

TAKE PRIDE

in

RULES OBSERVANCE

For men to be safe they must be taught
by a competent, courteous teacher.

Each conductor, engineer and foreman
is a teacher and has the obligation to
require rules observance and safety in
the performance of duty by men under
their supervision.

TAKE TIME FOR SAFETY



**MISSOURI PACIFIC RAILROAD CO.
LOUISVILLE AND NASHVILLE RAILROAD CO.**

**JOINT
TIMETABLE
No. 3
CHICAGO DIVISION
BETWEEN
Chicago and Woodland Jct., Ill.
Effective 12:01 a. m. Sunday, Oct. 31, 1976
CENTRAL STANDARD TIME**

**FOR THE GOVERNMENT OF
EMPLOYEES CONCERNED**

**The Railroad Company Reserves the Right to Vary
Therefrom as Circumstances May Require.**

**R. K. DAVIDSON, Vice President—Operation.
J. M. TOLER, Vice President—Transportation.
J. G. GERMAN, Vice President—Engineering.
N. W. DERRYBERRY, Asst. Gen. Mgr. Transportation.
C. E. DETTMANN, Asst. Gen. Mgr. Transportation.**

CHICAGO DIVISION

CHICAGO DIVISION

1

SOUTH ↓ Miles	STATIONS	NORTH ↑	Station Numbers	Sidings	
				Cars	Feet
0.0	CHICAGO (Dearborn).....		ZA-0		
3.3	37TH STREET.....	WD			
16.9	DOLTON JCT.....	WD	ZA-17		
18.0	YARD CENTER. T&D @ W		ZA-18	Yd.	
20.1	THORNTON JCT GT.....		ZA-20		
26.8	C. R.....				
27.0	JAY. EJ & E.....		ZA-26		
27.8	CHICAGO HEIGHTS.....		ZA-27	Yd.	
28.8	STEGER.....		ZA-29	122	6106
49.7	PENCE. CR.....		ZA-50		
49.9	MOMENCE.....		ZA-50	110 76	5535 3806
60.1	ST. ANNE. IDOT.....		ZA-60		
77.5	WATSEKA. TPW.....		ZA-77		
82.6	WOODLAND JCT.....		ZA-83		

82.6

SPECIAL INSTRUCTIONS

MP and L&N employees using this joint trackage will be governed by the Uniform Code of Operating Rules effective June 2, 1968 and this timetable. Employees of both railroads will be governed by the general instructions of their respective employers, except as modified by the Uniform Code of Operating Rules and this timetable.

All Absolute Signals between Dolton Interlocker and Thornton Jct. will be under the control of the Yard Center operator. Movements by these signals will be made only on his authority.

ABS — Between Yard Center and Woodland Jct.

CTC — Between southward interlocking signal Watseka and Woodland Jct.

Two main tracks between Yard Center and Woodland Jct. designated Northward and Southward tracks.

Signal indication with current of traffic, Rules 450-453 inc. in effect between Yard Center and Southward interlocking signal Watseka. Trains moving against current of traffic between Yard Center and Watseka must not exceed a speed of 49 MPH and be governed by Rule 99. Movements against current of traffic approach interlockings at Thornton Jct. MP 20.1; CR MP 26.8; Jay MP 27-0; Pence MP 49-7; St. Anne MP 60.1 at low speed.

No. 16 turnouts — Remote control switches at: Woodland Jct.

Authority for movement against current of traffic will be obtained:

Between Dolton Jct. and Thornton Jct.—Verbal authority of yardmaster.

Between Thornton Jct. and Chicago Heights — authority of train dispatcher relayed verbally thru operator.

Between Chicago Heights and Watseka—by train order.

Southward trains originating Yard Center secure clearance. Trains will not require clearance at Woodland Jct.

Operation between Chicago and Yard Center over C&WI R.R. Be governed by their rules and special instructions.

TIMETABLE NO. 3

Rule 99(j) in effect.

Yard Limits: Dolton Jct. — MP 31-00.

1. MAXIMUM SPEED

MPH

Between Yard Center and Woodland Jct. 60
(except as below)
Dolton Jct.—Thornton Jct. 15

2. MAXIMUM ENGINE SPEEDS (where Maximum train speed is LOWER, it will be govern).

A. 55 MPH with units 1100-1299, 1500-1521, 8000-8007, and 65 MPH on all other units whether operating or dead in tow.

B. Engines running light 45 MPH.

C. Engines without pilot on end facing direction of movement or when shoving cars 25 MPH.

D. Engine with flat spots in excess of 3 inches must not be handled exceeding 10 MPH unless authorized by Superintendent.

3. SPEED RESTRICTIONS: (Where maximum Train or Engine speed is LOWER, it will govern).

3-A. SPEED RESTRICTIONS THRU CROSSOVERS, TURNOUTS AND SPRING SWITCHES:

MPH

Thru No. 9, 10 and 11 turnouts and crossovers, entire train 15

Thru No. 15 16 and 20 turnouts and crossovers, entire train 35

Thru No. 20 equilateral turnouts, entire train 50

Thru precurved turnouts, entire train 50

In straightaway movement when moving points of No. 9, 10 and 11 spring switches 15

In straightaway movement when moving points of Nos. 15, 16 and 20 spring switches 35

In straightaway movement when lead wheels have passed over points of spring switches, maximum speed may be resumed.

All turnouts are No. 11 or less, except as otherwise specified.

3-B. TRAINS HANDLING WORK EQUIPMENT OR MATERIAL CARS:

MPH

Locomotive Cranes (boom must be disconnected) 30

Ditchers and Burro Cranes, loaded on flat cars 30

Except Burro Cranes when loaded on MPX 15000—15018 Incl. and MPX 15094 or loaded on TPX 15026—15032 Incl. and TPX 15018—Max. Frt. Train speed.

TIMETABLE NO. 3

Cars designated by initials MPX, TPX or CEIA and contractors spray trains, must be handled in local freight trains only and not to exceed speed of 30 M.P.H. unless authorized by the Superintendent. The following cars are exempt from these instructions:

MPX Diesel Engine Car 1
 MPX air dump cars 4000-4069; 55400-55402; 55600-55606; 55800; 75300-75307; 76900-76919
 MPX Welded rail cars series 6500-6568, 6600-6636, 6650-6685, 6701-6726
 MPX tie cars series 8001-8078; 8100-8124
 MPX flat cars 15000-15018, 50000-50200
 TPX flat cars 15026-15032
 MPX gondolas series 27000-29400
 MPX box cars series 30000-32400
 MPX hopper cars series 60000-62200
 MPX sand cars series 70000-70054
 CEIX sand cars series 70092-70099
 MPX-TPX wheel cars series 99000-99099
 MPX cars which are in consist of wrecker crane
 MPX-TPX work train cabooses

Note—Where maximum train speed is 30 MPH or less, speed of trains handling work equipment shown above, must be restricted to five miles per hour less than such maximum freight train speed.

Wrecking Cranes, Ditchers and Jordan Spreaders.

Boom of wrecking cranes must be in trailing position. Speed of trains handling must be restricted according to maximum permissible speed of freight trains, as shown in following table, except ditchers and Jordan Spreaders will be restricted to 15 MPH if not headed in working direction and must be headed in working direction at first opportunity.

Max Frt. Train Speed	Permissible Speed
MPH	MPH
10	7
15	10
20	14
25	20
30	23
35	27
40	31
45	36
50-60	40

Scale test cars except MPX 198, MPX 15110,

MPX 15111, MPX 15115, MPX 15116 and 15117..... 30 MPH

Handle scale cars on rear, if more than one, space 3 cars apart.

Loaded welded or jointed rail trains and snow plows.. 40 MPH

Unless otherwise instructed by Superintendent, loaded or empty rail trains will be restricted to 70 cars, rail cars will be handled on head end next behind buffer cars. No train moves are to be made while men are in the process of coupling rails or while men are standing on transition car. In no case will Engineer take slack or move train until authorized to do so by Roadmaster or Assistant Roadmaster.

3-C. The movement of Derricks, Cranes and other such equipment on its own wheels, on Revenue billing will be handled only on authority of Superintendent and at a speed not to exceed 30 MPH.

3-D. SPEED RESTRICTIONS ON PSGR. EQUIPMENT WITH FLAT WHEELS:

No restrictions if length of flat spot does not exceed 3 inches.

If length of flat spot is greater than 3 inches maximum speed is 10 MPH.

3-E. TRAIN ORDER FORM X, REQUIRED WHEN HANDLING RESTRICTED EQUIPMENT:

When there is to be handled any unit of equipment mentioned in items 2 or 3 above, or equipment or shipments of excessive width or height causing the speed of the train handling to be restricted below the maximum train speed, or where clearance of structures, or equipment on adjacent tracks may be close, when practicable, a Train Order, Form X, must be issued, specifying the restriction. When not practicable to obtain Train Order, Form X, cond. must inform engr. of restricted equipment, specifying maximum speed restricted equipment to be handled, and notify dispr.

3-F. SHIPMENTS REQUIRING CLOSE ATTENTION:

Unless otherwise directed by Superintendent, shipments of excessive height, width, weight or value or other unusual shipments requiring close attention must be positioned in trains as close to engine as practical, but in no case further than 5 cars behind engine, except cars accompanied by messenger, cars requiring handling on rear end only, or cars moving in local trains may be positioned not to exceed 5 cars ahead of caboose.

4. MAXIMUM TRAIN SPEED: (Shown on Schedule Page).

Passenger trains handling freight equipment will not exceed freight train speed except on Authority of the Superintendent.

5. MAXIMUM GROSS WEIGHT LIMITATIONS:

The maximum gross weight of work equipment or cars that can be handled will be shown on the schedule page for each subdivision.

If maximum weight shown is	220,000 lbs.	240,000 lbs.	263,000 lbs.
Then: 4 axle cars may handle	220,000 lbs.	240,000 lbs.	263,000 lbs.
" 6 " " " "	330,000 lbs.	360,000 lbs.	394,500 lbs.
" 8 " " " "	418,000 lbs.	456,000 lbs.	526,000 lbs.

except as authorized by the superintendent. Such authority, together with any restrictions, must be attached to the waybill.

If speed restriction required, Train Order Form X must be issued, when practicable.

Six axle-type engines must not operate on subdivisions where the maximum gross weight limitation is less than 240,000 lbs., except as authorized by the superintendent.

6. RAILROAD CROSSING AT GRADE:

Equipment must not be left standing within interlocking limits unless coupled to other equipment extending beyond such limits.

Outside of ABS Territory with 4000 ft. and not less than 2500 ft. of each side of crossings equipped with standard gates there is an approach sign. Trains and engines must immediately reduce speed to 20 MPH and be prepared to stop before reaching crossing until it can be seen that gate is in proper position for movement over crossing.

7. OPERATION OVER FOREIGN LINES:

Unless otherwise provided, trains and engines using foreign lines will be governed by the rules and instructions of the line being used. Foreign line employees are subject to rules and instruction of this railroad while occupying its tracks.

8. RAIL DETECTOR CARS:

Sperry rail detector test cars, when testing rail may occupy main track in CTC territory only as provided by Rule 402.

9. RESTRICTIONS ON USE OF ENGINE WHISTLE:

Within city limits at points designated by symbol ⑨ on schedule page do not sound whistle except to warn persons or vehicles oblivious to approach of train or engine and whose attention cannot be attracted by ringing bell.

10. OPERATION OF ENGINES:

- When engines are moved from mechanical facility to train or vice versa the controls will be handled from the lead unit when practicable, except when making short back up moves.
- Operating diesel engines through water. Unless otherwise directed by officer at point of high water, diesel engines must not be moved or allowed to stand in water which is more than three inches above top of rail. Movement through water three inches or less above top of rail must not exceed two miles per hour, to prevent water getting inside traction motors. If any probability of water having entered motors, cover on motors should be removed and motor examined. If water has entered motor, unit must be moved off line to assignment location for necessary repairs.
- Under unusual circumstances when a unit becomes inoperative, abnormal weather, etc., it is possible that the units can go into overload and damage traction motors. To prevent overload do not exceed the quarter hour short time rating of any unit in 8th throttle when speed is steady or decreasing. The following chart illustrates quarter hour ratings. The unit having highest minimum speed governs the short time rating of the entire consist.

UNIT WITH HIGHEST MINIMUM SPEED GOVERNS CONSIST RATING

1/4 Hr. Rating	SPEED AND AMMETER READINGS ON LEAD UNIT							
	GP35	U23B	U30C	GP28 GP38 SD40	GP16 GP18	GP7 GP9	GP15 SW15 MP15	SW7 8 9 SW12 GP12
GP35 U23B	10MPH 1125 AMP	10MPH 1275 AMP	10MPH 1230 AMP	10MPH 1100 AMP	10MPH 980 AMP	10MPH 900 AMP	10MPH 870 AMP	10MPH 825 AMP
GP7 9 16 GP18 28 38 SD40 U30C	10MPH 1125 AMP	10MPH 1275 AMP	9.5MPH 1274 AMP	9.5MPH 1150 AMP	9.5MPH 1025 AMP	9.5MPH 950 AMP	9.5MPH 890 AMP	9.5MPH 840 AMP
SW7 8 9 12 GP12 SW15 MP15 GP15	10MPH 1125 AMP	10MPH 1275 AMP	9.5MPH 1275 AMP	9.5MPH 1150 AMP	9.5MPH 1025 AMP	9.5MPH 950 AMP	7MPH 1065 AMP	7MPH 950 AMP

If throttle is reduced to prevent slipping, the 1/4 hour amperage rating still must not be exceeded regardless of speed.

The ammeter is the most accurate measure of load and should be used for 1/4 hour rating. Example: When lead SW12 is at steady 840 amps, the trailing GP38 will be at 1150 amps and

can be so operated for 15 minutes before adjusting tonnage. Should SW12 amps increase above 840 as speed drops the trailing GP38 would be overloaded and adjustment must be made immediately.

While the ammeter is the most accurate measure of load, the speedometer can be used for the 1/4 hour rating if the ammeter is inoperative. Example: When a lead MP 15 is at a steady 10.0 mph, the trailing GP35 will indicate 1125 amps and can be so operated for 15 minutes before adjusting tonnage. But, if the speed drops below 10.0 mph the trailing GP35 would be overloaded and adjustment must be made immediately.

D. Shoving or Back Movements:

Do not use any more power than actually required to smoothly start shoving movement. Always use the least possible power to negotiate sharp curves and turnouts or movement across bridges.

GP Units 81-298, 1085-1096, 1600-1827, 1837-1849, 1856-1881, 1900-1944, SW Units 1100-1299 and 1500-1521 and 8000-8007 do not have alignment controlled couplers. To avoid the possibility of jackknifing between units in the shoving of 20 or more cars the following precautions must be taken:

- When any of these units are adjacent to each other in a consist of 4 or more units, power must be used only on the 3 units next to train and all other units taken off line.
- When three units or less are in consist, full power may be used on all units.

To prevent the possibility of slack running out and breaking the train in two a minimum brake pipe reduction of 6 to 8 lbs. is desirable keeping the engine brakes released and using power until STOP is made. A sufficient number of hand brakes, dependent upon whether cars are loaded or empty and the brake condition, should be applied at rear of train to prevent break-in-two.

E. Switching:

When switching cars and the engine brakes only are used to control the cut of cars, crew must not handle more cars than can be safely stopped by the independent brake.

F. Fuel Saver Switch:

Certain locomotives (types U23B, U30C and SD-40) are equipped with a FUEL SAVER SWITCH which is located in the cab, within the main battery switch compartment and is appropriately stenciled on the outside of the access door and below the switch FUEL SAVER SWITCH for easy location and identification.

The switch is a single pole, single throw toggle type and is clearly stenciled for its "ON" - "OFF" positions.

The function of this switch, when placed in "ON" position is to limit the throttle response to #1 notch power and engine speed regardless of throttle advance on lead or controlling locomotive. When placed in "OFF" position engine speed, loading and throttle response will respond normally on this locomotive. When one of these locomotives is the lead or controlling unit, the switch may still be in "ON" position without affecting throttle advance on other locomotives in consist.

When the full potential of horsepower and tractive effort is not required of the entire locomotive consist, the FUEL SAVER SWITCH may be placed in the "ON"

position of one of the above units when instructed by Superintendent or his representative to achieve the maximum fuel savings.

If another locomotive in the consist fails while the **FUEL SAVER SWITCH** is in the "ON" position and the locomotive is required, this switch may then be placed in "OFF" position to obtain maximum horsepower and tractive effort.

11. ABS AND CTC: (See Schedule Pages)

- (1) Block Indicators will be designated by letter "I".
- (2) Rule 99(k) in effect, except in Illinois Rule 99(j) in effect.
- (3) In territory where CTC rules are in effect, where maximum speed permitted is in excess of 20 MPH trains and engines using a hand operated main track switch not equipped with electric lock or spring switch mechanism must leave a portion of train occupying main track or leave main track switch open.
- (4) Where CTC Rules are in effect, trains or engines must not enter a siding at a spring switch or hand operated switch unless authorized by dispatcher.
- (5) Where CTC Rules are in effect trains or engines having proceeded under flag protection under provisions of Rule 345 or Rule 350 due to lack of communication must not exceed low speed regardless of more favorable signal indication until communication has been re-established with control operator.

12. LOCATION OF HAND OPERATED CROSSOVERS BETWEEN MAIN TRACKS:

Station	MP	Station	MP
Thornton	21-41	Momence	49-50
Chicago Heights	*25-40	Momence	50-18
Chicago Heights	*27-8	St. Anne	60-18
Chicago Heights	27-34	Papineau	63-50
Balmo	*32-20	Pittwood	71-36
Goodenow	34-12	Watseka	77-23
Beecher	37-12		
Grant Park	45-1	*Facing Point.	

13. EMPLOYEES MUST PROVIDE THEMSELVES WITH:

- (1) Uniform Code of Operating Rules.
- (2) Uniform Code of Safety Rules.
- (3) Radio Rules.
- (4) Circular 81.
- (5) Air Brake and Train Handling Instructions.
- (6) Conductor must also have "Emergency Handling of Hazardous Materials Instructions."

14. UNIFORM CODE OF OPERATING RULE CHANGES.

(1) PROTECTION BY SIGNS:

On Subdivisions where maximum speed does not exceed 35 MPH protection for men, machines and track restrictions may be provided by display of temporary speed restriction and resume speed signs as prescribed by Rule 10(g) without the use of train orders or flag protection.

When such signs are displayed train or engine will proceed not exceeding 10 MPH, or slower if necessary, within the limits of the restriction, and be prepared to stop short of gang, machines, or stop sign. If gang is encountered be governed by verbal instructions of foreman. If stop sign displayed, train or engine must stop and be governed by verbal instructions of foreman.

(2) TIMETABLE SCHEDULES:

Schedules for regular trains may be established by General Order designating class, direction, number and movement for such train.

Trains so established will operate under the same rules and with the same authority as if they were shown in timetable.

(3) MAX. may be used for abbreviation of maximum.

(4) A yellow stripe around switch staff or operating lever of hand throw switch will indicate that diverging track is protected by derail.

(5) **RULE 26:** A blue signal displayed at one or both ends of an engine(s) and/or car(s) indicates that workmen are on, under or between the equipment, and the equipment must not be coupled to nor moved. Other engine(s) and/or car(s) must not be placed on the same track so as to block or reduce the view of the blue signals.

When a blue signal is displayed at an entrance to a track, engines and/or cars must not be permitted to enter that track.

When workmen are working on, under or between an engine or car(s) coupled to an engine, a blue signal must be attached to the controlling unit of the engine at a location where it is readily visible to the engineman or operator at the controls of that engine.

Blue signals must be displayed by each class or group of workmen and may only be removed by the same class or group that placed them.

When emergency repair work is to be done on, under or between an engine or one or more cars coupled to an engine, and a blue signal is not available, the engineman or operator at the controls of the engine must be notified and appropriate measures must be taken to protect the employees making the repairs.

(6) **RULE 26-A:** When workmen are working on, under or between an engine(s) and/or car(s) on a track other than a classification track of a hump yard, a blue signal must be displayed at each end of the equipment to which a coupling can be made, or at each entrance to the track.

When workmen are working on, under or between an engine and/or car(s) on a classification track of a hump yard, the following protection must be provided:

- (a) Each manually operated switch, including crossover switches, providing access to the track must be lined for movement to another track and a blue signal displayed at or near each switch, and each remotely controlled switch providing access to the track must be lined against movement to the track and a locking device applied to the control for the switch.
- (b) The employee in charge of the workmen must ask for and receive from the operator of the remotely controlled switches the required protection before the work is begun.
- (c) The operator of the remotely controlled switches will provide the protection before informing the employee in charge of the workmen that it has been provided. He

POSITION IN FREIGHT OR MIXED TRAIN OF CARS CONTAINING EXPLOSIVES AND DANGEROUS COMMODITIES

[illegible][illegible]

will not remove the locking device until notified by the employee in charge of the workmen that the work is completed.

- (d) The operator will record on a prescribed form and retain for 30-days information as to the date and time he received request for track protection, name and craft of employee in charge who requested the protection, the number or other designation of the track involved, the date and time he notified the employee in charge that the protection had been provided, the date and time he was informed the work had been completed and the name and craft of the employee in charge who provided this information.

(7) **RULE 34:** Employees located in the operating compartment of an engine must communicate to each other in an audible and clear manner the name of each signal affecting movement of their train or engine, as soon as the signal is clearly visible. It is the responsibility of the engineer to have each employee comply with these requirements, including himself.

It is the engineer's responsibility to have each employee located in the operating compartment maintain a vigilant lookout for signals and conditions along the track which affect the movement of the engine or train.

If a crew member becomes aware that the engineer has become incapacitated or should the engineer fail to operate or control the engine or train in accordance with the signal indications or other conditions requiring speed to be reduced, other members of the crew must communicate with the crew member controlling the movement at once, and if he fails to properly control the speed of the train or engine, other members of the crew must take action necessary to insure the safety of the train or engine, including operating the emergency valve.

(8) **RULE 103 (a) (5):** All tank cars containing flammable compressed gasses must not be cut off in motion, but will be shoved to rest. In addition, the next succeeding car or cars to be switched into the same track against an exposed tank car of flammable compressed gas must be shoved to rest, and all coupling made with no more force than is necessary to complete the coupling. These cars will be identified by the letter "G" in advance consists, PICL lists, hump lists, etc.

(9) **RULE 209:** Train orders may be duplicated mechanically Printed Form X Ex. 3 showing multiple locations may be used.

(10) **BLOCK AND INTERLOCKING SIGNAL INDICATIONS:** Definition distant signal — A signal governing approach to an absolute signal outside ABS territory. Distant signals convey information concerning indication being displayed by next signal only and do not protect against trains, engines, obstructions, switch not properly lined or broken rails.

Name	Aspect	Indication
Distant Clear	Green with a "D" marker	Proceed, next signal displaying other than stop indication. The indication of next signal may change to stop after the distant signal is passed and enginemen and trainmen must be on the alert to observe it.
Distant Approach	Yellow with a "D" marker	Proceed prepared to stop before reaching next signal.

(11) **RULE 220.** Conductor and engineer of train being tied-up short of terminal and leaving train before relieving crew arrives will secure all train orders and clearances held by his crew which have not been fulfilled. Conductor will leave orders for rear of train in envelope on conductor's desk with waybills. Engineer will leave orders for head end of train in envelope on engine. Both conductor and engineer will show correct designation of the train, date and location on outside of envelope and will sign below this information.

Unless otherwise instructed, crew manning a train which has tied-up on the line of road must contact train dispatcher before proceeding.

(12) **RULE 330:** —5 minutes or more will be considered delay, except when any delay occurs after passing Approach Signal to an interlocking, train or engine must approach Absolute Signal of interlocking at low speed.

(13) **RULE 344:** Automatic Interlocking. In absence of favorable signal indication or illuminated indicator light after working time release it may be determined that signals on the conflicting route indicate stop as follows:

Crew members will go both directions on conflicting route and observe that absolute signals display stop indication and signify such by giving hand proceed signal to member of crew located at the crossing, or directly to the Engineer if member of crew at signal is in view of the Engineer and that crew member has received a pre-agreed proceed signal from crew member located at the other signal. Crew members will remain at the signals on conflicting route and observe that they continue to display stop indication until conflicting route is fouled by their train.

If dark signal is encountered or members of crew on conflicting route are out of view protection per Rule 99 must be afforded on conflicting route.

(14) **RULE 510 (2):** Train and engine service employees must not occupy the roof of a freight car or caboose under any circumstances. Other employees whose duties require them to occupy the roof of a car or caboose may do so only when equipment is standing.

RULE 510 (3) ADD: Trainmen and Enginemen, except in emergency, must not pass from one unit to another while units are in motion.

(15) **TIME SERVICE AND WATCH INSPECTION:** Employees required to use standard watches must present watch and certificate to a designated inspector once each two years for inspection.

Employees in charge of standard clocks must, during each tour of duty secure correct time from Train Dispatcher and set clock when found to differ 30 seconds or more from correct time. If standard clock will not maintain correct time, it must be removed from service and face covered.

(16) **TRAIN ORDERS:** Train order Form Y Example 4 may be combined with train order Form G, and worded "_____ protecting to the rear as prescribed by Rule 99."

The following is supplementary to Form X Train Orders and may be used only on subdivisions where intermediate pole markers are not used. (Example)

Train order Form Y Example 3 may be combined with Form V Example 2.

"Reduce speed to

15 MPH over restricted track located between MP 10 and MP 11

30 MPH over restricted track located between MP 41 and MP 43

Signs displayed as specified in Rule 10 (g) indicate the restricted area"

(16.1) The requirements as to repetition, understanding and correctness of train orders will also apply to PX Lineups.

(17) OCCUPY LEAD UNIT: Head brakeman on freight trains will ride lead unit when practicable.

15. USE OF RADIO.

(a) When granting authority by radio for a train to move through the limits of an approach order, stop order or conditional stop order, after track is cleared and safe for passage and foreman has contacted train involved, he must identify himself thus:

(example) "Foreman Smith in charge of tamping gang using order No. 522 between MP 80 and MP 81 Chester Subdiv.", and will advise the engineer "Tamping gang is clear of East track. Extra 620 North may proceed not exceeding 30 MPH."

The engineer must identify himself as follows: "Engineer Jones on Extra 620 North", and will acknowledge instructions "Extra 620 North 30 MPH MP 81 to MP 80 on order No. 522."

After foreman has responded "OK" train may proceed as authorized.

(b) Radio call-in system areas are identified by symbols ①-1 and ②-2 which denote base stations or radio control points. Employees may contact train dispatcher by operating Dispatcher 1 button for ①-1 stations and Dispatcher 2 button for ②-2 stations on radio.

Operation of push-button on radio control head or of lever switch on Wabco portable radio for three seconds will identify calling station to dispatcher. Receipt of a tone will confirm dispatcher has been alerted. Dispatcher will answer call as soon as other duties permit. If no tone is received operate push-button for ten seconds. If contact is not then established other available means of communication should be used.

The Dispatcher 1 and Dispatcher 2 buttons are to be used only to contact the dispatcher in those areas so marked in the timetable.

Proper identification under Uniform Code of Radio Rules Nos. 24, 83, or S-89 (a) may be accomplished by direct radio conversation between crews involved. Train must approach such location at restricted speed until proper identification is received and acknowledged.

16. AIR BRAKE AND TRAIN HANDLING INSTRUCTIONS.

When a train is stopped with an emergency application of the brakes, whether from Locomotive or Train, or at a service rate of reduction from the train, the engineer will not move the locomotive until he has been informed by a member of the crew that

inspection of entire train has been completed and that it is safe to do so, except that when bridge or other physical characteristic prevents walking inspection of entire train, inspection will be made of as much of train as is possible, then train moved not exceeding 4 M.P.H., no further than is necessary to permit walking inspection of remainder of train.

17. HOT BOX AND DRAGGING EQUIPMENT DETECTORS LOCATED AT.

MP 46-45 and MP 73-30 equipped with indicators. When hot box is indicated, train must be stopped immediately and inspected.

17.1 General Instructions

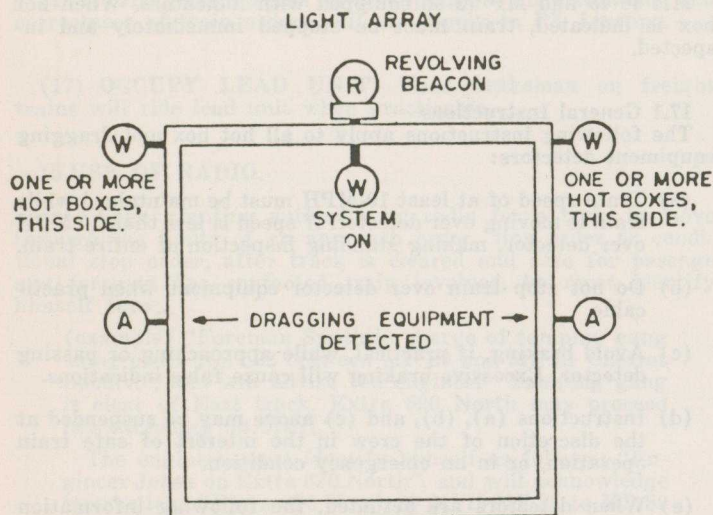
The following instructions apply to all hot box and dragging equipment detectors:

- (a) Train speed of at least 10-MPH must be maintained while train is moving over detector. If speed is less than 10 MPH over detector, making standing inspection of entire train.
- (b) Do not stop train over detector equipment when practicable.
- (c) Avoid braking, if practical, while approaching or passing detector. Excessive braking will cause false indications.
- (d) Instructions (a), (b), and (c) above may be suspended at the discretion of the crew in the interest of safe train operation, or in an emergency condition.
- (e) When detectors are actuated, the following information must be reported to the Dispatcher by the first available means of communication.
 - (1) Train identification.
 - (2) Date and time actuated and MP location of detector.
 - (3) Type of indication displayed by detector, i.e., hot box or dragging equipment.
 - (4) When detector is equipped with digital readout, report car number, axle and hot box location as indicated by readout.
 - (5) Disposition of car. (If set out, state where. If inspection shows that it was not necessary to set out car even though journal was warm enough to actuate the detector, advise what corrective action was taken to permit movement of car. Indicate roller bearing or friction bearing.)
- (f) Connecting crews, if any, must be notified by incoming crew of failure to locate hot bearing if indication is received from any detector and car is not set out.
- (g) Each detector is equipped with a steady burning white light to indicate "System On", located as shown in the following sketches. This light must be illuminated during the passage of the entire train. If not illuminated when passed by engine and caboose, train must be given standing inspection and dispatcher notified.

At some detectors, two white lights (one facing each direction) are used to indicate "System On". The pos-

sibility exists that a light may be burned out in one direction. If both engine and caboose verify that at least one light is burning, the system is "On" and an inspection need not be made.

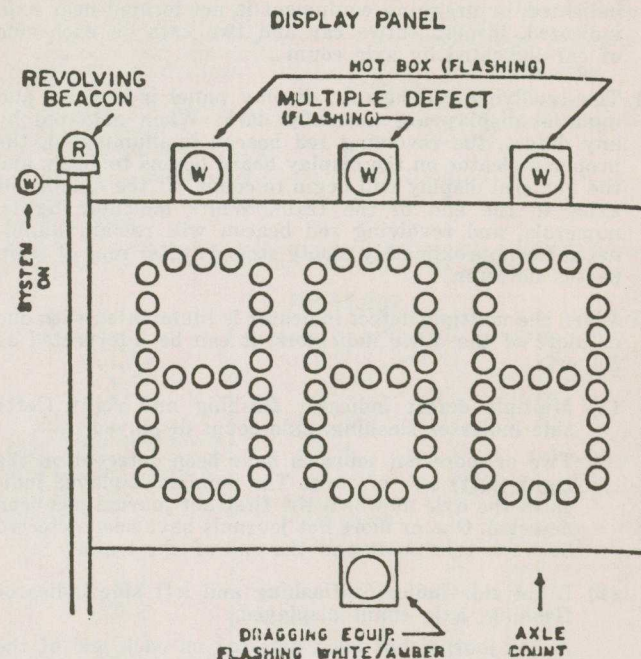
17.2 Hot Box and Dragging Equipment Detector Station... Equipped with Light Array Indicator.



When illuminated, array lights indicate the following:

- Revolving Red Beacon — Revolving red beacon at top center of indicator array will normally be dark. Beacon will be actuated when a hot journal and/or dragging equipment is detected.
- White light - lower center — White light at lower center of indicator array will be displayed continuously during passage of train to indicate "system on". See paragraph 17.1(g)
- White light - side — One side light illuminated indicates one or more hot journals detected on side of train indicated by array. Inspect entire side of train. If both white side lights are illuminated, one or more hot journals detected on both sides of train. Inspect both sides of the entire train.
- Yellow light - side — Both yellow lights will be illuminated when dragging equipment is detected. Inspect entire train for dragging equipment. Air hoses hanging below top of rail and dragging chains will be detected.

17.3 Hot Box and Dragging Equipment Detector Stations Equipped with Digital Display



Detectors designated by symbol (*) are equipped with digital read out as sketched above.

- Revolving Red Beacon — Revolving red beacon situated on top of display panel mast is actuated by hot journal or dragging equipment.
Information as to the type and location of defect is displayed on the digital panel.
If red beacon is illuminated and no information is displayed on panel, inspect entire train for hot journal or dragging equipment.
- System On-white light must be illuminated during passage entire train. See paragraph 17.1(g).
- White indication lights above panel.
Right Side: Flashing white light indicates one hot journal has been detected on side of train.
Left Side: Flashing white indicates one hot journal has been detected on left side of train.
Center: Multiple defect indicator — White flashing light indicates more than one defect detected. This light will operate whenever a second defect is detected, whether it be a second hot journal, or dragging equipment, or any combination of defects.
- White or Amber indicator light below panel — Flashing white or amber light indicates that dragging equipment has been detected.

(e) Number on display panel indicates the number of axles from the first defect detected, up to and including the rear axle of caboose. If hot journal is not located on axle indicated, or dragging equipment is not located near axle indicated, inspect entire car and two cars on each side of car indicated by axle count.

(f) The revolving red beacon, display panel indicators, and numeral display are normally dark. When actuated by any defect, the revolving red beacon is illuminated, the proper indicator on the display board begins to flash, and the numeral display will begin to count off the number of axles to the end of the train. White indicator lights, numerals, and revolving red beacon will remain illuminated for approximately ninety seconds after rear of train passes detector.

(g) When the multiple defect indicator is illuminated with one or more of the other indicators, it can be interpreted as follows:

- (1) Multiple defect indicator flashing and right (left) side indicator flashing, axle count displayed.

Two or more hot journals have been detected on the right (left) side of train. The number displayed indicates the axle at which the first hot journal has been detected. One or more hot journals have been detected between this point and the end of the train.

- (2) Right side indicator flashing and left side indicator flashing, axle count displayed.

A hot journal has been detected on each end of the same axle indicated by the illuminated numerals.

- (3) All three white indicators flashing above panel and axle count displayed.

Signifies the first indicated hot journal may be on either side of train at axle indicated by numeral display. Inspect both sides of entire train from point of first hot journal to the end of the train, looking for subsequent hot journals on same side of train as first hot journal, and one or more subsequent hot journals on opposite side of train.

- (4) Multiple defect indicator flashing and dragging equipment indicator flashing, axle count displayed. Two instances of dragging equipment detected; the first occurring near axle count displayed.

- (5) Multiple defect indicator flashing, dragging equipment indicator flashing, right (left) indicator flashing, axle count displayed.

A hot journal on the right (left) side of train has been detected or dragging equipment has been detected at axle count indicated. Inspect right (left) side of train for second defect, hot journal or dragging equipment.

18. Business Tracks

	MP	Sta. No.		MP	Sta. No.
Thornton	21.7	ZA-22	Wichert	57.9	ZA-58
Crete	30.4	ZA-30	Papineau	64.2	ZA-64
Balmo	32.5	ZA-33	Martinton	67.7	ZA-68
Goodenow	34.2	ZA-34	Pittwood	11.5	ZA-72
Beecher	37.6	ZA-38	Coaler	79.6	ZA-80
Sollitt	41.0	ZA-41	Woodland	81.8	ZA-82
Grant Park	44.7	ZA-45			

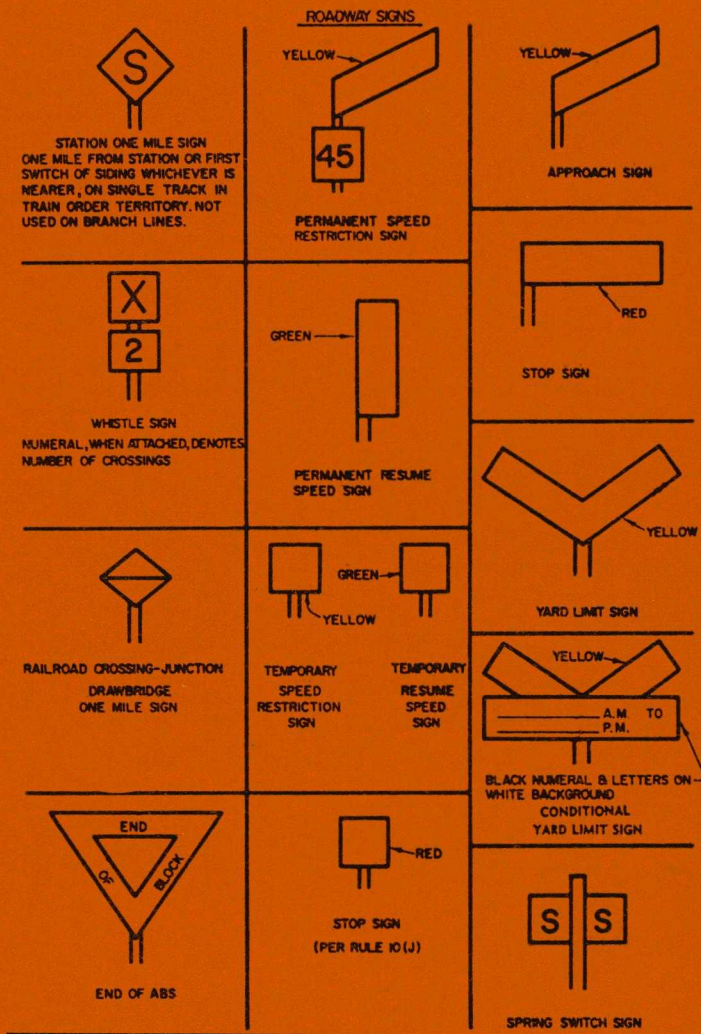
EXPLANATION OF CHARACTERS

- ①—Automatic Interlocking.
- ②—Radio Base Station.
- ③-1—Call in System Dispatcher 1.
- ③-2—Call in System Dispatcher 2.
- ④—Draw Bridge.
- ⑤—Gate—Normal position against conflicting route.
- G—Gate—Normal position against this Sub-division.
- ⑥—Manual Interlocking.
- ⑦—Stop Sign.
- T—Turntable or Wye.
- ⑧—Railroad Crossing at Grade.
- ⑨—Yard Limits.
- ⑩—Conditional Yard Limits.
- ⊙—50 MPH Equilateral Turnout.
- ⊖—50 MPH Precurved Turnout.
- §—Track Scale.
- n—Northward.
- s—Southward.
- ①—Train Order Office.
- I—Crossover between main tracks—Dual Control Switches.
- ②—General order book and standard clock.
- General Order Book.
- s—Regular Stop.
- f—Flag stop for passengers.
- ①—Item 9 Special Instructions applies.

Register Stations are shown in full-face type.

Capacity of Sidings shown in 50 ft. cars, also feet, clearance point to clearance point.

Track diagrams and color codes are for general information only and are not to scale. Red indicates CTC-ABS. Green indicates ABS.



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