item 2 above, before entering an adjoining Track and Time authority:
 - (a) Trains must be granted Joint Track and Time authority with the RWIC.
 - (b) On-track equipment must be granted verbal permission from the RWIC to enter Track and Time limits.



14.5-IMCS. PROTECTING MEN OR EQUIPMENT

Trains or on track equipment must not enter or make any movements within the limits of a track warrant which is jointly occupied with an employee until the employee in charge is contacted. Make all movements at restricted speed.

If the limits of a track permit will be jointly occupied, and track is not safe for movement at 20 MPH, protect the track by placing red flags as per Rule 5.4.7 (Display of Red Flag).



15.1-IMCS. TRACK BULLETINS

"Slow by" Speed Restriction

During the planning phase of large-scale railroad projects, the engineering department may determine need for a "Slow-By" speed restriction, issued by Track Bulletin Form C for a specified speed, not exceeding 60 MPH for all trains operating on tracks immediately adjacent to (next to) tracks out of service. The time period of the restriction must begin and end on the hour or half-hour and applies to the head end only.

The Roadway Worker in Charge (RWIC) or appointed Engineering department representative, must request instructions to be issued by the Amtrak Michigan Line Train Director at least 48 hours in advance when a "Slow-By" restriction for a specified speed will be required. The train director must ensure the speed restriction is properly entered into the appropriate system for PTC enforcement during the prescribed times.

Yellow Flags and Green Flags must be erected between the specified hours and removed upon void of the restriction. Yellow Flags encountered outside the specified time limits should be complied with as governed by GCOR Rule 5.4.2, Part B "Restriction Is Not In Effect" and reported to the train director.



15.2 PROTECTION BY TRACK BULLETIN FORM B

When determining limits for track bulletin Form B, 1000 feet must be added at both ends of the work area to provide an additional margin of protection. Display yellow-red flags as specified in Rule 5.4.3 (Display of Yellow-Red Flag).

While trains and on track equipment are within the limits during the time stated in track bulletin Form B, they must move at restricted speed until leading wheels have cleared the limits unless instructed otherwise by employee in charge as stated in Item A (Verbal Permission).

If work will not be completed by the time limits of a Form B track bulletin, contact the train dispatcher before time limits expire. If unable to contact the train dispatcher make sure that yellow-red and red flags are properly displayed and provide additional protection.

END OF SECTION



10 AMTRAK MICHIGAN SUBDIVISION SIGNAL ASPECTS AND INDICATIONS

RULE	ASPECTS	NAME	INDICATION
9.1.1		Clear	Proceed
9.1.2		Advance Approach	Proceed prepared to stop at the second signal. Passenger trains exceeding 45 MPH must begin reduction to 45 MPH as soon as engine passes the Advance Approach signal. Freight trains exceeding 40 MPH must begin reduction to 40 MPH as soon as engine passes the Advance Approach signal
9.1.3		Approach Slow	Proceed approaching the next signal not exceeding 15 MPH. Trains exceeding 30 MPH must begin reduction to 30 MPH as soon as engine passes the Approach Slow signal.
9.1.4		Approach	Proceed prepared to stop at the next signal. Trains exceeding 30 MPH must begin reduction to 30 MPH as soon as engine passes the Approach signal.
9.1.5	A E	Slow Clear	Proceed not exceeding 15 MPH until entire train clears all switches within control point limits, then proceed at maximum authorized speed.
9.1.6	• रे रे ▲ €	Slow Approach	Proceed prepared to stop at next signal, not exceeding 15 MPH until entire train clears all switches within control point limits, then proceed not exceeding 30 MPH.
9.1.7	A B E	Restricting	Proceed at Restricted Speed, not exceeding 15 MPH within Interlocking limits until the entire train has cleared all switches within control point limits, then continue at Restricted Speed until the leading wheels have either passed the next governing signal or the end of the block system.
9.1.8		Stop and Proceed	Stop, then proceed at restricted speed until the entire train has cleared all interlocking and spring switches and the leading wheels have passed a more favorable fixed signal or entered non-signaled territory.
9.1.9		Stop Signal	Stop.
9.1.10		Approach Medium	Proceed approaching the next signal not exceeding 30 MPH.

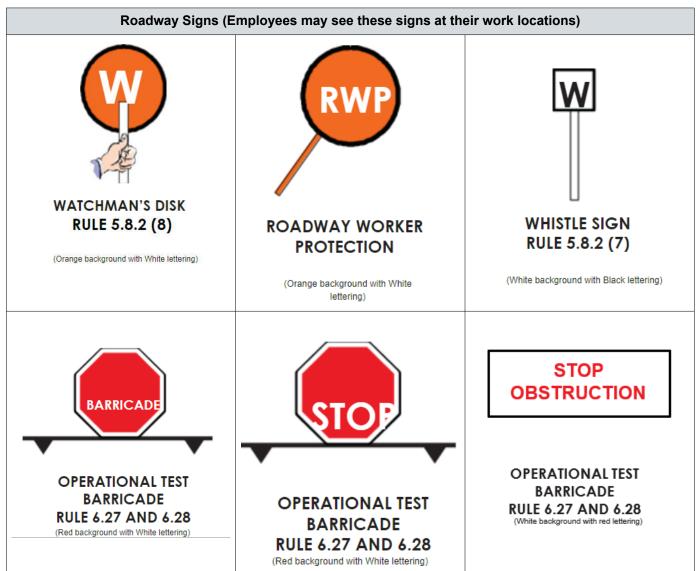


RULE	ASPECTS	NAME	INDICATION
9.1.11		Approach Limited	Proceed approaching the next signal not exceeding 45 MPH for passenger trains, 40 MPH for freight trains.
9.1.12		Medium Clear	Proceed not exceeding 30 MPH until entire train clears all switches within control point limits, then proceed at maximum authorized speed.
9.1.13		Limited Clear	Proceed not exceeding 45 MPH for passenger trains, 40 MPH for freight trains, until entire train clears all switches within control point limits, then proceed at maximum authorized
9.1.14		Medium Approach	Proceed prepared to stop at the next signal. Trains exceeding 30 MPH must begin reduction to 30 MPH as soon as the Medium Approach signal is clearly visible.

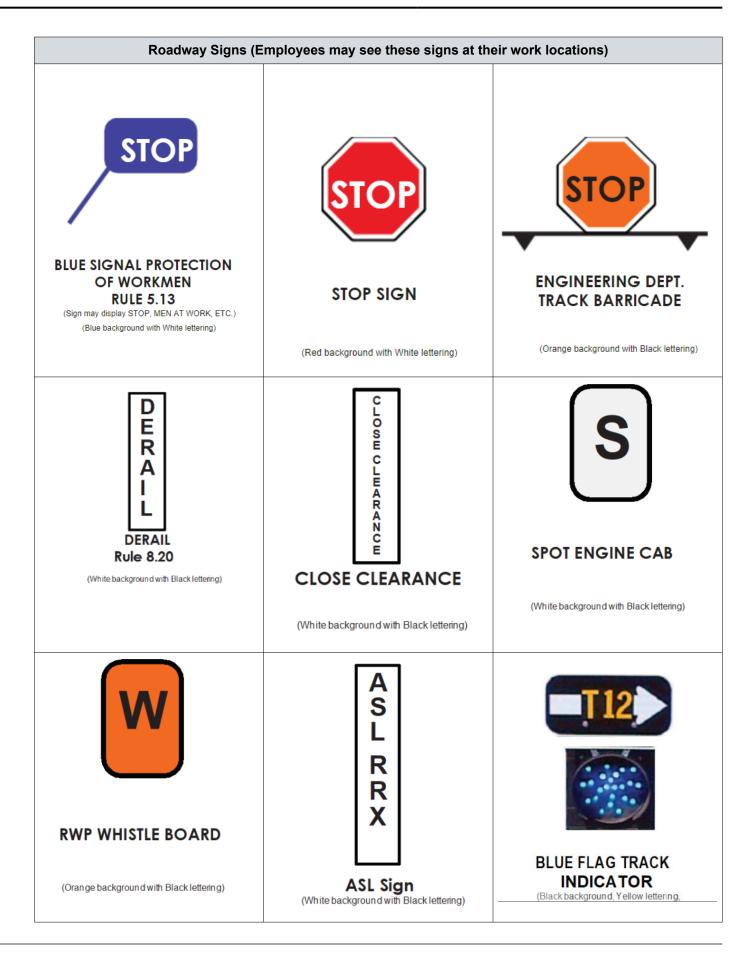
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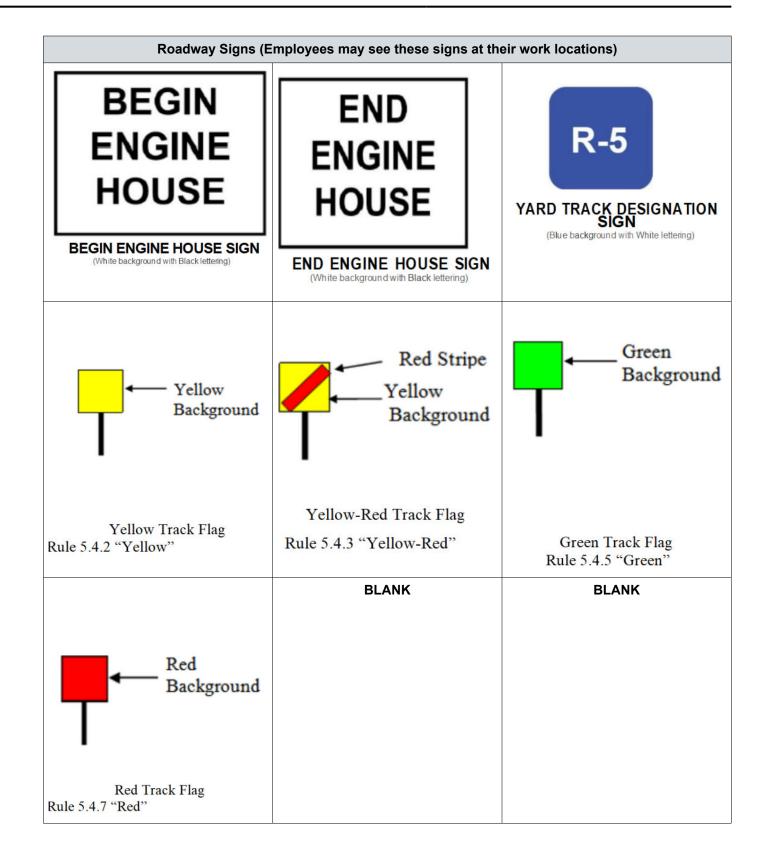
11 ROADWAY SIGNS











END OF SECTION



12 PC CHANGES

• South Shore Diamond – CP 10th Street (MP 229.8) 11/01/22

The single-track diamond at CP 10th Street will be removed. South Shore Railroad's Main Track will be disconnected from the single-track diamond at CP 10th Street.

South Shore Railroad's Main Track at CP 10th Street will be realigned and connected to the eastern portion of the double track diamond. This track will be renamed and identified as Main Track 2 by the South Shore Railroad.

The western portion of the double track diamond will not be connected to crossing foreign line traffic until a later date.

The 2E Signal at CP 10th Street will be relocated 118 feet west of its current location and will represent the new West Limit of CP 10th Street. This signal will govern Eastbound movements on the Main Track from the West Limit of CP 10th Street to the West Limit of CP 228.

The 2W Signal at CP 10th Street will remain at its existing location and will continue to represent the East Limit of CP 10th Street. This signal will continue to govern Westbound movements on the Main Track from the East Limit of CP 10th Street to Intermediate Signal 232W.

The Timetable mile post of CP 10th Street will remain unchanged.

Maximum authorized speeds as published in all governing documents remain unchanged.

END OF SECTION