

THE ANN ARBOR RAILROAD COMPANY



TIME TABLE No. 113

EFFECTIVE AT 12:01 A.M.
EASTERN STANDARD TIME

Sunday, October 11, 1964

DESTROY ALL TIME TABLES OF
PREVIOUS DATE

SAFETY ALWAYS

Safety is of the first importance in the discharge of duty.

Obedience to the rules is essential to safety.

Every employe should report promptly to proper person every unsafe condition and practice.

PREVENT INJURY

This Time Table is for the exclusive use and guidance of the employes concerned.

C. L. TOWLE

Vice-President — Operations

W. O. PEECHER, SR.

Superintendent

Toledo-Ann Arbor

J. E. SCHLOSSER

Superintendent

Ann Arbor - Frankfort

COMPANY SURGEONS

Toledo	Dr. H. A. Martin.....	248-4221
	2001 Collingwood Ave.	
	Dr. C. R. Marlow.....	244-3059
	1833 Broadway	
Milan	Dr. J. D. DeTar.....	439-9741
	55 W. Main St.	
Ann Arbor	Dr. W. E. Dolfin.....	668-9087
	708 W. Huron St.	
Howell	Dr. May & Associates.....	1955
	1200 Byron Road	
Durand	Dr. C. J. Richards.....	288-6772
	Genesee Street	
Owosso	Owosso Medical Grp.....	725-2155
	113 E. Williams	
Ithaca	Dr. M. J. Budge.....	875-4020
	103 Jeffery Ave.	
Alma	Dr. E. C. Meyer.....	Day 463-5928
	310 Warwick.....	Night 463-4500
Mt. Pleasant	Davis Medical Clinic.....	SP 3-3311
	314 S. Brown St.	
Clare	Dr. Donald Dunlop.....	EV 6-7272
	301 E. 4th St.	
Marion	Dr. D. C. Youngman.....	RI 3-2201
	221 E. Main St.	
Cadillac	Dr. G. P. Moore.....	PR 5-2493
	107½ N. Mitchell	
	Dr. W. J. Smith.....	PR 5-3821
	208 E. Harris St.	
Frankfort	Dr. F. R. Thacker.....	352-2431
	104 4th St.	
	Dr. G. W. Willoughby.....	357-3521
	408 Main St.	
Manistique	Dr. J. Fyvie.....	341-2181
	Dr. D. L. Water.....	341-2181
Menominee	Dr. H. Brukardt.....	863-5944
	534 1st St.	
Manitowoc	Dr. T. H. Rees.....	684-8888
	104 N. 8th St.	
Kewaunee	Dr. E. W. Wite.....	Day 314
	Dr. R. M. Neumann.....	Nite 600
	213 Ellis St.	

**D. C. Whitmore—Trainmaster-
Road Foreman of Engines.....Owosso**

**E. J. Gorman—Asst. Trainmaster-
Road Foreman of Engines.....Frankfort**

SPEED RESTRICTIONS

Trains must run at reduced speed whenever regulations or safety require.

During heavy rains, trains must proceed carefully at points where slides or washouts are liable to be encountered. If storms are of such intensity that slides or washouts might occur and vision ahead is obstructed, making the movement unsafe, trains will stop and make inquiries until it is safe to proceed.

**Miles
An Hour**

Maximum speed of trains:

45

Trains handling wrecking derrick, cars with short wheel base such as locomotive cranes, Jordan spreader, ditcher or pile driver:

Tangent track.....25

Curves not otherwise restricted.....20

Trains handling loads of poles that exceed 13 feet from top of rail; double and triple loads of steel or steel plates loaded on edge.....35

Through turnouts and crossovers.....10

Trains handling Diesel switch engines in tow.....35

Engines shoving Russell snow plows.....35

Trains handling Maintenance of Way Dept. water supply cars converted from steam locomotive tenders except where lower speeds are prescribed.....35

Trains handling loaded ore hoppers.....30

Trains handling empty ore hoppers.....40

SCALE TEST CAR

Must be handled on rear of train next ahead of caboose at a speed not to exceed 30 miles per hour. The car should be protected from rough handling at all times. Impacts of greater speed than two miles per hour should be avoided. Switching of car should be avoided when possible to do so.

Trains hauling Diesel locomotives in tow will be governed by billing instructions of the manufacturer or of foreign line for whom we are handling the locomotive. Where there are no billing instructions, or special instructions, trains hauling Diesel locomotives with friction bearings will not exceed 35 MAH and trains hauling Diesel locomotives with roller bearings will not exceed 45 MAH.

In cases where it is necessary to tow Diesel locomotives in a train as a result of derailment or other damaged or defective conditions, special instructions will be issued.

Diesel locomotive units may be operated through water not exceeding depth of 3 inches above top of rail proceeding at a speed not exceeding 3 miles per hour.

Dead or disabled units must not be dispatched or moved in any train without authority of the Superintendent. Unless otherwise instructed, such units must be handled next to operating units.

When operating four or more diesel units in multiple, caution must be exercised in handling throttle during back up movements to prevent derailling units or cars.

TOLEDO—OWOSSO

1st SUB-DIVISION

Distance from Toledo (Cherry Street)	Time Table No. 113 In Effect Sunday, October 11, 1964 STATIONS	Capacity Sidings In 50 ft. Cars Exclusive of Engine & Caboose
.0	..... TOLEDO	Yard
2.24	B L K { TT Crossing 2.24 I BOULEVARD D K C&O-TT 1.49 Crossing } B	.....
3.73	S I G { HALLETT R DN } T I NYC-C&O 1.20 Crossing } R S ALEXIS DN } K	.....
4.93	..... 4.40 .....	.....
9.33	..... TEMPERANCE .....	.....
11.41	..... 2.08 .....	.....
	..... SAMARIA	98
	..... 7.23 .....	.....
18.64	NYC Crossing I..... FEDERMAN .....	.....
20.54	DT&I Crossing 1.90 I..... DIANN DN	84
22.83	..... 2.29 .....	.....
30.86	..... DUNDEE D	34
36.53	Wabash 8.03 Crossing B L K { MILAN DN	76
40.45	..... 5.67 .....	.....
44.46	..... URANIA	77
50.45	S I G { NYC 3.92 Crossing I PITTSFIELD .....	.....
56.67	..... 4.01 .....	.....
61.82	..... FERRY (ANN ARBOR) ..D	Yard
66.94	..... 5.99 .....	.....
72.01	..... OSMER	80
73.90	..... 6.22 .....	.....
79.94	..... WHITMORE LAKE	34
84.73	GTW Crossing I..... LAKELAND .....	.....
88.93	..... 5.12 .....	.....
95.51	C&O Crossing 5.07 I..... CHILSON	121
96.20	..... ANNPERE 1.89 .....	.....
98.73	..... HOWELL D	74
104.02	..... 6.04 .....	.....
106.07	..... OAK GROVE	40
	..... 4.79 .....	.....
	..... COHOCTAH	72
	..... 4.20 .....	.....
	..... BYRON	27
	GTW Cross. 6.58 Not Int'l'd-Stop 0.69 .....	.....
	..... DURAND .....	.....
	..... 2.53 .....	.....
	..... YORK D	61
	..... 2.53 .....	.....
	..... VERNON .....	.....
	..... 5.29 .....	.....
	..... CORUNNA .....	.....
	..... 2.05 .....	.....
	..... OWOSSO RDN	Yard

STATIONS & SIDINGS NOT SHOWN

Dundee Cement Co. at MP-25—7155 Ft. long connected both ends.

Wickes—2½ Mi. east of Milan, 1465 Ft. connected west end.

Reynolds Chemical Co. spur track, 2000 Ft. west of MP-57, connected at west end — 570 Ft. in length.

SPEED RESTRICTIONS

FIRST SUB-DIVISION

LOCATION	Miles An Hour
Between home signals at interlockings—	
Federman, Milan westward and Lakeland	20
Dundee—Crossing highway M-50—westward	20
Milan—Main Street crossing—eastward	25
Ann Arbor—Between Hoover and Washington Sts.....	15
Over Huron River Bridge	30
Curves Osmer to Ann Arbor—eastward	30
Curve Mile Post 62.6	25
Curve Mile Post 64.1	30
Curve Mile Post 65.8	30
Howell—Under overhead bridges	20
Curve Mile Post 74.8	30
Curve Mile Post 82	30
Curve Mile Post 94	25
Durand—York yards—curves	15
Vernon—Reverse curves	30

Location of Railroad Crossings Not Interlocked Where State Law Requires Trains to Come to Stop 200 to 800 Feet Before Reaching Crossing.

1st Sub-Division

Durand.....	G. T. W. (Holly Sub-Division) Color lights
Durand	G. T. W. Gates
Durand	G. T. W. Wye Gates

EASTWARD TRAINS ARE SUPERIOR TO WEST-
WARD TRAINS OF THE SAME CLASS.

OWOSSO—BOAT LANDING

2nd SUB-DIVISION

Distance from Toledo (Cherry Street)	Time Table No. 113 In Effect Sunday, October 11, 1964 STATIONS	Capacity Sidings In 50 ft. Cars Exclusive of Engine & Caboose
106.07	OWOSSO R DN	Yard
107.77	NYC Crossing 1.70 Not Int'l'kd-Stop OWOSSO JCT.	
108.79	1.02 KING	57
115.42	6.63 CARLAND	60
120.31	4.89 ELSIE	35
124.16	3.85 BANNISTER	
128.35	4.19 ASHLEY D	41
133.69	5.34 NORTH STAR	27
138.34	4.65 ITHACA D	
144.67	6.33 WRIGHT	77
145.80	C&O Crossing 1.13 Not Int'l'kd-Stop ALMA D	
150.16	4.36 FOREST HILL	59
156.16	6.00 SHEPHERD D	40
163.76	7.60 MT. PLEASANT D	39
170.46	6.70 ROSEBUSH	33
178.82	C&O Crossing 8.36 CLARE D	101
193.82	15.00 LAKE GEORGE	83
200.71	6.89 TEMPLE	24
208.61	7.90 MARION D	82
216.43	7.82 McBAIN	36
220.82	4.39 LUCAS	45
226.91	PRR Crossing 6.09 CADILLAC D	
228.19	PRR Cross. (Spur) 1.16 Not Int'l'kd-Gate SELMA	Yard
237.64	9.45 BOON	28
248.03	10.39 YUMA	99
254.11	6.08 MESICK	28
261.49	7.38 HARLAN	93
267.58	6.09 COPEMISH	
270.39	C&O Crossing 2.81 THOMPSONVILLE D	
276.64	6.25 WELDEN	63
282.83	6.19 BEULAH	
290.29	7.46 JUNCTION SWITCH	
291.80	1.51 BOAT LANDING R DN	Yard
290.29	JUNCTION SWITCH	
292.	1.87 FRANKFORT	

STATIONS AND SIDINGS NOT SHOWN

Pomona—2½ miles east of Copemish, lgth. 740 ft., connected west end.

Case's—1 mile east of Beulah, lgth. 400 ft., connected east end.

SPEED RESTRICTIONS

SECOND SUB-DIVISION

LOCATION	Miles An Hour
Owosso—Between MP-106 and Oakwood Ave.	15
Owosso—Over street crossings	20
Curve—Mile Post 113	35
Ashley—Main St.—entering crossing	20
First curve west Mile Post 137	30
Ithaca—First curve west of depot	30
Alma—Center, Lincoln and Superior Sts.	8
Woodworth Avenue	6
Mile Post 163.75—Curve	25
Mt. Pleasant—Pickard Avenue	15
Clare—Curves through yard	35
Marion—Westward—Approaching Highway M-66 crossing—if stop has been made	25
Mile Post 222—west of: two curves	35
Mile Post 223—Curve	35
Cadillac—Over street crossings	20
Between Home Signals at Interlocking	20
Over P.R.R. spur crossing	8
Boon—First curve east	40
Curves between Boon and MP-244	35
Mile Post 254—First curve west	35
Mile Post 256—Reverse curves approaching and through	35
Mile Post 258—First curve east	35
Thompsonville—Between Home Signals at Interlocking	20
Curves between Mile Post 278 and Beulah	35
Mile Post 283—Curve	35
Curves between Mile Post 285 and 290	25
Between Junction Switch and Fourth Street—Frankfort	15
Frankfort—Between Fourth Street and end of track	4
Curves—Between Junction switch and Boat Landing Yard	25

Location of Railroad Crossings Not Interlocked Where
State Law Requires Trains to Come to Stop 200 to 800 Feet
Before Reaching Crossing.

2nd Sub-Division

Owosso Jct.	N.Y.C. Interchange—Target horizontal for A. A. trains.
Owosso Jct.	N.Y.C. main track Color lights
Alma	C. & O. main track—Target perpendicular for A. A. trains.
Cadillac	P.R.R. spur track is governed by gate. Reduce speed to 8 MAH, stop not re- quired if track is clear and gate is properly lined for movement on Ann Arbor track.

EASTWARD TRAINS ARE SUPERIOR TO WEST-
WARD TRAINS OF THE SAME CLASS.

SPECIAL INSTRUCTIONS

The rules and instructions of the Transportation Department (issued in book form) dated January 1, 1924, will govern the rights of trains on this time table except as amended or superseded by the following. Every employee whose duties are in any way prescribed by these rules must always have a copy of them at hand.

The officers of this company direct that the time table, book of rules, and bulletin orders must be rigidly observed, and the claim of customary practice at variance therewith will not be accepted as an excuse for violation.

Rule 2. Amended. Watches that have been examined and certified by designated inspector must be used by trainmasters, road foreman of engines, track supervisors, supervisor of bridges and buildings, conductors, enginemen, brakemen, flagmen, firemen, yardmasters, yard foremen, hostlers, agents, operators, track foremen, bridge and building foremen, signal foremen, signal maintainers, assistant foremen, assistant maintainers, and track car operators. The certificate in prescribed form must be renewed and filed with head of department every twelve months. (May of each year).

Rule 2-A. Amended. In addition to inspection of watches every year, a comparison of watches by conductors, enginemen, brakemen, flagmen, firemen, yardmasters and yard foremen must be made semi-annually, May and November each year by designated inspector. Watch Inspection Card, Form 697, revised, showing record of comparison must be kept on hand to be presented to officials upon request.

Rule 10-(b). Amended. Yellow: Proceed at RESTRICTED SPEED, or for other uses prescribed by the Rules.

Rule 10-(f). Amended. Purple: STOP. (Night indication for hand throw derail).

Rule 10-(G). Amended. A yellow signal by day, and in addition, a yellow light by night placed on the engineman's side of track indicates that track, one-half mile distant is in condition for a speed of not more than ten miles an hour, unless a different speed is specified by train order, bulletin or time table. A green signal by day, and in addition a green light by night, placed on engineman's side of track, indicates that the slow track has been passed. The entire train must pass over the designated territory at the speed required, and the flagman will give proceed signal when the rear of the train has passed the green signal or light.

Rule 11. Amended. A train finding a fusee burning on or near its track must stop and extinguish the fusee. Train may then proceed at RESTRICTED SPEED expecting to find train or obstruction ahead.

Rule 14-(L). Amended. (- o -) Approaching public crossing at grade. To be prolonged or repeated until crossing is occupied by engine or car. See Rules 31 and 31-A Amended.

NOTE: The sounding of signal prescribed by Rule 14-(L) Amended. Not less than nine (9) seconds should intervene between the starting of the first blast and the closing of the final blast.

Rule 14-(q). (- o) Approaching meeting or waiting points. The engineman of each train will give signal 14 (q) at least one mile before reaching a meeting or waiting point. Should the engineman fail to give a signal 14 (q) as herein prescribed, the conductor or another crew member must take immediate action to stop the train.

Rule 19. Amended. The following signals will be displayed, one on each side of the rear of every train, as markers, to indicate the rear of the train, yellow lights to the front and side and red lights to the rear; except when the train is clear of the main track, when yellow lights must be displayed to the front, side and rear. Markers will be lighted at all times.

A train not equipped to display markers will display red flag by day and red light by night at rear of train.

When a car or cars are handled behind last car in train equipped to display markers, the markers shall remain displayed on such car and, in addition, a red flag by day and a red light by night shall be displayed on the rear car.

Air must be coupled whenever possible and in addition train employees must maintain a vigilant lookout to insure safety in case of detachment.

Rule 21-(A). Display of two white flags, and in addition two white lights by night, may be omitted, when no schedules for trains are in effect in the current timetable.

Rule 31-(A). Amended. Enginemen must sound whistle signal as prescribed by Rule 14-(L) Amended approaching curves: when view is restricted by weather or other unusual conditions, enginemen should frequently sound the whistle to warn trackmen and others.

Rule 34. Amended. All members of train and engine crews must when practicable, communicate to each other by its name the indication of each signal affecting the movement of their train or engine.

Rule 72-(A). Eastward trains are superior to westward trains of the same class.

Rule 83-(B). Amended. A train must not leave its initial station, or other stations prescribed by Special Instructions, on any sub-division, without receiving clearance card of proper form. Under this rule Hallett, Owosso and Boat Landing are initial stations for all trains.

Rule 91-(A). Between snow plow and trains in same direction 20 minute spacing will be maintained. These instructions may be modified by train dispatcher for specified movements only.

Conductor must ride the plow, and conductor and engineer will be held responsible for train operation according to rules and special instructions.

Rule 93. Interpretation placed on "under control" is that trains or engines affected will be operated approaching and passing through yard limits prepared to stop within half the range of vision.

Rule 98. Amended. Trains must approach the end of double track, junctions and railroad crossings at grade, prepared to stop, unless the switches are properly lined, signals indicate proceed and track is clear. Where required by rule or by law, trains must stop. Trains using a siding or yard track must proceed at RESTRICTED SPEED.

Rule 99-(B) - 97-(B). Opposing movements must not be made on verbal notice from a flagman. When made by flag authority instructions must be in writing, using Form X-128 in accordance with Rule 97-(A).

Reverse movement must not be made without signal and until it is known protection is afforded.

Rule 100. When a flagman goes back to protect the rear of train and is left behind, another member of the crew must take his place on the train.

Rule 101-(B). Passing stations and sidings a trainman will inspect train from rear and remain in position to give or receive necessary signals. Vigilant lookout will be maintained from the head end for signals from the trainman on rear or others.

Train and engine crews must observe their train at every opportunity while in motion for detecting hot journals or other defective equipment and observe passing trains for any defects and if any noted will signal members of such train.

When meeting or passing other trains and passing train order offices, or other stations, and points where trackmen, bridgemen or other employees are working, train and engine crews on moving trains must be on the lookout for signals, and when practicable, exchange signals between head end and rear end of train.

When practicable, when two or more employees are present, they will station themselves so both sides of the train can be observed.

Rule 101-(C). When brake beam or other appurtenance is found down on a car, in a way that indicates damage might have occurred to switches, frogs, etc., conductor will wire dispatcher, giving station last complete inspection of train was made. Conductor will also throw off message notifying sectionmen when they are encountered.

If opposing train is met before notice is given dispatcher, conductor will stop the train and notify crew, giving them full information. The crew of train so notified will carefully approach and pass over all switches, frogs, etc., until the designated station is passed.

Rule 101-(D). Whenever a steel span forming the part of any bridge or trestle has been damaged from any cause an immediate inspection shall be made and report of damage wired to the superintendent. No trains shall be allowed to pass over the structure until an examination of the damaged members has been made by a competent man and it is known that the structure is safe for traffic.

Rule 103. Amended. When cars are pushed by an engine, except when shifting or making up trains in yards, and even then when conditions require, a trainman must take a conspicuous position on the leading car. When shifting over all public crossings at grade not protected by a watchman, manually or automatically controlled crossing signals or gates, which are known to be functioning, a member of the crew must protect the crossing from a point on the ground on the crossing, and all movements over crossing must be made only on his signal.

Rule 104-(C). Note: When dropping cars, engines must be run on straight track, when practicable, except yard engines switching in yards.

Rule 201-(A). To annul a train order fixing meeting points for opposing extra trains, the reason therefor must be stated in the annulling order; Extra trains must not proceed unless train orders addressed to them, in such cases state the reason an order to meet opposing extra has been annulled.

Rule 201-(B). At Wright-Alma; Selma-Cadillac, extra train holding order to meet opposing extra train may, after communicating with operator, proceed to telegraph office, if meeting point is changed, providing the order effecting the change is repeated to the conductor.

Rule 216-(A). Train orders written by dispatchers for direct delivery to trains must, when such orders are also addressed to trains for delivery at stations other than Owosso, be transmitted to an operator at a place other than that at which orders are to be delivered, for check. Orders so sent must be addressed to "Operator for check" and must be copied, repeated, checked, completed and filed as provided by rules for handling train orders.

Rule 220. Amended. Last line paragraph 5 Amended to read AA-848 instead of 61.

Rule 220-(A). At Ferry yard office, trains in both directions may pass train order signal displaying red-stop-indication, to clearance point of siding, but will not proceed beyond clearance point without receiving clearance card. Prior to receiving clearance card, yard moves may be made under yard limit rules.

Rule 221-(B). A clearance card must be delivered with train orders. When an order is delivered to a train on any date, except the date the order is issued, operators must show date of such order on clearance card.

Rule 221-(C). Operators must check clearance cards with dispatcher before delivery, giving the numbers of all orders to be delivered, placing notation "Ckd" with personal initials and time on face thereof.

In case means of communication fail, operator may deliver clearance card (together with orders, if any) without dispatcher's check, endorsing "Not checked account wire trouble," adding personal initials and time. As soon as practicable after communication is re-established, operator must check with dispatcher clearance cards delivered without check.

Rule 221-(D). Conductors, enginemen, and when practicable other members of crews, must see that the information shown on clearance form AA-848 corresponds with the train orders received.

Crews must not accept clearance card without indication thereon that it has been checked, except when means of communication fail as provided in Rule 221-(C).

FORMS OF TRAIN ORDERS "B", DIRECTING A TRAIN TO PASS OR RUN AHEAD OF ANOTHER TRAIN . . . last paragraph, Amended.

When an inferior train receives an order to pass a superior train, right is conferred to run ahead of the train passed from the designated point. Unless some form of block signals is used, the following train will run at RESTRICTED SPEED, looking out for the designated train ahead until the order is fulfilled.

FORMS OF TRAIN ORDERS, "E" TIME ORDERS—(ADDITION)—

To relieve a train from protecting against following extra trains, (5) must be used:

(5) All Eastward extra trains between Corunna and Milan except Extra 51 East wait at Corunna until 6:10 p.m.

Extra trains named except Extra 51 East must not pass the first named station before the time specified.

Extra 51 East is relieved from protecting against following extra trains between Corunna and Milan until the time specified. This order applies to named train in specified direction only.

This form of order will not be used with a work train order in effect between the designated points.

Rule 804-(A). Air must be cut through and operating on helper engines shoving trains outside of yards.

Rule 804-(B). The placing of pusher engines behind any train using a wooden underframe coach as a caboose or with a wooden underframe coach or snow plow on the rear or when handling the sleeping-dining car of wrecking outfit or outfit cars occupied, is prohibited.

Rule 804-(C). When handling cars on coal dock or other incline tracks, air must be cut in and operative. It must be ascertained that brakes on the cars are working before movement is made. Cars left on coal docks, or any incline track, must have hand brakes securely set, and wheels blocked.

Rule 825-(A). Account frequent necessity for using certain sidings for spotting-storing-loading or unloading of cars-trains or engines may expect to find cars standing in sidings at following stations: Whitmore Lake, Cohoctah and Temple. Trains approach all siding expecting to find them occupied.

BLOCK SIGNAL AND INTERLOCKING RULES (AMENDED)

Note: The following supersedes Automatic Block Signal Rules and Interlocking Rules contained on pages 67-68-69-70 and 71 of Rules and Instructions of Transportation Department, effective Jan. 1, 1924.

DEFINITIONS

BLOCK SYSTEM—A series of consecutive blocks.

AUTOMATIC BLOCK SYSTEM—A series of consecutive blocks governed by block signals, actuated by a train or engine, or by certain conditions affecting the use of a block.

INTERLOCKING—An arrangement of signals and signal appliances, so interconnected that their movements must succeed each other in proper sequence and for which interlocking rules are in effect. It may be operated manually or automatically.

INTERLOCKING LIMITS—The tracks between the home signals of an interlocking.

BLOCK STATION—A place from which block signals are operated.

INTERLOCKING STATION—A place from which an interlocking is operated.

BLOCK—A length of track of defined limits, the use of which by trains is governed by block signals.

FIXED SIGNAL—A signal of fixed location indicating a condition affecting the movement of a train or engine.

BLOCK SIGNAL—A fixed signal at the entrance of a block to govern trains entering and using that block.

INTERLOCKING SIGNALS—The fixed signals of an interlocking.

HOME SIGNAL—A fixed signal at the entrance of a route or block to govern trains or engines entering and using that route or block.

APPROACH SIGNAL—A fixed signal used in connection with one or more signals to govern the approach thereto.

DWARF SIGNAL—A low home signal.

GRADE SIGNAL—An automatic block signal designated by letter "G," located on signal mast below signal arm or light.

DUMMY MAST—A short upright, without signals, placed on top of a bracket post, or bracketed to the side of signal mast, to show there is a track between the bracket post or signal mast, and the track for which signals are provided.

MEDIUM SPEED—A speed not exceeding 25 miles an hour.

RESTRICTED SPEED—A speed that will permit stopping short of another train or obstruction or switch not properly lined and look out for broken rail, but not exceeding 15 miles an hour.

FIXED SIGNALS

Signals shall be placed over or to the right of tracks they govern, unless otherwise specified.

Signal aspects, Rules 281 to 302, inclusive, shall appear where conditions require their use. The aspects may be shown by the position of semaphore arms (either upper or lower quadrant) and by color of lights.

Day and night aspects for color light signals shall have the same colors as the night aspects of the semaphore signals.

GENERAL DESCRIPTION OF SIGNALS

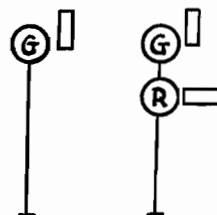
In the illustrations of signal aspects:

R—signifies Red

Y—signifies Yellow

G—signifies Green

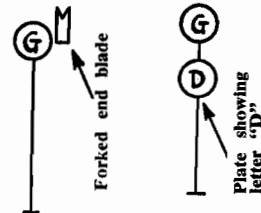
RULE 281



NAME—CLEAR

Indication—Proceed.

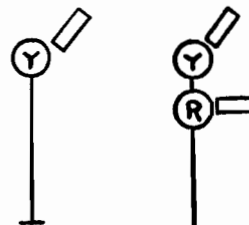
RULE 281A



NAME—CLEAR DISTANT

Indication—Proceed.
Note: Used in non-automatic signal territory.

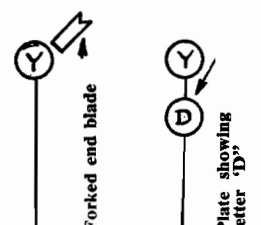
RULE 285



NAME—APPROACH

Indication—Proceed preparing to stop at next signal; train exceeding medium speed must at once reduce to that speed.

RULE 285A



NAME—APPROACH DISTANT

Indication—Proceed preparing to stop at next interlocking signal; train exceeding medium speed must at once reduce to that speed and not exceed 20 MAH within interlocking limits.

Note: Used only as approach signal to an interlocking on track not protected by automatic block system.

RULE 290



NAME—RESTRICTING

Indication—Proceed at restricted speed.

RULE 290A

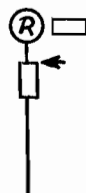


NAME—LOW RESTRICTING

Indication—Proceed at restricted speed.

Note: Approach signal at not exceeding restricted speed.

RULE 291

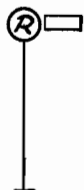


Number plate showing mile location of signal.

NAME—STOP AND PROCEED

Indication — Stop; then proceed at restricted speed.

RULE 292



Any signal without numberplate showing mile location of signal. Reflex "A" marker may be used.

NAME—STOP

Indication—Stop.

Note: Trains must not pass this signal unless authorized to proceed in accordance with rules or special instructions in time-table.

RULE 293



Plate showing letter "G"

NAME—GRADE

Indication—Stop; then proceed at restricted speed, except freight trains having 75% or more of their rated tonnage may proceed at restricted speed without stopping.

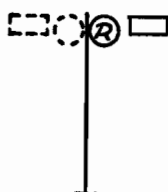
RULE 301



NAME—TRAIN ORDER SIGNAL CLEAR

Indication—Proceed.

RULE 302



NAME—TRAIN ORDER SIGNAL STOP

Indication—Stop.

Note: Used as block or train order signal. The indications for lower quadrant signals are the same as shown except the arm is inclined downward.

Rule 505. Block signals govern the use of the blocks, but unless otherwise provided, do not supersede the superiority of trains; nor dispense with the use or the observance of other signals whenever and wherever they may be required.

Rule 506. Block signals may be put to their most restrictive indication by a train, engine, cars, or other obstruction in the block; switch not properly lined or broken rail.

Rule 508. Unless otherwise provided, block signals for a track apply only to trains or engines moving with the current of traffic on that track.

Rule 509. When a train is stopped by a Stop-indication it must stay until authorized to proceed, and will then proceed at restricted speed, or in case of failure of means of communication it may proceed when preceded by flagman to the next signal displaying a proceed indication.

Rule 509-(B). A train having right to main track at meeting point may pass the stop and proceed signal, Rule 291, at or near the entrance of the siding without stopping and proceed at restricted speed to clearance point of switch used by opposing train, if opposing train can be seen entering siding.

Train taking siding may pass the stop and proceed signal, Rule 291, at or near the entrance of the siding without stopping, and proceed into siding at restricted speed.

Rule 510. When a train is stopped by a block signal which is evidently out of order, unless otherwise provided, the fact must be reported to the Superintendent.

Rule 511. Both switches of a cross-over must be open before a train or engine starts to make a cross-over movement, and the movement must be completed before either switch is restored to normal position.

Rule 512. Where switch indicators are used, the indications displayed do not relieve enginemen and trainmen from protecting their train as required by rules.

Rule 513. Before a train or engine enters on or fouls a main track, or crosses from one main track to another, at hand operated switches, the trainman will operate the switch and wait two minutes at the switch before making engine or train movement, except when opposing train has been met and can be seen receding from switch. This will not relieve employees from the duty of promptly and properly protecting the movement.

Rule 513-(A). A train or engine having accepted a clear indication and is delayed in the block must proceed at restricted speed to the next signal.

Rule 514. A train or engine entering a block between signals must be protected as prescribed by the rules and must proceed at restricted speed.

Rule 515. A train or engine having passed beyond the limits of a block must not back into that block except under protection, as prescribed by Rule 99, or on authority of the Superintendent.

Rule 605. Interlocking signals govern the use of the routes of an interlocking, and as to movements within Home Signal Limits, their indications supersede the superiority of trains, but do not dispense with the use or observance of other signals whenever or wherever they may be required.

Rule 607. Trains and engines when given authority to pass a stop signal in Automatic Block System territory, must observe interlocking rules within interlocking limits, and must observe Automatic Block Signal rules beyond interlocking limits.

Rule 608. When necessary for trains or engines to be moved and signal indication cannot be given, Form 439 will be issued to authorize the movement, over the signature of the signalman. Signalman must not issue Form 439, until train or engine has been brought to a stop, and he has ascertained that the route is properly lined and safe for the intended movement.

Trains and engines moving within interlocking limits under authority of Form 439, Permissive Card, must proceed at restricted speed.

Rule 609. An engine or car must not be left standing on a railroad crossing at grade unless coupled to another engine or car.

Rule 661. If a signal indication, permitting a train or engine to proceed, after being accepted, is changed to a Stop-indication before it is reached, the stop must be made at once. Such occurrence must be reported to the Superintendent.

Rule 663. Trains or engines must not pass an interlocking signal indicating stop until a member of the train or engine crew is fully informed of the situation and Form 439 has been issued, authorizing the movement, over the signature of signalman; the movement must then be made at restricted speed.

Rule 669. Trains or engines stopped by the signalman in making movement through an interlocking, must not move in either direction until they have received the proper signal from him.

Rule 670. A reverse movement within the limits of an interlocking, or a forward movement after making a reverse movement, must not be made without the proper interlocking signal indication or permission from signalman.

Rule 671. While an interlocking station is closed, should a signal for an open route indicate "Stop," movements through the interlocking must be preceded by a flagman. Before proceeding, the enginemen and trainmen must know the route is properly lined.

The facts must be reported to the Superintendent from the first available point of communication.

Rule 672. During a stated period an interlocking station may be closed upon authority of Superintendent. When so closed, switches and switch levers must be secured for routes that do not conflict and signal levers placed in position so that signals will display the proper indication. The interlocking station must be securely locked.

Dwarf Signal Wabash West Football Wye—Milan—
Governs movements from wye to Ann Arbor main track. Normal position "Stop." When switch is set for movement out of wye signal will display yellow indication, Rule 290-(A) if block is clear. If signal continues to display "Stop," indication after switch has been lined for movement, proceed only in accordance with Rule 509.

Pittsfield Interlocking—Automatic: Normal position of signals is proceed on Ann Arbor and stop on New York Central. If proceed indication is not displayed for Ann Arbor train, a member of crew will go to crossing, and after ascertaining that no trains are approaching on New York Central, may after reporting signal failure to dispatcher, proceed at restricted speed, per Rule 509.

Lakeland, Ann Pere, Clare, Cadillac and Thompsonville Interlockings—Automatic: In event indication permitting train or engine to proceed is not displayed on Home signal and cause is not apparent, train or enginemen will go to Ann Arbor MANUAL RELEASE box and follow instructions posted inside.

Following signals will be used to notify crews of passing trains of defective conditions:

HOT JOURNAL..... BY DAY

Nose held with one hand with other hand pointing toward track.

BY NIGHT

Stop Signal.

BRAKES STICKING..... BY DAY

Hands shoved in sliding motion out from body.

BY NIGHT

Stop Signal.

BROKEN WHEELS

DEFECTIVE TRUCK

DRAGGING BRAKE CONNECTION

LADING SHIFTED OVER SIDE

OR END OF CAR

SWINGING CAR DOOR OR ANY OTHER

DANGEROUS CONDITION

Stop Signal

PERSONAL INJURIES

B1. Persons injured must be cared for properly by conductor or agent in charge. If railroad surgeon is not available immediately, call nearest surgeon to administer first aid, railroad surgeon to assume charge as soon as possible.

B2. Trespassers injured on railroad property should be taken to their homes or put in charge of civil authorities. Railroad surgeon will render first aid only.

B3. Report of all personal injuries or accidents must be made at once on telegraphic report Form AA-8284, filled out and signed by injured party or person in charge of crew, and wired to Superintendent's Office, at first open telegraph office. Completed form to be forwarded to Superintendent. In addition Form 2121 must be made in duplicate by each member of crew and employees who witness accident and mailed to Superintendent. Employees should make effort to secure all information in connection with such accidents. When vehicles of any kind, or pedestrians, are struck on crossings, close attention should be given as to their location when first seen, also location of train or engine and distance train moved after accident occurred.

FIRST SUB-DIVISION

Trains will be governed by Central Terminal Time Table between Alexis and Galena St., and between Boulevard and Toledo.

Standard clocks are located in the yard office, Toledo; yard office, Ferry; dispatchers' office, Owosso.

All trains will register at Hallett and dispatchers' office, Owosso. Register ticket of prescribed form may be used.

Freight trains required to stop for eastward home signal, Alexis interlocking, must regulate stop to leave not less than one hundred fifty feet clearance from west side of Dixie Highway, to avoid obstructing the view from the highway of trains approaching on adjacent tracks.

Ann Arbor city ordinance prohibits sounding of locomotive whistle within city limits, except in cases of emergency.

Yard engines, with or without cars, and light engines, will stop before moving upon Huron River bridge and make careful observations for persons walking on bridge, and may then proceed over bridge at a speed that will not endanger the safety of such persons.

Track cars, before moving over Huron River bridge, will stop and not proceed until it is ascertained that the way is clear. Between sunrise and sunset a red flag will be waved aloft continuously while passing over the bridge. When day signals cannot be plainly seen, night signals must be used. Between sunset and sunrise a lighted red lantern, and when conditions require, a lighted fusee, will be used.

This does not relieve operators of track cars from observance of rules and regulations of the Maintenance of Way Department.

Under operating arrangements and Grand Trunk Western regulations Ann Arbor engines may occupy Grand Trunk Western main track at Lakeland between eastward distant signal 3385 feet west of Grand Trunk Western crossing and westward distant signal 1458 feet east of Grand Trunk Western crossing without train orders or flag protection.

When a car is spotted at Sinclair Oil unloading spout on house lead Howell, team track switch leading from house track must be left lined for the team track.

Durand City Ordinance prohibits the use of the locomotive whistle within the city limits, except in case of emergency, or in compliance with Rules 14-(C), 14-(D), 14-(E), 14-(K), and 31.

DURAND HIGHWAY CROSSING SIGNALS:

Two lights (green over red) on pole West of Oak Street crossing, South side track, opposite East siding switch Durand. Green light displayed indicates flashers are operating and gates are down. Red light displayed indicates gates are up and flashers inoperative. Trains or engines must stop on red indication.

Rule 93. Yard limits Toledo: (Alexis-Galena St., Hallett-Cherry St.); Diann-Dundee; Milan; Ferry-Ann Arbor; Howell, Durand-York; Corunna-Owosso, are designated by yard limit boards.

Rule 93-(A). Between connection track to Grand Trunk Western at west end York yard and GTW (Holly Sub-division) crossing Durand, track is used jointly by Ann Arbor and Grand Trunk Western.

Rule 104-(F). The following main track switches may be left open by trains and engines using them. Trains and engines must move expecting to find them open.

Ottawa Yard—Cherry Main switch east end yard.

Ottawa Yard—Cherry Main switch west end yard.

Owosso Yard—Lead switch east end yard and crossover switches between Main track and No. 1.

Locomotives are restricted from using tracks as follows:

Ann Arbor—Industry Tracks, larger than D-6;

Howell—Parshall, Lumber beyond Wetmore St. and Sugar larger than D-10. Beyond frog on new track at American Bitumuls—all locomotives.

Corunna—Bourne and Strawsine Mfg. Co. larger than D-10;

Owosso—Industrial, repair and shop larger than D-10.

Owosso Iron and Metal Co., west of Elm St. and shop 17, 18, 19, 19½ larger than D-10.

SECOND SUB-DIVISION

Standard clocks are located in dispatchers' office, Owosso; yard office, Boat Landing.

All trains will register at Owosso and Boat Landing.

Register ticket of prescribed form may be used.

Before crossing over or using C. & O. main track at Alma, Ann Arbor crews must obtain permission from C. & O. dispatcher on telephone located at crossover.

At Mt. Pleasant clear space of not less than 80 feet must be left on each side of Pickard Ave. on yard tracks.

Mt. Pleasant—Whistle must be sounded for private crossing located just West of West switch of siding.

Cadillac city ordinance prohibits the sounding of locomotive whistle within city limits between 10:00 P.M. and 6:00 A.M. Bell must be rung as provided by Rule 30, and whistle sounded when necessary to avert accident, including compliance with Rules 14-(C), 14-(D), 14-(E), 14-(K), and 31.

Engineers must dim locomotive headlights when doubling over and testing air at Boat Landing.

At Boat Landing yard engines loading boats must not exceed speed of 5 miles an hour approaching apron and must stop and stretch slack to know cars are coupled before moving on to apron.

Flashing light signals protecting crossing of highway to car ferries, Boat Landing, are operated by switches located in switch boxes on posts just east of crossing on either side of lead to west slip. A member of crew must operate switch starting flashers in ample time to afford protection.

Rule 93. Yard limits Owosso-King; Ashley; Wright-Alma; Mt. Pleasant; Cadillac-Selma; Frankfort-Boat Landing, are designated by yard limit boards.

Rule 93-(A). Between NYC transfer track connection and Michigan Ave., Owosso, the main track is used jointly by AA and NYC.

Between a point approximately 100 feet East of Bond Street, to and including the crossover from main track to siding West of Belt track switch, Selma Yard, the main track is used jointly by Ann Arbor and Pennsylvania Railroad Companies.

Rule 104-(F). The following main track switches may be left open by trains and engines using them. Trains and engines must move expecting to find them open.

Owosso—Lead switch, west end yard.

Boat Landing—Lead switch, east end yard.

Following tracks may be used by GP-35—2500 HP engines at speed not exceeding 5 MAH—applies to GP-35 2500 HP road locomotives, whether used singly or in multiple service:

Ashley—East elevator track.

North Star—elevator track.

Ithaca—Little elevator track.

Alma—Sugar Co. track No. 2.

Mt. Pleasant—Mill track.

Cadillac—Malleable Iron Co. tracks.

Following tracks restricted from use by GP-35—2500 HP road locomotives whether used singly or in multiple service:

Mt. Pleasant—Battles track beyond frog.

Frankfort—Main track beyond Pet Milk track switch.

Following track restricted from use by locomotives of any class or size:

Marion—Beet track beyond derail.

Following track restricted from use by locomotives larger than D-10:

McBain—Bridge on stock track.

ROAD DIESEL LOCOMOTIVES:

Road diesel locomotives are equipped with Gyalrite headlight on the front end, a safety feature, while train is in operation light gyrates to warn motorists a train is approaching crossing. In event of an emergency stop, Engineer must operate light switch to display red beam, warning opposing trains that this train has come to an emergency stop. This red beam of light can be seen for a distance of approximately 5 miles, the change is instantaneous and at no time does the gyration of the light stop.

This gyrating headlight is to be used in connection with standard headlight and is to be in service during time it is necessary to use standard headlight; however, on the judgement of engineman during inclement weather and dark days, if he deems it advisable, the gyrating light may be used.

SLID FLAT WHEELS:

In event of slid flat wheels resulting in flat spots of 2 inches or more in length, engineman in charge will make full report to Superintendent at nearest telegraph office or telephone, in road service and be governed by instructions received in proceeding thereafter. In yard switch service engineman will report to Yardmaster. Full report will also be made on engineer's work report, Form ME-588.

OIL BURNING LANTERNS:

Oil burning red and white lanterns when required as flagging equipment on locomotives, must not be taken into engine compartment of diesel locomotives.

HANDLING SHORT WHEEL BASE CARS:

Turntable steam shovels, locomotive cranes, Jordan Spreader, ditcher, pile driver and similar equipment on own wheels may be handled in local freight trains only, except on specific authority over the signature of Superintendent. Steam shovels and cranes moving on own wheels must have boom end trailing and Jordan spreader must be in position for forward movement when handled in trains.

PLACING OF LOADED OPEN TOP CARS IN TRAIN:

Open top cars loaded with pipe, poles, rail, machinery or other material that may shift over end of car in case of derailment or emergency stops, must not be handled next to locomotive and must be placed at least two (2) cars ahead of caboose. Also cars of sand and cinders must be placed at least two (2) cars ahead of caboose.

HIGH AND WIDE LOADS:

Employees must not ride on top of high loads or cars when passing under overhead bridge and will carefully observe height of car on which riding before passing under any overhead obstruction.

In all cases where shipments of unusual width are handled on flat cars; projecting over sides of car in a way that might create a hazard, agents at junctions and yardmasters and conductors should report such shipments to train dispatcher, so proper precautions can be taken to prevent accidents or injuries. Conductors should call attention, by note or otherwise, when they handle such cars into terminals, so that terminal forces can protect themselves.

Auto rack cars loaded with automobiles or trucks are to be handled in train 5 cars or more behind engine. They must not be handled next to cars containing coal, sand, lime, cement or other commodities which will damage paint on automobiles, or next to open top cars containing pipe, poles, rail, machinery or other material that may shift over end of car and cause damage to automobiles.

HOT BOXES:

When conditions require car with hot box be set out on road where there is fire in journal box, box lid is to be raised, about one-half tube of fire extinguishing chemical thrown inside box and lid closed. This should immediately put out any blaze in box. After waiting two minutes lid to be again raised and rest of fire extinguisher chemical in tube thrown inside box and lid closed. This to prevent reignition due to heat of journal. If dust guard of journal box has been burned out, some chemical should be thrown around back of box and through dust guard opening. One tube will normally be sufficient but if one is not enough to achieve desired results, more may be used.

Cars on which this chemical has been used to extinguish hot box must be set out and not thereafter moved until serviced by carmen. Conductors will promptly report to Dispatcher cars set out with hot boxes, stating if fire extinguishing chemical used, so car will not be run until carmen repack box. This fire extinguishing chemical is not a substitute for cooling but is strictly a fire preventive.

AIR BRAKES MUST BE APPLIED:

In all cases where engine is to be detached from train, full service application must be made before angle cock is closed; this to prevent train from moving in case of switching or when coupling is made.

To avoid brakes sticking in trains, in making up or filling trains when cuts of cars with train line charged with air are added, enginemen handling locomotive performing that work will make 20 lb. reduction before angle cock is closed preparatory to cutting locomotive off, and give one blast of horn to inform employees handling angle cock that reduction has been completed. Trainmen, yardmen and carmen should not close angle cock until after signal is sounded to indicate the reduction has been made.

SEPARATING AIR HOSE:

To avoid damage to equipment and unnecessarily setting brakes in emergency, when practicable angle cocks must be closed and air hose separated by hand. Air hose between diesel engines and cars must be separated by hand in all cases, whether or not train line is charged.

DEFECTIVE AIR BRAKES:

In order that bad order cars and those with defective brakes or air cut out (except hot box) may be readily detected by Car Inspectors on arrival at terminals, apply a red "Defective Air Brakes" card Form 1208 indicating on card the defects; stub to be removed and mailed to Master Mechanic, Owosso, after properly filled out over signature of Conductor. In cases of hot boxes, use red tag from cartons of Cooling Compound reading "Hot Box" which is to be applied either on box lid or to the grab iron nearest the hot box.

When car is set out on line requiring wheels, Conductor will advise the Dispatcher and Master Mechanic capacity or size of journal, also if car equipped with Bettendorf type truck frame or journal boxes with bolts.

Form ME-458 report must be made by Conductor and attached to carbon copy of time report when repairs made to cars on road, showing kind of car and whether loaded or empty.

Conductors picking up cars at junctions will report to Agent or Operator defects discovered. If Agent or Operator not on duty, information to be left in bill box, copy sent in with carbon of time report.

CROSSING SIGNALS:

Trains and engines moving through sidings or industrial tracks and across highway grade crossings which are protected by flashers and such tracks do not operate flashers, crossing must be protected by a member of the crew until crossing is covered, unless the crossing is being protected by a known employee.

HANDLING OF EBAX CARS:

Motor Fuel Anti-Knock Compound (Ethyl Brand) cars bear EBAX marking and are series 300, 3000, 600 and 6000. These cars are used for transportation of "Class B Poison." Accordingly, it is chiefly dangerous by contact with body or inhalation of vapors. Metallic Sodium is shipped in EBAX cars of 400 series. This is an inflammable solid which will flash when coming in contact with water. If such cars involved in wrecks or otherwise damaged, the following must be complied with:

1. Do not under any conditions:
 - (a) Transfer lading.
 - (b) Open dome cover, dome valves or fill car with water.
 - (c) Make repairs requiring the application of heat.
 - (d) Use empty cars in any other service.

Superintendent must be notified promptly of any major bad order conditions.

HANDLING OF EXPLOSIVES AND DANGEROUS SHIPMENTS:

Handling, cars. (a) Definitions.

- (1) "Person" means any individual, partnership, corporation, association, joint stock company, business trust or other organized group of persons, or any trustee, receiver, assignee, or personal representative, and includes any department or agency of the United States, any State, the District of Columbia, or any other political, governmental or legal entity.
- (2) "Railroad" means any person engaged in transportation as a common carrier by rail and includes its agents or employees.
- (3) "Engine" means any locomotive, propelled by any form of energy, used by a railroad.
- (4) "Freight car" means any vehicle used for the transportation of property by rail.
- (5) "Passenger car" means any vehicle used for the transportation of passengers by rail.
- (6) "Combination car" means any vehicle used for the transportation of both property and passengers by rail.
- (7) "Occupied caboose" means any vehicle used by railroad employees, caretakers, or others authorized to ride therein.
- (8) "A train" is one or more engines coupled together with or without cars displaying markers.

(9) "Freight train" means one or more engines coupled with one or more freight cars, displaying markers.

(10) "Passenger train" means one or more engines coupled with one or more passenger cars carrying passengers, displaying markers.

(11) "Mixed train" means one or more engines coupled with one or more freight cars and passenger cars carrying passengers, displaying markers.

(12) "Placarded car" shall be construed to embrace also any car which under this part is required to be placarded.

(13) "Pickup and/or setoff service" shall be construed to mean trains in service that pick up and/or set off one or more cars at three or more stations enroute, trains having cars from which less-than-carload freight is loaded or unloaded enroute, or trains regularly scheduled to perform pickup and/or set off service which on some days make less than three stops.

(b) Placards on cars. A car requiring car certificates and "Explosives", "Dangerous", "Dangerous-Class D poison", "Poison Gas", or "Caution-Residual Phosphorous" placards under the provisions of this part shall not be transported unless such freight car is at all times placarded and certificated as required by this part. Placards and card certificates lost in transit shall be replaced at next inspection point and those not required shall be removed.

(1) At points where trains are inspected, cars placarded "Explosives" and adjacent cars shall be inspected, such cars shall continue in movement only when inspection shows them to be in condition for safe transportation.

(c) Switching cars containing explosives or poison gas or placarded trailers on flat cars. A car placarded "Explosives" or placarded "Poison Gas" or any flat cars carrying a placarded trailer shall not be cut off while in motion. No car moving under its own momentum shall be allowed to strike any car placarded "Explosives" or placarded "Poison Gas" or any flat car carrying a placarded trailer nor shall any such car be coupled into with more force than is necessary to complete the coupling.

(1) When transporting a car placarded "Explosives" in terminals, yards, side tracks, or sidings, such cars shall be separated from the engine by at least one non-placarded car.

(2) Closed cars placarded "Explosives" shall have doors closed before they are moved.

(d) Switching of cars containing dangerous articles. In switching operations where use of hand brakes is necessary, a placarded loaded tank car, or a draft which includes a placarded loaded tank car shall not be cut off until the preceding car or cars clear the ladder track and the draft containing the placarded loaded tank car, or a placarded loaded tank car shall in turn clear the ladder before another car is allowed to follow.

(1) In switching operations where hand brakes are used it shall be determined by trial that a car placarded "Dangerous" or that a car occupied by a rider in a draft containing a car placarded "Dangerous" has its hand brakes in proper working condition before it is cut off.

(e) Placement of freight cars containing explosives in yards, on sidings, or side-tracks. Cars placarded "Explosives" shall be so placed that they will be safe from all probable danger of fire. Freight cars placarded "Explosives" shall not be placed under bridges or overhead highway crossings, nor in or alongside of passenger sheds or stations except for loading or unloading purposes.

(f) Notice to crews of cars containing explosives in freight trains or mixed trains. At all terminals or other places where trains are made up by crews other than road crew accompanying the outbound movement of cars, the railroad shall execute a consecutively numbered notice showing the location in the freight train or mixed train of every car placarded "Explosives." A copy of such notice shall be delivered to the train and engine crew and a copy thereof showing delivery to the train and engine crew shall be kept on file by the railroad at each point where such notice is given. At points where train or engine crews are changed, the notice shall be transferred from crew to crew.

(g) Position in freight train or mixed train of cars containing explosives. In a freight train or a mixed train either standing or during transportation thereof, a car placarded "Explosives" shall, when length of train permits, be placed not nearer than the sixteenth car from both the engine or occupied caboose, except:

(1) When the length of freight train or mixed train will not permit it to be so placed, it shall be placed near the middle of the train.

(2) When transported in a freight train made up in "Blocks" or classifications, a car placarded "Explosives" shall be placed near the middle of the "block" or classification in which moving, but not nearer than the sixth car from both the engine or occupied caboose.

(3) When transported in a freight train or a mixed train performing pickup and/or setoff service, it shall be placed not nearer than the second car from both the engine or occupied caboose, except as provided in paragraph (1) of this section.

(h) Separating cars placarded "Explosives" from other cars in trains. In a freight train or a mixed train either standing or during transportation thereof, a car placarded "Explosives" must not be handled next to:—

(1) Occupied passenger car, except as provided in paragraph (L) of this section.

(2) Occupied combination car, except as provided in paragraph (L) of this section.

(3) Any car placarded "Dangerous" or "Dangerous-Class D Poison."

(4) Engine.

(5) Any car placarded "Poison Gas."

(6) Wooden underframe car (except on narrow gauge railroads).

(7) Loaded flat cars, except that cars carrying trailers or containers placarded "EXPLOSIVES" as authorized by the regulations in this chapter may be coupled to each other. (Note: Flat cars equipped with permanently attached ends of rigid construction shall be considered as open-top cars. See subparagraph (8) of this paragraph.)

(8) Open-top car when any of the lading protrudes beyond the car ends or when any of the lading extending above the car ends is liable to shift so as to protrude beyond the car ends.

(9) Car equipped with automatic refrigeration or any other apparatus utilizing an open-flame light or an internal combustion engine in its operation.

(10) Car containing lighted heaters, stoves, or lanterns.

(11) Car loaded with live animals or fowl, occupied by an attendant.

(12) Occupied caboose, except as provided in paragraph (1) of this section.

(i) Position in train of loaded placarded tank car. In a freight train or a mixed train, except a train consisting entirely of placarded loaded tank cars and as provided in paragraph (j) of this section, a placarded loaded tank car shall when the length of the train permits, be not nearer than the sixth car from the engine, occupied caboose or passenger car.

(1) When the length of the freight train or mixed train will not permit it to be so placed, it shall be not nearer than the second car from the engine, occupied caboose or passenger car.

(2) When transported in a freight train engaged in "Pickup" or "Setoff" service, a placarded loaded tank car shall be not nearer than the second car from both engine or occupied caboose.

(j) Separating loaded tank cars placarded "Dangerous" from other cars in trains. In a freight train or mixed train either standing or during transportation thereof, a placarded loaded tank car must not be handled next to:

(1) Occupied passenger car, other than gas handlers accompanying shipment.

(2) Occupied combination car, other than gas handlers accompanying shipment.

(3) Any car placarded "Explosives."

(4) Engine, (except when train consists only of placarded loaded tank cars).

(5) Any car placarded "Poison Gas."

(6) Wooden under-frame car (except on narrow gauge railroads).

(7) Loaded flat car. (Note: Flat cars equipped with permanently attached ends of rigid construction shall be considered as open-top cars. See subparagraph (8) of this paragraph.)

(8) Open-top car when any of the lading protrudes beyond the car ends or when any of the lading extending above the car ends is liable to shift so as to protrude beyond the car ends.

(9) Car equipped with automatic refrigeration or any other apparatus utilizing an open-flame light or an internal combustion engine in its operation.

(10) Car containing lighted heaters, stoves, or lanterns.

(11) Car loaded with live animals or fowl, occupied by an attendant.

(12) Occupied caboose, (except when train consists only of placarded loaded tank cars).

(k) Position in freight train or mixed train or cars placarded "Poison Gas" or containing poison liquids, class A. In a freight train or mixed train either standing or during transportation thereof, a car placarded "Poison Gas" or containing poison liquids, class A, shall not be next to other freight cars placarded "Explosives" or cars placarded "Dangerous."

(l) Position in freight train or mixed train or cars placarded "Explosives" or "Poison Gas", or both, when accompanied by cars carrying guards or gas handling crews. A car requiring "Explosives" or "Poison Gas" placards, or both, shall be next to and ahead of the car, except that when the car occupied by guards or gas handling crews is equipped with a lighted heater or stove it shall be the fourth car behind a car or cars requiring "Explosives" placards.

(m) Cars containing explosives or poison gas and tank cars placarded "Dangerous" in passenger or mixed trains: Cars containing explosives, class A, poison gases or liquids, class A, and tank cars requiring "Dangerous" placards shall not

be transported in a passenger train. Such cars may be transported in mixed trains but only at such times and between such points that freight train service is not in operation.

(1) Cars containing explosives, class A, poison gases or liquids, class A and tank cars placarded "Dangerous" shall not be transported next to occupied cabooses or cars carrying passengers in mixed trains, except as provided in paragraph (1) of this section.

(2) When a car containing explosives, class B, or dangerous articles other than explosives requiring labels (not including class A poison gases or liquids) is moved in a mixed train and such car is not occupied by an employee of the carrier, placards must be applied to the car as required by this part.

(n) Position in train of cars containing class D poison. In a freight train or mixed train either standing or during transportation thereof, a car placarded "Dangerous—Class D Poison" must not be handled next to cars placarded "Explosives" or next to carload shipments of undeveloped film.

Amendment to Regulations to Permit:

(1) The handling of Piggyback cars specially equipped for that service next to Placarded Tank cars in trains. This amendment does not include flat cars loaded with trucks or trailers unless such trucks and trailers are secured by means of a device designed and permanently installed for that purpose and of a type generally accepted for handling in interchange between railroads.

(2) The handling of open top cars loaded with frames next to Placarded Tank cars in trains. This amendment does not include frames loaded on Flat Cars.

INSTRUCTIONS REGARDING INJURIES AND ACCIDENTS:

Call nearest Company surgeon.

Cover the wounds with sterile gauze. Do not use waste, rags, towels, handkerchief, etc.

Do not use soap or water, salves, oils or other home remedies on open wounds.

In cases of severe bleeding apply tourniquet, and keep the bleeding member elevated as much as practicable. Apply the tourniquet three (3) inches above the wound.

Immobilize fractures by means of a board, cardboard, or other suitable splint securely tied to the member. In case of broken ribs relief may be had by applying a wide bandage tightly about the chest.

In cases of burns or scalds, apply unguentine or a paste made of baking soda and water.

In cases of fatal accident to employees or others, a Company surgeon at the closest point should be notified, and the Coroner of the County in which the death occurs also notified. The body may be immediately removed from track or highway to permit resumption of the operation of the Railroad at that point, providing the body is left in charge of a Company representative until the Coroner arrives.

In case of injuries, the Company surgeon nearest the place of the accident should be called. In the event a Company surgeon cannot be reached, another should be called but should only handle the case until the Company surgeon can be secured.

The Company will not pay for the services of outside surgeon, except those of specialists, consultants, etc., called by the Company doctor, unless it is necessary to call an outside doctor on an emergency case.

Employees injured while on duty will be expected to go to the Company surgeon's office for treatments, except when their disability will not permit.

The Company will not pay for medical treatment rendered trespassers injured on the property, except for first aid.

All cases of personal injury, accident or damage to property must be reported immediately.

When reporting vehicular accidents at street or road crossings, secure names and addresses of all persons present at the scene, whether or not they admit having seen the accident.

When an accident occurs at a crossing protected by a flasher or other signals, a test of such signals should be made with the train involved as soon as possible after the accident and, if it can be arranged, in the presence of outside witnesses, whose names and addresses should be secured.

Careful note should be made of the exact location of any movable objects such as freight cars on side tracks and automobiles parked on street or highway, which in any way restricted the view of the driver of the vehicle, or in any other manner figured in the accident. Measurements such as the height and width of such objects, the distance from the track and, the distance from the highway should be made if possible.

Record must be made of the condition of the pavement as to ice or snow and whether wet or dry. The roadway should be examined for skid marks and a record made of their exact location and length.

When taking the license number of a vehicle be sure to show state and year of issue, make and model of car.

Whenever employees or other persons are injured on or about cars or engines, the equipment must be immediately inspected by the persons in charge, or regular inspectors if available, to ascertain condition. In cases of serious injury to persons between cars, there must be, in addition to the inspection, an immediate coupling and uncoupling test and the crew handling the cars in making the test, must use and examine the levers and all parts of the coupling apparatus, and be prepared to make statement, showing their condition. Report must be made to the general claim agent by wire and confirmed in writing, by first mail. The inspection and tests must be made before the cars or engine leave the place of accident and afterwards regular inspection must be made by two inspectors at the first division terminal, unless otherwise directed. Inspectors must keep suitable record of such special inspection, which shall include the names of those injured, date, and place of accident, the manner of its occurrence, and the result in detail of the inspection of the equipment. When injury is caused by the breaking of machinery, tools, or any appliance the broken parts must be so marked as to be readily identified, and immediately turned over to the proper authority.

SAFETY RULES

EMPLOYEES MUST:

Exercise care to avoid injury to themselves or others by observing the condition of equipment and the tools which they use in performing their duty and when found defective will, if practicable, put them in safe condition, reporting defects to the proper authority.

Inform themselves as to the location of structures or obstructions where clearances are close.

Expect trains to run at any time on any track, in either direction.

Step over the rail, not on it.

Always look in both directions before crossing railroad tracks.

Never walk on the track, or foul of the track, when practicable to walk elsewhere.

Never go within 10 feet of the end of a car when crossing tracks.

Not, when making couplings, adjust drawbars with either hand or foot, when couplers are close together.

Never attempt to adjust knuckle or drawbar on leading end of engine or car, when engine or car is in motion.

Not stand on leading footboard of engine when coupling engine onto or shoving cars.

When riding footboard of engine, take position outside of rail and not against drawbar. Riding leading footboard of engine is prohibited. Riding on footboard between engine and car is prohibited.

Always face in the direction which car is moving when riding on top or side of car.

When riding on top of car, to avoid being thrown off, stand near middle rather than near one end.

Stepping from top of one car to another while in motion is prohibited.

Never step between cars, while they are in motion, to lift pin or turn angle cock.

Never ride on end of cars containing load which may shift.

Face engine when getting down steps of engine.

TELEGRAPH SERVICE

Hallett	Continuous
Diann	Continuous
Dundee	8:00 AM to 5:00 PM exc. Sun.
Milan	Continuous
Ferry	10:00 AM to 7:00 PM exc. Sat., Sun. and Holidays
Howell	8:30 AM to 5:30 PM exc. Sun.
York	9:00 AM to 6:00 PM exc. Sat., Sun. and Holidays
Owosso	Dispatcher's Office — Cont.
Ashley	8:00 AM to 5:00 PM exc. Sat. and Sun.
Ithaca	7:30 AM to 4:30 PM exc. Sun.
Alma	7:30 AM to 4:30 PM exc. Sun.
Shepherd	8:00 AM to 5:00 PM exc. Sun.
Mt. Pleasant	8:00 A.M. to 5:00 PM exc. Sun.
Clare	7:30 AM to 4:30 PM exc. Sun.
Marion	8:00 AM to 5:00 PM exc. Sat., Sun. and Holidays
Cadillac	8:00 A.M. to 5:00 PM exc. Sun.
Thompsonville	8:00 AM to 5:00 PM exc. Sat., Sun. and Holidays
Boat Landing	Continuous

TABLE OF TRAIN SPEEDS

If train covers the distance between two mile posts in 73 seconds the speed is 49.3 miles an hour.

Second per Mile	Miles an Hour	Second per Mile	Miles an Hour	Second per Mile	Miles an Hour
73	49.3	86	41.9	115	31.3
74	48.6	87	41.4	120	30.0
75	48.0	88	40.9	125	28.8
76	47.4	89	40.4	130	27.7
77	46.7	90	40.0	135	26.7
78	46.1	91	39.6	180	20.0
79	45.6	92	39.1	240	15.0
80	45.0	93	38.7	360	10.0
81	44.4	94	38.3	720	5.0

The Maximum Weights of Cars Which May Be Accepted In Regular Service Without Specific Authorization From Superintendent.

Cars with 4 axles and truck centers not less than 24'—220,000 lb. gross weight

Cars with 4 axles and truck centers not less than 30'—263,000 lb. gross weight

Maximum gross weight of any car—263,000 lb.

Cars exceeding weights shown for lengths designated, up to 263,000 lb. maximum, may be handled when placed between two empty cars.

TONNAGE RATING (Per Unit)

Toledo to Owosso		Owosso to Marion		Marion to Boatlanding	
GP—35	2500	GP—35	3000	GP—35	2200
D—10	1730	D—10	2080	D—10	1460
D— 6	1040	D— 6	1250	D— 6	875
Boatlanding to Selma		Selma to Owosso		Owosso to Toledo	
GP—35	2100	GP—35	2995	GP—35	3300
D—10	1245	D—10	1870	D—10	2040
D— 6	750	D— 6	1125	D— 6	1220

ROAD DIESEL LOCOMOTIVES

To provide greater advance warning to the public and Maintenance of Way Forces the headlight must be displayed, burning bright, to the front of every train by day and by night. When the view is restricted by weather or unusual conditions enginemen must frequently sound horn.

LIST OF THROUGH TRUSS AND OTHER NON-CLEARANCE BRIDGES AND STRUCTURES—MAIN TRACKS

	Location		
Bridge No. 6.47	Temperance	Overhead	
Bridge No. 22.08	Dundee	Overhead	Side
Bridge No. 28.14	Milan		Side
Bridge No. 35.50	Urania	Overhead	Side
Bridge No. 39.43	Pittsfield	Overhead	
Bridge No. 44.20	Ann Arbor	Overhead	
Bridge No. 45.48	Ann Arbor		Side
Bridge No. 45.55	Ann Arbor		Side
Bridge No. 45.68	Ann Arbor		Side
Bridge No. 45.89	Ann Arbor		Side
Bridge No. 46.23	Ann Arbor		Side
Bridge No. 61.11	Lakeland		Side
Bridge No. 72.79	Howell		Side
Bridge No. 73.78	Howell	Overhead	Side
Bridge No. 73.81	Howell	Overhead	Side
Bridge No. 73.85	Howell	Overhead	Side
Bridge No. 97.20	York	Overhead	
Bridge No. 98.97	Vernon		Side
Bridge No. 123.89	Bannister		Side
Bridge No. 138.72	Ithaca	Overhead	
Retaining Wall	Wright		Side
Bridge No. 161.11	Mt. Pleasant	Overhead	
Bridge No. 254.34	Mesick	Overhead	
Bridge No. 262.82	Harlan		Side
Bridge No. 282.77	Beulah	Overhead	
Conveyor MP 291.12	Boat Landing	Overhead	

Inasmuch as these structures will not clear a man on top of cars or on side of cars and engines, employees are forbidden to stand on top of, or ride on side ladders of cars, or hang or lean out from sides of trains or engines when approaching or passing through these bridges and structures.

Conductors must not, under any circumstances, attempt to handle cars through these bridges, the lading of which is in excess of clearance.

Attention is directed to the fact that the bridges enumerated cover non-clearance bridges only, numerous other bridges and non-clearance points are covered by special notices or signs with which employees are directed to familiarize themselves.

Employees are forbidden to stand on top of, or ride on side ladders of cars, or hang or lean out from sides of trains or engines when approaching or passing non-clearance points.

AVOID DAMAGE—SWITCH CUSTOMERS CARS CAREFULLY

JUDGING SPEED

Accurate judgment of coupling speed depends upon correct timing. An excellent way to get accurate timing without a watch is to count "one hundred and thirty-one, one hundred and thirty-two" and so on as the car passes a stationary point. With a little practice counting can be done at the rate of one a second.

Ability to closely estimate speed at time car strikes is extremely important because impact force builds up as the square of the speed. This means that impact delivered by a car coupled at 8 mph is not four times that at 2 mph but 16 TIMES AS GREAT. Damage to freight and car can be avoided by always keeping coupling speed within the safe range—NOT OVER 4 MILES PER HOUR—A BRISK WALK.

Impact Force

At Various Striking Speeds

Car Coupled at	Units of Destruction
1 mph	1
2 "	4
3 "	9
4 "	16
5 "	25
6 "	36
7 "	49
8 "	64
9 "	81
10 "	100

Safe Dangling

To Find Coupling Speed of 40 Foot and 50 Foot Cars

Sight vertical end of car body on a fixed point and note the number of seconds it takes car to pass. Speed in miles per hour is shown opposite.

Damage as a result of Rough Handling makes up a large part of the claim bill for Loss and Damage to Freight. From the Railroad standpoint it is the major item in the expense. We all know that Rough Handling can be reduced, often eliminated. It is hoped that this table will be helpful in your efforts to prevent Rough Handling.

Switch crews must function as a team. Clear signals properly given are mighty important; talk it over . . . Prevent Rough Handling . . . it can be done.

Seconds	40 Foot Car Miles Per Hour	50 Foot Car Miles Per Hour
1	28	35
2	14	17.5
3	9.3	11.6
4	7	8.7
5	5.6	7
6	4.7	5.9
7	4	5
8	3.5	4.4
9	3.1	3.9
10	2.8	3.5
11	2.5	3.1
12	2.3	2.9
13	2.15	2.7
14	2	2.5

TO ALL EMPLOYEES:

Performing our work without being injured is something we all want, but our success is largely dependent on how much effort each of us puts forth to avoid accidents and injury.

Much needless suffering can be avoided if each employee accepts his personal responsibility in preventing injury to himself and assists others in avoiding injury.



THERE IS ALWAYS TIME
FOR COURTESY



MAKE
SAFETY
YOUR
POLICY