



Our NS Goal-No Damage



Western Region

Illinois Division

Effective Sunday, June 13, 1993

12:01 A.M. Central Standard Time

Timetable Number

2

For The Government of Employees Only

EXPLANATION OF TRACK DIAGRAMS:

† †	Automatic Block Signal Territory - Single Track
†† ††	Automatic Block Signal Territory - Double Track
|	Traffic Control & Remote Control Territory - Single Track
||	Traffic Control & Remote Control Territory - Double Track
|||	Traffic Control & Remote Control Territory - Triple Track
§ §	Non-Signaled Territory - Single Track
§§ §§	Non-Signaled Territory - Double Track

Column designating other tracks in cars is based on
50 ft. cars.

See Method of Operation table in Special Instruction
section for movement authority.

Lafayette District — WESTWARD

Capacity of Tracks		MILE POST	STATIONS	SEE PAGE 1	INTERLOCKINGS	RR CROSSINGS	SECTION 3	MILES FROM	DETROIT
Other Tracks In Cars	Sidings In Feet								
Yard	12800	D202.5	Peru	††				202.5	
		D204.5	West Peru					204.5	
		D213.0	Danes					213.0	
Yard		D218.5	Logansport		C	◇		218.5	
10	12400	D224.3	Clymers		C	◇		224.3	
	8375	D232.1	Rockfield					232.1	
		D238.6	Delphi		C	◇		238.6	
	12700	D243.8	Colburn					243.8	
80		D247.4	Buck Creek					247.4	
		D253.1	East Yard					253.1	
Yard		D255.4	Lafayette	††				255.4	
		D257.2	Lafayette Jct.		C	◇		257.2	
		D257.7	West Demun					257.7	
10	12575	D265.3	West Point					265.3	
20	8725	D276.8	Attica					276.8	
		D280.5	WilliamSPORT					280.5	
5		D284.9	West Lebanon					284.9	
84		D288.7	Marshfield					288.7	
10		D294.2	State Line					294.2	
		D296.2	Eidan					296.2	
		D300.4	Danville Jct.	††	C	◇		300.4	
		D300.8	CR Crossing	††	C	◇		300.8	
Yard		D301.6	Danville	††				301.6	
Yard		D303.8	Tilton	††				303.8	
		D306.7	N.T. Jct.	††				306.7	
10	7020	D313.3	Ryan					313.3	
100	6375	D321.5	Homer					321.5	
112		D327.6	Sidney					327.6	
15		D332.2	Philo					332.2	
50	16100	D338.0	Tolono		C	◇		338.0	
50		D342.5	Sadorus					342.5	
5	7860	D345.6	Sloan					345.6	
40		D348.6	Ivesdale					348.6	
		D353.3	East Bement					353.3	
100		D355.4	Bement	||				355.4	
		D357.5	Veech					357.5	
25		D359.4	Milmine	††				359.4	
		D363.7	Cerro Gordo	††				363.7	
		D372.9	Brush	††				372.9	
Yard		D375.6	Decatur (Wabic)		C	◇		375.6	

Frankfort Branch — WESTWARD

Capacity of Tracks		MILE POST	STATIONS	SEE PAGE 1	INTERLOCKINGS	RR CROSSINGS	SECTION 3	MILES FROM	FRANKFORT
Other Tracks In Cars	Sidings In Feet								
Yard	7862	SP234.8	CR/CSXT Crossing	§	A	◇		0.0	
44		SP235.5	Frankfort Yard	§				8.1	
		SP243.6	Mulberry	§				15.4	
Yard		SP250.9	S. Yd. Siding					17.6	
		SP253.1	South Yard						
50		SP254.8	Altamont					19.3	
		SP257.2	East Demun					21.7	
		SP257.7	West Demun					22.2	
		SP257.2	East Demun					21.7	
		SP257.7	Lafayette Jct.	C		◇		22.2	
Yard		SP258.0	CSXT Crossing	C		◇		22.5	
		SP259.1	Wabash River Br.	§				23.6	

Bloomington District — SOUTHWARD

Capacity of Tracks		MILE POST	STATIONS	SEE PAGE 1	INTERLOCKINGS	RR CROSSINGS	SECTION 3	MILES FROM	PEORIA
Other Tracks In Cars	Sidings In Feet								
		SP415.3	Peoria	§				0.0	
		SP412.9	Wesley Jct.	§				2.4	
Yard		SP411.8	E. Peoria Yd.	§				3.5	
		SP411.3	P&PU Jct.	§				4.0	
30	3882	SP410.6	Farmdale	§	A	◇		5.5	
20		SP403.3	Crandall	§				12.0	
		SP397.1	Deer Creek	§				18.2	
10		SP394.2	Goodfield	§				21.1	
		SP389.9	Congerville	§				25.4	
		SP385.4	Carlock	§				29.9	
		SP381.0	Yuton	§				35.0	
50	3385	SP379.0	Good Yard	§				35.3	
Yard		SP375.6	SPCSL Jct.	§	C	◇		39.7	
		SP375.0	Bloomington	§				40.6	
		SP372.8	Dean	§				42.0	
40	4456	SP369.6	Brokaw	§				46.4	
		SP364.0	Holder	§				51.3	
5	3217	SP359.2	Ellsworth	§				56.1	
		SP355.3	Arrowsmith	§				60.5	
3	4478	SP348.7	Saybrook	§				66.6	
		SP339.4	Gibson City	§	C	◇		75.9	
10	8353	C120.2	Foosland	§				84.0	
		C125.1	Osman	§				88.9	
10		C131.2	Mansfield	§	C	◇		95.0	
		C136.1	Galesville	§				99.9	
15	8836	C140.0	Lodge	§				103.8	
		C145.0	Monticello	§				108.8	
25		C153.0	Bement	§				116.8	

Brooklyn District — SOUTHWARD

Capacity of Tracks		MILE POST	STATIONS	SEE PAGE 1	INTERLOCKINGS	RR CROSSINGS	SECTION 3	MILES FROM	DETROIT
Other Tracks In Cars	Sidings In Feet								
Yard		D375.6	Decatur (Wabic)...	||	C	◇	375.6		
		D376.6	Mosser .....	||			376.5		
		D379.2	Knights .....	||			379.2		
		D381.0	B D Jct. ....	||			381.0		
20		D389.8	Blue Mound	+			389.8		
80		D395.3	Stonington	+			395.3		
Yard	16690	D401.6	Taylorville	+			401.6		
30		D412.4	Palmer	+			412.4		
25		D416.2	Morrisonville	+			416.2		
6		D422.2	Harvel	+			422.2		
	14450	D423.6	Midway	+			423.6		
15		D425.5	Raymond	+			425.5		
25		D436.5	Litchfield	+			436.5		
		D437.8	Winston	+	A	◇	437.8		
8		D444.6	Mt. Olive	+			444.6		
	12380	D447.1	Karnes	+			447.1		
20		D449.2	Staunton	+			449.2		
		D452.1	Decamp	+	A	◇	452.1		
		D456.2	Worden	+			456.2		
		D460.5	Carpenter	+			460.5		
		D467.1	Edwardsville	+			467.1		
30		D469.1	Poag Jct.	++			469.1		
50		D474.7	Mitchell	++	C	◇	474.7		
		D478.5	25th St.	++			478.5		
		D480.2	Granite City	++			480.2		
		D480.4	WR Tower .....	||	C	◇	480.4		
		VIA	SH Interlock .....	||			482.2		
		TRRA	May Street .....	||			484.1		
Yard		SL5.1	Luther	SS			485.2		

Madison Branch — EASTWARD

Capacity of Tracks		MILE POST	STATIONS	SEE PAGE 1	INTERLOCKINGS	RR CROSSINGS	SECTION 3	MILES FROM	CNW YARD
Other Tracks In Cars	Sidings In Feet								
120		TS447.0	CNW Madison Yard	SS				0.0	
		TS445.7	A&S	SS	A	◇		1.3	
		TS445.0	Madison	SS				2.0	
	6645	TS441.3	Stallings	SS				5.7	
		TS436.6	Glen Carbon	SS				10.4	
45		TS433.7	Leclaire	SS				13.3	
		TS431.0	Edwardsville	SS				16.0	
	5869	TS429.8	White	SS				17.2	
	6934	TS412.6	New Douglas	SS				34.4	
	3510	TS406.8	Sorento	SS	A	◇		40.2	
53		TS400.7	Donnellson	SS				46.3	
82		TS396.0	Coffeen	SS				55.0	

Springfield/Hannibal District — WESTWARD

Capacity of Tracks		MILE POST	STATIONS	SEE PAGE 1	INTERLOCKINGS	RR CROSSINGS	SECTION 3	MILES FROM	DECATUR
Other Tracks In Cars	Sidings In Feet								
Yard		D375.0	Decatur .....	||	C	◇		0.0	
		D375.6	Wabic .....	||				0.6	
10		DH376.5	Mosser .....	||				1.5	
	8720	DH382.8	Harristown .....	||				7.8	
15		DH387.2	Niantic .....	||				12.2	
110		DH391.1	Illioopolis .....	||				16.1	
20		DH396.8	Lanesville .....	||				21.8	
2	10702	DH402.9	Dawson .....	||				27.9	
110		DH411.2	Starne .....	||	C	◇		36.2	
20		DH412.9	C&M Crossing. ....	||	C	◇		37.9	
		DH414.0	10th & Madison .....	||				39.0	
Yard		DH414.7	Springfield .....	||				39.7	
2		DH416.2	Iles .....	||	C	◇		41.2	
6	12222	DH430.6	New Berlin .....	||				55.6	
30		DH423.5	Curran .....	||				48.5	
4		DH437.4	Alexander .....	||				62.4	
60	10020	DH443.0	Arnold .....	||				68.0	
		DH447.9	Jacksonville .....	||	C	◇		72.9	
	10720	DH457.9	Chapin .....	||				82.9	
Yard		DH465.4	Bluffs .....	||				90.4	
55		DH469.5	Naples .....	||				94.5	
20		DH473.8	Valley City .....	||				98.8	
25	7360	DH478.7	Griggsville .....	||				103.7	
	12663	DH491.2	Hadley .....	||				116.2	
2		DH502.9	Kinderhook .....	||				127.9	
1	12720	DH514.1	East Hannibal .....	||				139.1	
		DH514.4	Bridge .....	||	C	◇		139.4	
		DH515.0	Hannibal .....	||				140.0	
Yard		H2.1	Outer Depot .....	||				142.1	
		H4.2	Oakwood .....	||				144.2	
	12720	H15.2	Huntington .....	||				155.2	
7		H22.3	Monroe City .....	||				162.3	
	7220	H30.6	Clapper .....	||				170.6	
20		H39.5	Goss .....	||				179.5	
30		H43.9	Paris .....	||				183.9	
15	12720	H51.7	Holliday .....	||				191.7	
3		H57.7	Madison .....	||				197.7	
5		H63.1	Evansville .....	||				203.1	
		H68.5	E. Moberly .....	||				208.5	
Yard		H69.7	Moberly .....	||				209.7	

Meredosia Branch — NORTHWARD

Capacity of Tracks		MILE POST	STATIONS	SEE PAGE 1	INTERLOCKINGS	RR CROSSINGS	SECTION 3	MILES FROM	BLUFFS
Other Tracks In Cars	Sidings In Feet								
Yard		M467.0	Bluffs	SS				0.0	
Yard		M470.8	Meredosia	SS				3.8	

St. Louis District — WESTWARD

Capacity of Tracks		MILE POST	STATIONS	SEE PAGE 1	INTERLOCKINGS	RR CROSSINGS	SECTION 3	MILES FROM	LUTHER
Other Tracks In Cars	Sidings In Feet								
Yard 29		\$15.1 \$17.9 \$18.3	Luther Jennings McLaran						0.0 2.8 3.2
	7200	\$12.1 \$14.5 \$16.9 \$23.0	Ferguson Berkeley Robertson St. Charles						5.6 8.0 10.4 16.5
Yard 83		\$32.3 \$36.4 \$44.0 \$46.7	St. Peters O'Fallon Wentzville Siding Wentzville						25.8 29.9 37.5 40.2
15 10 Yard	14885	\$53.9 \$59.2	Wright City Truesdale	†					46.4 51.7
10 20 12 25	8976	\$65.7 \$70.2 \$75.3 \$78.8	Pendleton Jonesburg High Hill New Florence	†					58.2 62.7 67.8 71.3
Yard 10 Yard	6470 8690	\$84.2 \$92.8 \$96.6 \$104.0 \$110.2	Montgomery Wellsville Siding Martinsburg Benton City Mexico	†					76.7 85.3 89.1 96.4 102.6
	4720	\$116.0 \$124.0 \$132.0	Thompson Siding Centralia Sturgeon	†					108.4 116.4 124.4
Yard 10	10470	\$136.8 \$142.3 \$146.4 \$148.1	Clark Renick Urbandale Moberly	†					129.2 134.7 138.8 140.5

Alton District — SOUTHWARD (T&E Line)

Capacity of Tracks		MILE POST	STATIONS	SEE PAGE 1	INTERLOCKINGS	RR CROSSINGS	SECTION 3	MILES FROM	ALTON
Other Tracks In Cars	Sidings In Feet								
Yard Yard 85		A0.0 A1.7 A4.3 A4.4	Alton Federal Reuters IT Jct.						0.0 1.7 4.3 4.4
Yard Yard		A5.0 A8.0	Wood River Roxana						5.0 8.0

Alton District — SOUTHWARD (A&E Line)

175		AE21.8 AE19.5 AE17.0	IT Jct. Hartford Chemetco						4.4 6.7 9.2
Yard		AE11.4 AE9.6	A.O. Smith Yd. WR Tower						14.8 16.6
Yard		AE9.3 AE7.3 AE6.6 AE5.4 AE4.9 AE3.9	Hoyt Jct. CNW Jct. CNW Madison Yard CP Jct. Brooklyn Bridge Jct.						16.9 18.9 19.6 20.8 21.3 22.3

Kansas City District — WESTWARD

Capacity of Tracks		MILE POST	STATIONS	SEE PAGE 1	INTERLOCKINGS	RR CROSSINGS	SECTION 3	MILES FROM	MOBERLY
Other Tracks In Cars	Sidings In Feet								
Yard 10 55		\$148.1 \$148.5 \$154.9 \$161.3	Moberly Stamper Huntsville Clifton	† ††					0.0 0.4 6.8 13.5
Yard 10 23 Yard	8320 8320 8220	\$169.1 \$176.1 \$178.0 \$180.0 \$187.1	Salisbury Keytesville Sido Dalton Brunswick						21.0 28.0 29.9 31.9 39.0
		\$188.6 \$193.9 \$203.8 \$210.8	Kelly Dewitt Wakenda Carrollton						40.5 45.8 55.7 62.7
15 12	6306 7720 6920	\$212.8 \$220.8 \$229.4 \$235.5 \$242.4	W.B. Jct. Norborne Hardin Henrietta C. A. Jct.						64.7 72.7 81.3 87.4 94.3
VIA ATSF		\$246.7 \$250.6 \$253.6 \$256.6 \$262.1	Orrick Maxwell Excelsior Sprg. Missouri City South Liberty						98.6 102.5 105.5 108.5 114.0
8 18 20	5034 6642 6530	\$264.7 \$266.6 \$269.2 \$271.9 \$273.3	Birmingham Jct. Birmingham Randolph Block 222 N. Kansas City						116.5 118.5 121.1 124.4 125.2
Yard		\$274.5 \$275.0 \$276.4 \$279.1	Block 224 Ustick Tower Fifth Street Kansas City						126.4 126.9 128.3 131.0

C.A. Jct. and A.Y. Tower via ATSF & KCT — WESTWARD

Capacity of Tracks		MILE POST	STATIONS	SEE PAGE 1	INTERLOCKINGS	RR CROSSINGS	SECTION INST.	MILES FROM	MOBERLY
Other Tracks In Cars	Sidings In Feet								
VIA	1470	418.2	C. A. Jct.	||	..	..	..	94.3	
		421.7	Floyd	||	..	..	..	97.8	
		426.7	Sibley*	||	..	..	..	102.8	
		434.0	Atherton	||	..	..	..	110.0	
		436.5	Eton	C	◇			112.6	
ATSF VIA		439.4	Courtney	||	..	..	..	115.4	
		442.6	Sugar Creek	||	..	..	..	118.6	
		444.2	Congo	C	◇			120.3	
		445.9	KCS Crossing	C	◇			122.0	
KCT		446.4	KCT Sheffield	C	◇			122.4	
		446.4	KC Union Sta.	||	..	..	..	127.2	
		1.3	Santa Fe Jct.	||	..	..	..	128.6	
	3.9	A. Y. Tower	||	..	..	..	130.8		
			(Argentine Yd.)	||	..	..	..

Note: This page is provided as information only. Employees operating over this trackage must afford themselves a copy of the applicable timetable.

* Single track extends across Missouri River Bridge.

Moulton and Des Moines District — NORTHWARD

Capacity of Tracks		MILE POST	STATIONS	SEE PAGE 1	INTERLOCKINGS	RR CROSSINGS	SECTION INST.	MILES FROM	MOBERLY
Other Tracks In Cars	Sidings In Feet								
Yard	23	SD150.5	Moberly	§	..	..	..	0.0	
	40	SD154.7	Calro	§	..	..	..	9.0	
	20	SD164.2	Excello	§	..	..	..	18.5	
		SD170.7	Macon	§	..	..	..	25.0	
15 Yard	10	SD182.5	Atlanta	§	..	..	..	36.8	
		SD191.2	LaPlata	§	..	..	..	45.5	
	10	SD205.0	Kirksville	§	..	..	..	59.3	
10 Yard	10	SD216.0	Green Top	§	..	..	..	70.3	
	10	SD220.3	Queen City	§	..	..	..	74.6	
	10	SD229.3	Glenwood	§	..	..	..	83.6	
8 Yard	8	SD235.6	Coatesville	§	..	..	..	89.9	
	100	SD243.4	Moulton	§	..	..	..	97.7	
	10	SD260.6	Moravia	§	A	◇		114.9	
4120		SD272.4	Albia-BN	§	C	◇		126.7	
		* 3.4	Sheahan	§	..	..	..	130.6	
		* 9.1	Lovilla	§	..	..	..	136.3	
		SD284.3	Hamilton	§	..	..	..	138.8	
10 25		SD286.9	Bussey	§	..	..	..	141.4	
		SD292.2	Tracy	§	..	..	..	146.7	
		*23.1	Harvey	§	..	..	..	149.8	
4305 15 60		*32.8	Knoxville	§	..	..	..	159.8	
		*42.9	Pleasantville	§	..	..	..	170.2	
		SD320.0	Swan	§	..	..	..	175.9	
57 Yard		SD324.3	Runnels	§	..	..	..	180.2	
		SD335.2	McCoy	§	..	..	..	190.4	
		SD335.3	NW Jct.	§	..	..	..	190.5	
20		SD337.3	Wabash Jct.	§	C	◇		194.2	
		DU338.4	CNW	§	..	..	..	195.3	
		DU340.2	Des Moines	§	..	..	..	196.1	
		DU354.7	Geneser	§	..	..	..	210.6	

Note: * Designates BN Mile Post on Joint Trackage between Albia and NW Jct. Joint Trackage under control of BN Dispatcher.

Illinois Central-Chicago District — SOUTHWARD

Capacity of Tracks		MILE POST	STATIONS	SEE PAGE 1	INTERLOCKINGS	RR CROSSINGS	SECTION INST.	MILES FROM	CHAMPAIGN
Other Tracks In Cars	Sidings In Feet								
		0.0	Union Station					129.2	
		2.2	South Wye Sw.					125.6	
		8.1	67th Street					119.7	
		14.5	Kensington . . . . .	||	C	◇		113.3	
		20.0	Harvey . . . . .	||				107.8	
Yard		23.5	Homewood . . . . .	||				104.3	
		31.6	Stuenkel . . . . .	||				96.2	
		34.2	Monee . . . . .	||				93.6	
	10519	40.5	Peotone . . . . .	||				87.3	
		46.7	Manteno . . . . .	||				81.1	
		49.4	Indian Oaks Jct.					78.4	
		55.3	Kankakee Jct.		C	◇		72.5	
Yard		55.9	Kankakee . . . . .	||				71.9	
		60.3	Otto . . . . .	||				67.5	
		64.3	Chebense . . . . .	||				63.5	
	11025	73.1	Ashkum . . . . .	||				54.7	
		77.4	Danforth . . . . .	||				50.4	
		81.1	Gilman . . . . .	||	C	◇		46.7	

Illinois Central-Gilman District — SOUTHWARD

Capacity of Tracks		MILE POST	STATIONS	SEE PAGE 1	INTERLOCKINGS	RR CROSSINGS	SECTION INST.	MILES FROM	CLINTON
Other Tracks In Cars	Sidings In Feet								
		81.1	Gilman	†	C	◇		67.4	
		86.4	Ridgeville	†				62.1	
	10336	90.1	Thawville	†				58.4	
		95.6	Roberts	†				52.9	
		100.2	Melvin	†				48.3	
		106.0	Guthrie	†				42.5	
		110.0	Gibson City	†	C	◇		38.5	

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SPECIAL INSTRUCTIONS

1. STANDARD CLOCKS; BULLETIN BOOKS; TRAIN REGISTERS.

Location	Office	Standard Clock	Bulletin Book	Train Register
Peru	Crew Room	X	X	
Frankfort	Crew Rep. Room	X	X	
Lafayette	East Yard	X	X	
Lafayette	South Yard	X	X	
Tilton	Yard Office	X	X	
Chicago	Calumet Yard Office	X	X	
Chicago	Dormitory Reg. Room	X	X	
Chicago	Eng. House Reg. Room	X	X	
Brush	Crew Report Room	X	X	
E. Decatur	Crew Report Room	X	X	
Decatur	Engineer's Rep. Room	X	X	
Taylorville	Crew Report Room	X	X	
Springfield	Yard Office	X	X	
Outer Depot	Yard Office	X	X	
Bloomington	Yard Office	X	X	
E. Peoria	P&PU Yard Office		X	
E. Peoria	P&PU Dispatchers	X		
E. Peoria	Engineer's Rep. Room		X	
Federal	Yard Office	X	X	
Roxana	Yard Office	X	X	
AO Smith Yd	Yard Office	X	X	
Wentzville Yd	Yard Office	X	X	
Berkeley	Yard Office	X	X	
Luther	Operators Office	X	X	
Luther	Humbolt Tower	X	X	
Luther	Carrie Avenue	X	X	
Mexico	Yard Office	X	X	
Moberly	Yard Office	X	X	
Moberly	Dormitory	X	X	
N. Kansas City	Yard Office	X	X	
N. Kansas City	Round House	X	X	
Claycomo	Yard Office	X	X	
Des Moines	Yard Office	X	X	

2. CLEARANCE CARDS/DISPATCHER'S BULLETINS

A. Clearance Cards

Not Applicable

B. Dispatcher's Bulletins

Engineers and Conductors must receive a current Dispatcher's Bulletin addressed to their train before leaving their initial station. Engineers and Conductors must show Dispatcher's Bulletin to other members of their crew. All crew members must read and be familiar with the contents. Each crew member is jointly responsible in complying with the requirements contained therein.

When Dispatcher's Bulletins are received, all crew members, when reading bulletins, must be certain that the total number of items and messages indicated above the Dispatcher's initials corresponds with actual number of items and messages listed in the Bulletins. If any discrepancy is noted, the Dispatcher must immediately be contacted for further instructions.

Instructions contained in Dispatcher's Bulletins must be complied with on all trips during the tour of duty on which the Bulletins are received. When Engineer and/or Conductor are relieved before the completion of a trip, Dispatcher's Bulletins held must be delivered to the relieving Engineer and/or Conductor. Such bulletins must be compared by Engineer and Conductor before proceeding. When tying up on line, Dispatcher's Bulletins must be retained and inspected on next tour of duty. When this is done, Engineer or Conductor must contact Dispatcher prior to commencing next tour for further instructions, if any.

Each Dispatcher is responsible for the correctness of the contents of the Dispatcher's Bulletins issued on the territory. Each Dispatcher is responsible for seeing that Engineer and Conductor of originating train receives a copy at designated location. Additions to and deletions of items in Dispatcher's Bulletins must be made without delay and such changes must be promptly provided to concerned trains while enroute.

When Dispatcher is relieved, the Dispatcher must see that the relieving Dispatcher has a clear understanding of changes needed for updating of Dispatcher's Bulletins. Any additions or deletions that have not been provided to trains enroute must be clearly conveyed. This information must also be included in Dispatcher's written transfer, as provided in the Operating Rules.

Dispatcher's Bulletins will be issued at Peru, Lafayette, Frankfort, Tilton, Decatur, Calumet, Landers, Taylorville, A. O. Smith Yard, Luther, Berkeley, Wentzville, Springfield, Bridge, Outer Depot, Peoria, Moberly, Bloomington, Mexico, Des Moines, Claycomo and North Kansas City.

Originating trains operating over the Illinois Division must not depart any of the above locations until both the Engineer and Conductor have received a current Dispatcher's Bulletin that is addressed to their train.

3. RAILROAD CROSSING AT GRADE

a. Interlocked

LOCATION		LINE/RR	
Lafayette District			
Logansport	M.P. D218.5	CR	(Note 1)
Clymers	M.P. D224.3	CR	(Note 1)
Delphi	M.P. D238.6	CSXT	(Note 2)
Lafayette Jct.	M.P. D257.2	NS Frankford Branch	(Note 3)
Danville Jct.	M.P. D300.4	CSXT	(Note 4)
CR Crossing	M.P. D300.8	CR	(Note 4)
Tolono	M.P. D338.0	IC	(Note 5)
Wabic	M.P. D375.6	IC	
Bloomington District			
Crandall	M.P. SP402.8	TPW	(Note 6)
Gibson City	M.P. SP339.4	IC	
Mansfield	M.P. C131.2	CR	(Note 1)
Brooklyn District			
Wabic	M.P. D375.6	IC	
Winston	M.P. D437.8	BN	(Note 7)
DeCamp	M.P. D452.1	CNW	(Note 8)
Mitchell	M.P. D474.7	UP	
WR Tower	M.P. D480.4	TRRA	
Madison Branch			
A&S	M.P. TS445.7	A&S	(Note 9)
Sorento	M.P. TS406.8	BN	(Note 10)

3. RAILROAD CROSSING AT GRADE (Cont'd)

a. Interlocked (Cont'd)

LOCATION		LINE/RR	
Springfield District			
Wabic	M.P. D375.6	IC	
Starne	M.P. DH411.2	IC	
C&IM Crossing	M.P. DH412.9	C&IM	(Note 11)
Iles	M.P. DH416.2	SPCSL	
Jacksonville	M.P. DH447.4	BN	
Bridge	M.P. DH514.4	BN	
St. Louis District			
May Street	M.P. SL3.0	TRRA	
Mexico	M.P. S110.1	GWWR	(Note 12)
Clark	M.P. S136.8	GWWR	(Note 13)
Alton District			
Wood River	M.P. AE5.0	SPCSL/CR	
St. Louis Terminal Routes			
Willows	M.P. 2.8VC	CR/CSXT	
Coapman Yd.	M.P. 4.5W	(Southern Interlocking) TRRA	
Coapman Yd.	M.P. 6.3W	A&S	(Note 14)
Kansas City District			
Birmingham	M.P. S266.6	SOOL	
Ustick Tower	M.P. S275.4	BN	
Moulton and Des Moines District			
Moravia	M.P. SD260.0	SOOL	(Note 15)
Albia	M.P. SD272.4	BN	(Note 16)
Wabash Jct.	M.P. SD337.3	CNW	

Note 1. When home signal indicates Stop, in addition to receiving permission from the Control Station to proceed, train or engine will pass Home Signal but stop before fouling conflicting route and wait five (5) minutes before proceeding.

Note 2. The controlled interlocking located at Delphi, Indiana, M.P. D238.6, is controlled by NS Dispatcher located Decatur, Illinois. NS and CSXT trains encountering a Stop signal at this interlocking must immediately contact NS Dispatcher in Decatur and secure permission from NS Dispatcher to pass Stop signal and proceed through interlocking in accordance with Operating Rule 461.

Note 3. When Home Signal for Frankford Branch (Former Peoria District) movements indicates Stop, in addition to securing permission from the Control Station, crew members must contact the dispatcher and secure permission to operate the "Trap" Button and the "Push" Button located in the box. Once permission is received, crew members must determine that no trains or engines are on or closely approaching the crossing from all other directions. Seeing no conflicting movement and "CSXT Sigs Red" light illuminated, depress NS "Trap" Button (for 2 seconds). If Home Signal displays proceed aspect, proceed by signal indication.

If Home Signal does not display proceed, depress NS "Push" button (for 2 seconds), then if Home Signal displays Proceed aspect, proceed by signal indication. If Home Signal does not display proceed signal indication and "NS Push Button" light along with "CSXT Sigs Red" light are illuminated, proceed at restricted speed. If "NS Push Button" light is dark or "CSXT Sigs Red" light is dark, pass Home Signal but stop before fouling CSXT Route. Wait 6 minutes and then proceed at restricted speed.

After obtaining permission to operate "Trap" Button and "Push" Button and "CSXT Sigs Red" light is dark, depress "Push" Button (for 2 seconds) and wait 6 minutes. If Home Signal displays Proceed aspect, proceed by signal indication.

If Home Signal does not display Proceed signal indication and "NS Push Button" and "CSXT Sigs Red" light are illuminated, proceed at Restricted Speed. If "NS Push Button" light or "CSXT Sigs Red" light are dark, pass Home Signal but stop before fouling CSXT Route. Wait 6 minutes and then proceed at Restricted Speed.

Crew members must close and lock box prior to departure.

Note 4. The CSXT Interlocking at Danville, Illinois, M.P. D300.4, and the Conrail Crossing at M.P. D300.8 is controlled by the CSXT Dispatcher in Jacksonville, Florida. The CSXT Dispatcher may be contacted by use of either the Motorola Spectra Clean Cab Radio or the Motorola MCX100 engine radio. Access the CSXT Dispatcher by the DTMF Code "4." Receive and transmit on channel "94."

If neither of these radios are available, contact either the Tilton Yard Office or the NS Lafayette District Dispatcher in Decatur, who will in turn contact the CSXT Dispatcher.

Note 5. The control interlocking located at Tolono, Illinois, M.P. D338.0, is controlled by IC Dispatcher, located Chicago, Illinois.

NS Trains encountering a Stop Signal at this interlocking must immediately contact NS Dispatcher in Decatur, Illinois. NS Dispatcher will secure permission from IC Dispatcher for NS Train to pass Stop Signal and proceed through interlocking in accordance with Rule 461.

Note 6. Movement must occupy track circuit within 90 feet of Home Signal.

Observe TPW Home Signals. If either is displaying a Proceed indication, no action should be taken until TPW movement has been completed or has stopped clear of crossing or until it is evident there is no TPW movement approaching.

If TPW Home Signals are at Stop, operate emergency switch to OFF position, pass Home Signal, but Stop before fouling TPW track. Return emergency switch to ON position and wait five (5) minutes clear of the crossing. If no conflicting movement is evident, proceed through interlocking limits at Restricted Speed.

If necessary to operate emergency release, notify Dispatcher as soon as possible.

Note 7. Ascertain that there is no conflicting movement.

Operate time release by pressing button in NS labeled box. Button must remain depressed for a minimum of 1 second.

In the event Home Signal does not display a Proceed indication after activating time release, wait 11 minutes and 30 seconds and then be governed by the following instructions:

- (a) If red indicator lamp lights which indicates signals on conflicting route are in stop position and no conflicting movement is in sight, movement may be made at Restricted Speed.
- (b) If red indicator lamp does not light, and no conflicting movement is in sight, train or engine will pass Home Signal and stop short of conflicting route, then wait 5 minutes and proceed at Restricted Speed.

When time release is activated, Train Dispatcher must be notified whether or not amber lamp lights.

When a train has passed the approach signal to the "BN" Interlocking at Winston, Illinois, M.P. D437.8, and is traveling at a speed which is less than 30 mph, the train must approach the Home Signal prepared to STOP.

This restriction applies to both northbound and southbound trains approaching the interlocking.

Note 8. Southbound main line moves will activate the approach circuit to the Decamp Interlocker when the movement passes M.P. D447.0. All southward trains should not pass M.P. D447.0 when meeting northbound train until southward leaving signal at south end of Karnes is set to stop. If leaving signal at south end of Karnes is at stop (red), southward movements may proceed to the leaving signal. Southbound moves on passing siding will activate the approach circuit to Decamp Interlocker when movement passes a point (yellow marker on ground) 500 feet north of leaving signal at south end of Karnes. All southward trains should not pass this point when meeting northward movement at Karnes, unless southward leaving signal is set to stop. After northward train has passed south end of Karnes, southward movement, if track warrant or Dispatcher Bulletin so indicates, may proceed southward; however, if southward movement is delayed or stopped before trains get within 100 feet (yellow marker on ground) of leaving signal, there is a time out section. A positive restart section will be activated when the movement is within 100 feet (yellow marker on ground) of leaving signal. If movement is not delayed or stopped during this 500 foot move, signal will not time out.

Be sure no other trains are on or approaching the crossing from other direction.

Operate manual emergency release. Push button in. Hold depressed for two (2) seconds before releasing. Then after three (3) minute interval, the signal required should display Proceed indication.

If the signal does not display Proceed indication after operating release and expiration of time interval:

- (a) If indicator lamp is lighted, trainman may give a hand signal to proceed if no other trains are on or closely approaching the crossing from other directions.
- (b) If indicator lamp is not lighted, trainman must place lighted fuses on Chicago & Northwestern track 100 feet in each direction, after which train will occupy track between home signal and crossing, but stop in clear of Chicago & Northwestern crossing. After standing three (3) minutes, if no other trains are on or closely approaching the crossing from other direction, train may proceed.

If it has been necessary to use the release or hand signals, trainman will notify dispatcher at first open office.

Be sure to lock the box when leaving.

Note 9. If signal displays Stop, crew member will depress "Push" Button mounted on mast of governing Home Signal and signal may clear.

If signal does not change its indication after expiration of 5 minutes and no conflicting movement is evident, train or engine will pass Home Signal, but must stop before fouling conflicting route, waiting 5 minutes before proceeding at Restricted Speed.

Note 10. When Home Signal is indicating Stop, after Key Controller at Home Signal has been operated, and if no BN movements are on or seem to be approaching the crossing, trainmen will be governed by the following:

- (a) Observe light type indicator; when lighted, BN home signals are indicating Stop. When not lighted, BN home signals may be displaying an indication to proceed and no action should be taken until all BN movement has been completed or it is known that BN movement has stopped or that no BN movement is approaching.
- (b) Operate push button by depressing, hold for one (1) second, and then release. If indicator is lighted at the time the push button is operated, NS Home Signal should display an indication to proceed immediately. If the indicator is not lighted at the time the push button is operated, NS Home Signal should

display an indication to proceed within four and one-half (4-1/2) minutes. In the event that home signal still fails to display an indication to proceed, trainmen must comply with Article (C).

- (c) If indicator flashes after push button has been operated, trainmen must place a lighted ten (10) minute red fusee on each side of the crossing along BN track and, if the indicator continues to flash, train or engine may proceed at Restricted Speed.

When indicator fails to flash, trainmen must comply with Article (D).

- (d) If Home Signal fails to display an indication to proceed, or if indicator fails to flash after push button has been operated, trainmen must place a lighted ten (10) minute red fusee in center of crossing and immediately have movement occupy track section between Home Signal and BN crossing without fouling the BN track. Just before the fusee placed in center of crossing is consumed, trainmen must then place a lighted ten (10) minute red fusee on each side of crossing along BN track, and when it is ascertained that no BN movements are on or closely approaching the crossing, train or engine may proceed at Restricted Speed.

Note 11. Between the hours of 11PM and 7AM when the home signal indicates stop and you are unable to contact the C&IM dispatcher, you must contact NS dispatcher Decatur and comply with his instructions.

Note 12. Be sure no other trains are on or closely approaching the crossing.

Check position of switches. If switches are lined for GWWR route, operate emergency pushbutton. Hold depressed for two (2) seconds before releasing. Then after two (2) minutes, switches should be unlocked and can be lined for NS route. The required signal should display Proceed indication.

If switches are lined for NS route, if no conflicting movement is evident, train will pass Home Signal but stop before fouling conflicting route and wait two (2) minutes before proceeding at Restricted Speed. Notify dispatcher.

Be sure and lock box when leaving.

Note 13. Be sure no other trains are on or approaching the crossing from other direction. Operate manual emergency release. Turn knob to zero(0). Release knob, allowing points on dial to return to normal position. The signal required should display a Proceed indication.

In case proceed signal is not displayed, after operating release, if indicator lamp is lighted, trainman may give a hand signal to proceed if no other trains are on or closely approaching the crossing from other directions.

If indicator lamp is not lighted, train will occupy track between Home Signal and GWWR crossing but stop in clear of GWWR crossing. After standing five minutes, if no other trains are on or closely approaching the crossing, the train may proceed at Restricted Speed.

If it has been necessary to use the release or hand signals, trainman will notify the train dispatcher Decatur.

Lock the box when leaving.

Note 14. Instructions governing operation of release for signals 5 - 7 or 6 - 8:

If indicator is illuminated, operate push button labeled for signal to be used and hold 5 seconds before releasing.

If indicator light is not illuminated, wait 2 minutes and if no conflicting movement is evident, then operate push button and hold 5 seconds before releasing.

Note 15. Be certain no other trains are on or approaching the crossing from another direction.

Operate manual emergency release: Turn knob to zero, release knob, allowing point on dial to return to normal position, the signal required should display a proceed indication. If a Proceed signal is not displayed after operating the manual emergency release, and no conflicting movement is in sight, train or engine may pass Home Signal, stopping before fouling conflicting route. Then wait five (5) minutes and proceed at Restricted Speed.

If it has been necessary to use the release or hand signals, trainman will notify the Train Dispatcher Decatur.

Lock the box when leaving.

Note 16. Controlled by BN Dispatcher.

b. Not Interlocked

LOCATION		LINE/RR	
Frankfort Branch			
Frankfort	M.P. SP234.8	CR	(Note 1)
Frankfort	M.P. SP234.8	CSXT	(Note 1)
Bloomington District			
SPCSL Jct.	M.P. SP375.6	SPCSL	
Alton District			
CP Jct.	M.P. AE5.4	TRRA	(Note 2)
Brooklyn	M.P. AE4.9	NS (V&C Belt)	
St. Louis Terminal Routes			
Brooklyn (VC Belt)	M.P. 4.8VC	TRRA & NS (A&E Line)	
Moulton/Des Moines District			
Des Moines	M.P. DU338.4	CNW	
Des Moines	M.P. DU338.4	IAIS	

Note 1. Aluminum boxes are installed at CR and CSXT crossings. At the CR crossing, the push buttons are labeled NS (Frankfort District), and Conrail. At the CSXT crossing, the push buttons are labeled NS and CSXT.

The push buttons are only to be used if signals indicate stop when signals at CR and CSXT crossings indicate proceed. And if the way is seen to be clear, movement may proceed over such crossings without stopping at a speed not exceeding 15 MPH. In addition, at CR crossing, crew is responsible for the position of the hand-throw switch where CERA and NS Frankfort District junction. Proceed indication at CR crossing does not indicate position of hand-throw switch. Proceed indication at CSXT crossing is for either NS or CERA using NS tracks.

When signals at CR and CSXT crossings indicate stop, movement must stop. Crew member will determine if conflicting route is clear, and if clear will operate push button. After an elapsed time of 45 seconds, signal should indicate proceed and movement may proceed only after determining that no conflicting movement is approaching. If a stop signal is still displayed, NS Operating Rule 462 will apply.

To prevent NS through trains from having to make two stops, push buttons labeled "NS" at either crossing will cause NS "proceed" indications at both crossings. NS crews must make sure both crossings are clear before operating either NS push button.

CERA will have to operate both push buttons entering and leaving Frankfort Yard: NS button on CR crossing and NS button on CSXT crossing.

Note 2. Signals for all movements through CP Jct. will display red STOP and movements are made under the jurisdiction of the TRRA Control Operator. The crossing is equipped with a gate, the normal position for which is against NS movement. Trains and engines stopped will contact TRRA Control Operator for further instructions and will not line gate for NS movement until authorized by TRRA Control Operator.

4. JUNCTIONS

a. Interlocked

LOCATION		LINE/RR
Lafayette District		
CSXT Crossing	M.P. SP258.0	CSXT/CR
West Demun	M.P. D257.7	NS (Frankfort Branch)
Bement	M.P. D355.4	NS (Bloomington District)
Brush	M.P. D372.5	NS (North Yard Lead)
Bloomington District		
Gibson City	M.P. C113.4	IC (Gilman District)
Brooklyn District		
Mosser	M.P. D376.5	NS (Springfield District)
Mitchell	M.P. D474.6	A&S
Springfield Hannibal District		
Mosser	M.P. DH376.5	NS (Brooklyn District)
Hannibal Jct.	M.P. H69.7	NS (St. Louis District)
St. Louis District		
Mexico	M.P. S110.5	GWWR
Kansas City District		
Hannibal Jct.	M.P. S148.1	NS (Hannibal District)
Kelly	M.P. S188.9	WGR
WB Jct.	M.P. S212.8	ATSF
CA Jct.	M.P. S242.4	ATSF
Maxwell	M.P. S250.6	BN
Birmingham	M.P. S266.6	BN
Des Moines District		
CNW	M.P. DU338.4	CNW

b. Not Interlocked

LOCATION		LINE/RR
Frankfort Branch		
CR/CSXT Crossing	M.P. SP234.8	CR/CERA
Wabash River Br.	M.P. SP259.1	KBSR
Bloomington District		
Dean	M.P. SP373.4	CR
A&E Line		
IT JCT.	M.P. AE21.8	NS (T&E Line)
Hoyt Jct.	M.P. AE9.3	TRRA
CNW Jct.	M.P. AE7.3	CNW
CNW Madison Yd.	M.P. AE6.6	TRRA, CNW, NS (Madison Branch)
Bridge Jct.	M.P. AE3.9	SPCSL
T&E		
IT Jct.	M.P. A4.4	NS (A&E Line)
St. Louis Terminal Routes		
A&S Jct.	M.P. M6.4W	A&S

5. DRAWBRIDGES

a. Interlocked RIVER

LOCATION Springfield/Hannibal District

Valley City M.P. DH473.8 Illinois River
Bridge (Hannibal) M.P. DH514.4 Mississippi River

b. Not Interlocked

(None)

6. METHOD OF OPERATION

BETWEEN	AND	† TRACKS	* SIGNALS	AUTHORITY FOR MOVEMENTS #
West Peru	East Yard	Single	ABS	TC (Note 1) (Note 2)
East Yard	Lafayette Jct.	Double	ABS	YL 251 (Note 4)
Lafayette Jct.	Eldan	Single	ABS	TC (Note 1)
Eldan	NT Jct.	Double	ABS	YL 251 (Note 4) (Note 2)
NT Jct.,	E. Bement	Single	ABS	TC (Note 1) (Note 2)
E. Bement	Veech	Double	ABS	TC
Veech	Brush	Double	ABS	251
Brush	Wabic	Single	ABS	TC
Wabic	Mosser	Double	ABS	TC
Gibson City	Bement	Single	ABS	TC (Note 1)
Farmdale	Gibson City	Single	NS	TWC
Frankfort	E. End S. Yd.	Single	NS	TWC
E. End S. Yard	West Demun	Single	ABS	TC (Note 1)
Mosser	BD Jct.	Double	ABS	TC
BD Jct.	Poag Jct.	Single	ABS	TWC ²
Poag Jct.	WR Tower	Double	ABS	YL 251 (Note 8)
WR Tower	Brooklyn	Single	NS	YL (Note 8)
Brooklyn	Coapman	Single	NS	YL (Note 8)
Alton	VC Belt	Single	NS	YL (Note 8)
Alton	Roxana	Single	NS	YL (Note 8) (Note 2)
IT Jct.	WR Tower	Single	NS	YL (Note 8) (Note 11)
WR Tower	Bridge Jct. (A&E Line)	Single	NS	YL (Note 8)
Madison	Coffeen	Single	NS	TWC
Mosser	E. Hannibal	Single	ABS	TC (Note 1) (Note 2)
E. Hannibal	Oakwood	Single	ABS	RC (Note 7)
Oakwood	Hannibal Jct.	Single	ABS	TC (Note 1) (Note 10) (Note 2)
Bluffs	Meredosia	Single	NS	TWC
Luther	Wentzville	Single	ABS	RC (Note 1) (Note 2) (Note 9)
Wentzville	Urbandale	Single	ABS	TWC
Urbandale	Hannibal Jct.	Single	ABS	YL
Hannibal Jct.	Stamper	Single	NS	YL (Note 5)
Stamper	Huntsville	Double	ABS	YL 251 (Note 5)
Huntsville	WB Jct.	Single	ABS	TC (Note 1)
WB Jct.	CA Jct.	Multiple	ABS	TC (Note 3)
CA Jct.	Birmingham	Single	ABS	TC (Note 1)
Jct.	Albia-BN	Single	NS	TWC
Moberly	Birmingham	Double	ABS	RC (Note 12)
Birmingham Jct.	Birmingham	Double	ABS	RC (Note 13)
Birmingham	Block 224	Double	ABS	RC (Note 13)

² - Authority for operation through Poag Jct. is TC

† - TWO OR MORE TRACKS EXTEND BETWEEN THE FOLLOWING POINTS AND ARE IDENTIFIED AS FOLLOWS:

Between East Yard, M.P. D253.1 and Lafayette Jct., M.P. D257.2
#1 Track: Located on left hand side when headed toward Lafayette Jct.

#2 Track: Located on right hand side when headed toward Lafayette Jct.

Between Eldan, M.P. D296.2 and NT Jct., M.P. D306.7

#1 Track: Located on left hand side when headed toward NT Jct.

#2 Track: Located on right hand side when headed toward NT Jct.

Between E. Bement, M.P. D353.3 and Veech, M.P. D357.5

#1 Track: Located on left hand side when headed toward Veech

#2 Track: Located on right hand side when headed toward Veech

Between Veech, M.P. D357.5 and Brush, M.P. D372.9

#1 Track: Located on left hand side when headed toward Brush

#2 Track: Located on right hand side when headed toward Brush

Between Wabic, M.P. D375.6 and Mosser, M.P. D376.6

#1 Track: Located on left hand side when headed toward Mosser

#2 Track: Located on right hand side when headed toward Mosser

Between Mosser, M.P. D376.6 and BD Jct., M.P. D381.0

#1 Track: Located on left hand side when headed toward BD Jct.

#2 Track: Located on right hand side when headed toward BD Jct.

Between Poag Jct., M.P. D469.1 and WR Tower, M.P. D480.4

#1 Track: Located on left hand side when headed toward WR Tower

#2 Track: Located on right hand side when headed toward WR Tower

Between Stamper, M.P. S148.5 and Huntsville, M.P. S154.9

#1 Track: Located on left hand side when headed toward Huntsville

#2 Track: Located on right hand side when headed toward Huntsville

*NS = Non-Signaled; ABS = Automatic Block System.
 #TO = Train Order; TC = Traffic Control; RC = Remote Control;
 251 = Rule 251; 261 = Rule 261; MBS = Manual Block System;
 YL = Rule 93; TWC = Track Warrant Control.

Note 1. THE FOLLOWING SIDINGS IN TC OR RC TERRITORY ARE SIGNALLED SIDINGS:

Between West Peru and East Yard

Danes	M.P. D212.5	M.P. D215.1
Logansport	M.P. D217.5	M.P. D218.6
Clymers	M.P. D222.0	M.P. D224.4
Rockfield	M.P. D232.2	M.P. D233.9
Colburn	M.P. D241.4	M.P. D244.0

Between Lafayette Jct. and Eldan

West Point	M.P. D263.8	M.P. D266.3
Attica	M.P. D275.2	M.P. D277.0

Between NT Jct. and E. Bement

Tolono West Pass	M.P. D338.0	M.P. D339.8
Sloan	M.P. D345.0	M.P. D346.6

Between Frankfort and West Demun

South Yard Siding	M.P. SP250.9	M.P. SP252.9
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Between Gibson City and Bement

Osman	M.P. C124.9	M.P. C126.6
Lodge	M.P. C140.1	M.P. C141.8

Between Mosser and Hannibal Jct.

Harristown	M.P. DH381.0	M.P. DH382.9
Dawson	M.P. DH402.6	M.P. DH404.8
New Berlin	M.P. DH428.3	M.P. DH430.9
Arnold	M.P. DH441.4	M.P. DH443.5
Chapin	M.P. DH458.2	M.P. DH460.4
Griggsville	M.P. DH479.0	M.P. DH480.6
Hadley	M.P. DH491.2	M.P. DH493.8
E. Hannibal	M.P. DH511.8	M.P. DH514.3

Between Luther and Wentzville

Ferguson	M.P. S12.5	M.P. S14.2
Wentzville Siding	M.P. S41.0	M.P. S44.0

Between Huntsville and WB Jct.

Salisbury	M.P. S169.4	M.P. S171.2
Sido	M.P. S177.1	M.P. S178.8
Brunswick	M.P. S185.6	M.P. S187.3
Dewitt	M.P. S192.3	M.P. S193.6
Wakenda	M.P. S203.9	M.P. S205.7
Carrolton	M.P. S211.3	M.P. S212.7

**** The following sidings in TC Territory are controlled sidings (RULE 105)**

Between NT Jct. and E. Bement

Ryan	M.P. D311.8	M.P. D313.3
Homer	M.P. D319.7	M.P. D321.1
Tolono E. Pass	M.P. D336.4	M.P. D338.0

Between Mosser and Hannibal Jct.

Huntington	M.P. H12.5	M.P. H15.1
Clapper	M.P. H29.2	M.P. H30.7
Holliday	M.P. H51.0	M.P. H53.6

Between CA Jct. and Birmingham Jct.

Orrick	M.P. S245.9	M.P. S246.9
Excelsior Springs	M.P. S253.4	M.P. S254.7
South Liberty	M.P. S261.2	M.P. S262.5

MAIN TRACK SWITCHES NOT EQUIPPED WITH ELECTRIC LOCKS:

Between West Peru and East Yard

- Logansport - Wilson Food Track, M.P. D220.6
- Logansport Refrigeration, M.P. D220.9
- Colburn - Lox Equipment, M.P. D240.8

Between Lafayette Jct. and Eldan

- West Point - Sohigro Fertilizer Track, M.P. D263.8
- State Line - Elevator Track, M.P. D294.1

Between NT Jct. and Veech

- Catlin - House Track, M.P. D307.6
- Sidney - Frito Lay Tracks, M.P. D324.9 and M.P. 325.2
- Team Fertilizer Track, M.P. D326.9
- Tolono - Savoy Elevator Track, M.P. D337.6
- Wickes Lumber Company Track, M.P. D338.5
- Bement - #2 Track, M.P. D355.8 - M.P. D356.1

Between Mosser and Hannibal Jct.

Mosser - Dunn Coal, M.P. DH376.7
Illiopolis - Oaks Spur, M.P. DH393.8
Springfield - Journal Register, M.P. DH414.4
- Sid and Son, M.P. DH414.4
- Engine Lead, M.P. DH414.8
Sanger - Novemco Track, M.P. DH420.1
New Berlin - S. Elevator Track, M.P. DH431.1
Island Grove - Elevator Track, M.P. DH433.5
Alexander - Fertilizer Track, M.P. DH436.9
Jacksonville - Mobil Chemical Track, M.P. DH445.7
- Meyers Track, M.P. DH450.2
Markham - W. R. Grace Track, M.P. DH453.3
Valley City - Station Track, M.P. DH474.6
Baylis - Stub Track, M.P. DH480.8
Barry - Stub Track, M.P. DH499.1
Magner - Storage Track, M.P. DH500.4

All tracks between M.P. H4.2 and Hannibal Jct., except sidings at Huntington, Clapper and Holliday.

Between Luther and Wentzville

Robertson - McDonnell Douglas Corp., M.P. S16.2
St. Peters - Hill Behan Lumber Track, M.P. S31.1
- East Switch Storage Track, M.P. S31.6
- West Switch Storage Track, M.P. S31.9
- Linclay Corp., M.P. S34.1

Wentzville

Siding - Clay Track, M.P. S42.1
Wentzville - Exxon Corp., M.P. S44.2
- Team Track, M.P. S44.8
- Metalife Co., M.P. S45.0
- MFA Fertilizer, M.P. S45.3
- Missouri Concrete Products M.P. S46.4

Between Huntsville and WB Jct.

Clifton - Spur Track, M.P. S162.5
Salisbury - Naylor Spur Track, M.P. S168.7
Dewitt - Brunswick River Term. Spur, M.P. S191.9

Between WB Jct. and CA Jct. (South Track)

Norborne - East End Old Siding, M.P. S220.6
- West End Old Siding, M.P. S221.2
Henrietta - Elevator M.P. S235.5

No trains or engines shall clear the main track at any of the above switches.

While movement is using such tracks, an engine or car must continuously occupy the main track or main track switch must be kept continually set for movement into such track. Other main track switches in TC territory not equipped with electric locks are located between Brush, M.P. D372.9 and Wabic, M.P. D375.6. All trains and engines must not exceed 20 MPH between these two points.

INSTRUCTIONS GOVERNING THE ISSUING OF JOINT TRACK TIME FORM 23-A

The issuing Operator/Dispatcher, hereafter referred to as issuing party, will contact the other Operator/Dispatcher involved hereafter referred to as the other party, and inform him that he wishes to authorize someone to do work on a specified track, and will be issuing a Track Time Form 23-A to cover the movement. The issuing party will supply the other party with the number he intends to use on his 23-A. The other party will then supply the issuing party with his number. Then, both parties will block out the control points involved, after which the issuing party will issue the movement a 23-A using both numbers. When the 23-A is given up by the movement, the issuing party will contact the other party and release the joint 23-A with him.

JOINT TRACK TIME FORM 23-A IS REQUIRED AT THE FOLLOWING LOCATIONS:

Springfield District

(1) Between Oakwood, M.P. H4.2 and the West Switch Hadley, M.P. DH493.65.

Kansas City District

(1) Between Birmingham Jct., M.P. S264.7 and the Power Crossover Switch, Birmingham, M.P. S266.6

Lafayette District

(1) Entering or leaving the Illinois Division at West Peru, M.P. 204.4 (Eastbound or Westbound Tracks)

Note 2. POWER OPERATED SWITCHES ARE CONTROLLED AS FOLLOWS:

LOCATION	MP	BY OPERATOR
1. Delphi (Power Crossover)	D238.6	NS Dispatcher Decatur
2. Danville Jct. (Power Crossover N. Yard)	D300.4	CSXT Dispatcher Jacksonville
3. Tolono (Power Crossover)	D338.0	NS Dispatcher Decatur
4. Valley City Bridge	DH473.8	Bridge Tender Valley City Bridge
5. EE East Hannibal	DH511.8	Opr. Hannibal Bridge
6. WE East Hannibal	DH514.3	Opr. Hannibal Bridge
7. Wood River I/L	A5.0	Operator Luther Yard
8. Luther (IB/OB Switch)	SL6.3	Operator Berkeley
9. Ferguson	S12.5	Operator Berkeley
10. Berkeley (Power Crossover)	S14.2	Operator Berkeley
11. Berkeley (Power Crossover)	S14.3	Operator Berkeley
12. Robertson, Missouri	S16.9	Operator Berkeley
13. Wentzville Siding (EE)	S41.0	Operator Berkeley
14. Middle Yd. Lead (Off Pass)	S43.0	Operator Berkeley
15. Wentzville Siding (WE)	S44.0	Operator Berkeley
16. Birmingham	S266.6	"KN" Opr. - Kansas City
17. Block 222	S271.9	"KN" Opr. - Kansas City

Note 3. Train movements between WB Jct. and CA Jct. are governed by ATSF Rules, Timetables and Special Instructions.

Note 4. The following instructions will govern train operations and movement of on-track equipment between East Yard and Lafayette Junction and between Eldan and NT Junction.

Within yard limits, between East Yard, M.P. D253.1, and Lafayette Junction, M.P. D257.2, and between Eldan, M.P. D296.2, and NT Junction, M.P. D306.7, all movements are under the jurisdiction of the Dispatcher at Decatur.

Movements against the current of traffic within these limits must not be made without permission of the Dispatcher at Decatur, who must arrange for protection of such movements.

No train or engine will enter the main track, or cross over from one main track to another, through hand operated switches, without permission of the Decatur Dispatcher. Except, between Eldan, M.P. D296.2, and NT Junction, M.P. D306.7, this permission will be secured through the Yardmaster at Tilton. Yardmaster at Tilton is on duty all shifts Monday, and first shift (7:00 AM - 3:00 PM) and third shift (10:00 PM - 6:00 AM) Tuesday through Sunday.

All movements against the current of traffic within these limits must be made at yard speed, not exceeding 20 MPH.

All trains and engines must secure permission from the Dispatcher at Decatur to depart East Yard, Lafayette and Tilton. Permission to leave Tilton will be secured from the Yardmaster, when on duty. It will be the responsibility of the Conductor or Engineer to secure this permission.

Operation of on-track equipment will be handled under the provisions of Operating Rule 819.

Note 5. The following instructions will govern train operation, movement of on-track equipment, and employees performing maintenance on main tracks within yard limits Moberly between Huntsville, M.P. S155.0; Urbandale, M.P. S146.4; East Moberly, M.P. H68.5; and Moulton District, M.P. SD150.5.

Movements against current of traffic between Huntsville, M.P. S155.0, and Stamper, M.P. S148.5, must not be made without permission of the St. Louis/Kansas City District Dispatcher in Decatur, who must arrange for protection of such movements.

No train or engine will enter main track, or cross over from one main track to another, through hand operated switches, without permission of the Decatur Dispatcher.

All movements against current of traffic will be governed by Rule 93 and made at yard speed, not exceeding 20 MPH.

All trains and engines must secure permission from the Dispatcher at Decatur prior to departing Moberly. It will be the responsibility of the Conductor or Engineer to secure this permission.

Operation of on-track equipment will be handled under the provisions of Operating Rule 819.

Note 6. Controlled by Decatur Dispatcher and provisions of Rule 93 apply.

Note 7. Train and engine movements between E. Hannibal, M.P. DH511.7 and Oakwood, M.P. H4.2 are governed by the Operator at Bridge.

Note 8. All train and engine movements and movement of on-track equipment are governed by instructions from Luther Operator.

Note 9. Controlled by Operator, Berkeley, Missouri.

Note 10. Additional rules applicable to Traffic Control between Outer Depot and Moberly.

1. The following additional signal aspects are authorized:

Rule 286A



Name—Block Approach

Indication—Proceed on main track preparing to stop at next signal at end of siding.

Rule 295



Name—Take Siding Signal

Indication—Movement by the signal will proceed into siding at Restricted Speed when the switch is properly lined.

R—Red
FY—Flashing Yellow
FR—Flashing Red

Note 11. An absolute block is established between Shaffer Road, M.P. AE13.4 and IT Jct., M.P. AE21.8. The limits of this block are marked with signs reading "End Yard Limits Begin Absolute Block" and "End Absolute Block Begin Yard Limits".

Maximum authorized speed within the limits of this block is 25 MPH, except where further restricted. Trains, engines and on-track equipment entering this block at either end or through any switch located within the limits of the block will do so only on permission of operator at Luther, who will control access and use of this block, and will maintain an Absolute Block for all trains, engines and on-track equipment entering, using and leaving this block. All trains, engines and on-track equipment must report clear of this block promptly.

Except in an emergency, only one movement will be permitted within the limits of the block at a time. A second movement must not be authorized until prior movement is reported clear.

Should an emergency condition arise which would require occupancy by more than one piece of equipment within the limits of the Absolute Block, additional equipment must not be allowed to enter the block until all other equipment in the block has been notified and the employee in charge of each piece of equipment fully understands the situation. Whenever it is necessary for more than one piece of equipment to be in the block, all equipment in the block must proceed at Yard Speed. Only under emergency conditions will more than one train or engine be permitted in the Absolute Block.

After a train or on-track equipment clears the Absolute Block, including clearing in auxiliary tracks, the Conductor or Engineer, or the Operator or employee in direct charge of on-track equipment, will promptly report "Clear" to the Operator. When clearing a block at a point where switch must be returned to normal position, "Clear" must not be given until switch has been secured in normal position.

Train operating without a caboose must not be reported clear of the Absolute Block except under the following conditions.

It has been visually confirmed that the rear-end marker has cleared the limits; or

Engine has passed *2 miles beyond the limits and end-of-train device indicates proper brake pipe pressure on rear.

* - If the controlling locomotive is equipped with a distance counter, and end-of-train device motion detector indicates that rear car is moving, train may be reported clear after the engine has moved a distance equal to the train's length beyond the limits.

Trains or on-track equipment must not re-enter a block after reporting "Clear", except by again securing authority to occupy the block.

Maintenance forces may be authorized to jointly occupy with trains the Absolute Block (Between M.P. AE13.4 and M.P. AE21.8) on the A&E Line, but only after the following conditions have been met:

- (a) Foreman in charge of maintenance must secure authority for joint occupancy of the Absolute Block from the operator at Luther.
- (b) Authority for joint occupancy of the Absolute Block must not be granted by the operator at Luther until he has ascertained that all trains have passed the point where maintenance will be performed and has instructed the Conductor and Engineer of trains involved not to make a reverse movement account main track occupied by maintenance forces.
- (c) Maintenance work must be protected by live flag in both directions. Flagman must walk to the point where protection will be provided unless it can be ascertained positively that there are no trains in the segment of track between the flag and the point of restriction.

Note 12. KN operator controls under jurisdiction of Decatur Dispatcher.

Note 13. All movements between Birmingham and Block 224 are controlled by KN operator and are governed by BN Rules, Timetable and Special Instructions.

7. OTHER TRAIN MOVEMENTS/INSTRUCTIONS

a. SYSTEM WIDE

1. **Rail Security Service** - When cars are moving on Government bills of lading annotated "Rail Security Service Required" or "RSS Required" are set off between terminals other than at final destination, seals protecting must be inspected and seal numbers recorded on the waybill. Also, the Chief Dispatcher must be notified by the quickest available means of communication, furnishing car number, location set off, and seal numbers. Any exceptions such as broken or missing seals must be reported in the same manner. Chief Dispatcher must immediately notify NS Police Department officer for further handling.

2. Caboose will be handled on rear of trains unless otherwise authorized by the General Manager.

3. When a near miss is encountered, train or engine crew should contact Dispatcher with relevant information on the Near Miss Incident. The Dispatcher in turn will notify Police Department. Crew must fill out Near Miss card at first opportunity and give to supervisor. Prompt handling with Dispatcher will enable Police Department to expeditiously handle with involved party.

4. Reverse movements with Triple Crown Service trailer, when in a yard or on line of road, may be made only when absolutely necessary and then only under the following conditions:

- (a) Reverse movement may be for a short distance only and at a speed not exceeding 5 MPH.
- (b) All locomotives except the controlling locomotive must be isolated.
- (c) Caution must be used in handling locomotive brake, or dynamic brake; with amperage being limited to a safe level.

5. (a) Loaded and empty Triple Crown units - When both air bags are deflated and cannot be inflated and unit is resting on bumper pin, the unit will be handled at 30 MPH to the first convenient set off point where a highway power unit can be attached to the unit for movement to final destination. This applies to loaded and empty units, and only applies to the rear car of train.

(b) Engineers operating Triple Crown trains must not leave a terminal with less than 110 PSI rail supply line pressure.

When operating on line of road, rail supply line pressure must be periodically monitored for pressure reduction. When pressure falls below 110 PSI due to horn blowing or air bag adjustments on heavy curvature and engine is not in a high throttle position, the generator field switch may be opened and engine advanced to No. 8 throttle until rail supply line is restored to 110 PSI.

6. When Rail Gangs, Timbering and Surfacing Gangs, or Surfacing Gangs are to work on a main track in multiple track territory, the foreman or supervisor must contact the Chief Dispatcher at least 12 hours in advance, advising (1) track to be used by MW&S forces, (2) date and time work is to be performed, and (3) work limits, (must begin and end at specified mile posts.)

If authorized speed on track(s) immediately adjacent to MW&S forces is greater than 25 MPH, the Chief Dispatcher will arrange for issuance of 25 MPH slow order, to be in effect only when passing work limits during specified time period. Restriction will have been complied with when leading end of train or engine reaches end of work limits, or when notified by MW&S foreman or supervisor that leading end has passed entire work gang. Engine whistle and bell must be sounded frequently when approaching and passing work limits.

7. Locomotives at outlying points or at remote points within yard or terminal limits are to be locked when not in use. The Chief Dispatcher, Yardmaster or other designated employee must be notified if this equipment cannot be locked.

8. Instructions concerning the use of toilet facilities on locomotives and cabooses:

- (a) Prior to departure, ensure the presence on lead locomotive and caboose of waste receptacle with lid, secure toilet frame, and functional urinal. Report any defects to immediate supervisor, and obtain necessary supplies from servicing personnel.
- (b) To use, insert bag in facility and drape over seat portion of frame.
- (c) After using, remove the bag and securely apply a bag tie, deposit the bag in waste receptacle, and replace receptacle cover. THE BAG, AFTER USE, IS NOT TO BE DISPOSED OF IN ANY OTHER MANNER.
- (d) Misuse of the system or theft of bags, bag ties, or waste receptacle is prohibited.

9. Freight trains, except radio train, coal trains and empty hopper trains must not exceed 150 cars, unless authorized by Chief Dispatcher.

10. Except at crew change points, while stopped, the following procedures for insuring continuous train line pressure must be observed when using end-of-train device (EOT).

- (a) Make full service application and determine that train line pressure is being reduced as indicated on the head-of-train (HOT) receiver on the locomotive.
- (b) When train is ready to proceed, release brakes and determine that brake pipe pressure is increasing by indication on the HOT receiver.
- (c) If brake pipe pressure does not decrease or increase on the HOT receiver as required above, it must be determined there is continuous train line pressure through the rear car and EOT is in place before proceeding.
- (d) If immediately after starting, EOT signal is lost or pressure indication on HOT receiver is reduced five pounds or more, it must be determined that train consist is complete and there is continuous train line pressure through train and EOT is in place before proceeding.

Any malfunction regarding end-of-train device must be promptly reported to the Chief Dispatcher.

11. All radio transmitted train orders must be copied on Form 19R in multiple.

12. All train and engine employees, yardmaster and clerical employees are required to wear approved safety glasses with side shields while on duty and/or on Company property except when in enclosed offices or highway vehicles.

Safety glasses will be furnished to you by supervisory personnel. Several approved styles are available for your selection. The Company will purchase approved prescription safety glasses, through its supplier, for those employees having to wear glasses. Employees requiring safety glasses must furnish the supervisor with prescription for special handling.

Train and engine employees, yardmasters and clerical employees who wear prescription eye glasses will satisfy these requirements with the addition of side shields to their regular eye glasses. Side shields will be furnished by supervisory personnel.

Eye protection is not required between employees' vehicles and their on or off-duty locations, or their offices.

13. Each Operations Division employee who engages in any activity specified below is required to obtain and have accessible at all times when on duty or on Company property an approved hearing protection device. Each Operations Division employee must use an approved hearing protection device whenever he or she is:

- (a) On an operating locomotive;
- (b) In an open area within 100 feet of working retarders;
- (c) In a work area identified by sign or instructions as requiring hearing protection at any Mechanical, Maintenance of Way, or other facility;
- (d) Using tools or equipment or performing duties identified by sign or instructions as requiring hearing protection; or
- (e) At any location at which he or she is subject to exposure to loud noise ("loud noise" is any noise that would require a person to speak above a normal level in order to be heard at arm's length).

Those employees who have not been instructed by the Medical Department as to the specific type of protection device to use must obtain from their supervisors one of the devices which have been available for use on a voluntary basis. Once an employee has been tested, the Medical Department will notify him or her of the specific type of protection device to use.

If you feel that the hearing protection device ordered for your use interferes with the safe performance of your duties by making it difficult for you to hear and understand speech, radio communications or other warning devices, you should report this to your supervisor at once for further instructions.

You are allowed and encouraged to use the hearing protection device in any area to the extent needed for personal comfort. You are also encouraged to use the hearing protection device whenever you are exposed to loud noises at home or elsewhere.

14. The following procedure must be observed when using drawbar alignment strap:

- (a) ATTACH - Move equipment within three feet of drawbar to be aligned. Stop movement. For protection, establish clear understanding with all concerned, advising that strap is to be applied. Attach strap to both knuckles.
- (b) ALIGN - Employee(s) stand clear of strap while movement is made. Engineer, when directed, pull ahead slowly until strap slack is eliminated and drawbar is centered.
- (c) REMOVE - Operate cut lever to allow strap to slide free from knuckle. (If strap fails to slide free, stop movement, get slack, and remove by hand.) Separate equipment one-half car length and remove strap from remaining knuckle. Repackage and/or properly store strap for future use.

Drawbar alignment strap may be used only at locations authorized and only by employees that have been qualified on its use by a division or terminal officer.

15. Enginemen and trainmen will report changes in highway traffic on specific crossings.

Grade crossings should be reported where highway traffic has changed, such as increased heavy truck movements, new or more school buses, trucks hauling a dangerous commodity, or anything that may jeopardize safe train movements.

Each report should contain the name of the District, Mile Post and crossing, if possible, and should be forwarded to the Chief Dispatcher's Office.

16. When locomotive consist of a train stops on a bridge, the engineer will inform all other crew members of that fact, advising them to take caution when dismounting.

17. Conductor of train moving FRA defective cars will be notified in writing outlining defects, position in train, restrictions, or any other information concerning subject car. The conductor must inform all other crew members of the presence of the defective car, its location, maximum speed, and other restrictions.

Foreign cars with FRA defects moving home for repairs must be accompanied by a non-revenue waybill. Such waybill must bear the notation "FRA DEFECTIVE CAR MOVING FOR REPAIR - PART 215.9". The maximum speed and other restrictions for safely conducting movement of the defective car must be shown on the waybill. If no speed restriction is required for safe movement of the car, the words "normal freight train speed" must be shown on the defect card and the waybill.

18. When handling bad order cars as rear car in train, air must be cut in to such cars if possible. If this cannot be done, cars must be chained/cabled to caboose or rear car, kept under observation, and restricted to 15 MPH. When observation is not possible, bad order car must not be handled in train.

19. Gates across tracks must be equipped with proper fasteners (hooks, latches, chains). Gates that cannot be properly secured in the open position must be reported immediately, and cars or engines will not enter until repairs are made.

20. At any time a train separates twice between the same two cars, both cars are to be set out. This will be handled per instructions of Chief Dispatcher. The only exception to these instructions is that when a representative of the Mechanical Department is on the scene and advises the cars are okay to move.

21. Due to locomotive design differences, employees crossing from one locomotive to another must be alert to the possibility of a height differential between adjoining M/U walkway platforms. Caution must be exercised to avoid tripping or stumbling when this condition is encountered.

22. FRA has established minimum qualifications for locomotive engineers. The rule requires railroads to have a formal process for evaluating prospective operators of locomotives to determine that they are competent before permitting them to operate a locomotive or train. The procedures require that railroads (1) make a series of four determinations about a person's competency which are: A. Eligibility, B. Vision and hearing acuity, C. Demonstration of knowledge, and D. Demonstration of performance skills. (2) Devise and adhere to an FRA-approved training program for locomotive engineers; and (3) employee standard methods for identifying qualified locomotive engineers and monitoring their performance.

Each locomotive engineer, including student engineers and locomotive servicing engineers, shall have his or her current locomotive engineer certificate in his or her possession upon reporting to work and while on duty. The federal rules require that the certificate be displayed upon request to:

- (a) A representative of the Federal Railroad Administration,
- (b) An officer of Norfolk Southern, or
- (c) An officer of another railroad when operating a locomotive or a train in joint operations territory over that railroad.

Each locomotive engineer, including student and locomotive servicing engineers, must promptly report the loss, damage or destruction of his certificate to the proper company authority.

A copy of federal regulations 49 CFR, Part 240, will be available at division headquarters.

23. Before a rail train unloads rail within the limits of a railroad crossing at grade or interlocked junction, protection as prescribed below must be established and maintained to insure that a crossline or conflicting movement will not enter the limits until the rail is clear of affected routes:

At a controlled interlocking or a junction equipped with power-operated switch, time and working limits (Form 23A) must be obtained. At locations where the home signal for crossline or conflicting route is controlled by a foreign line railroad, communication must be established with foreign line dispatcher or control operator and it must be ascertained that positive protection has been established and will be maintained against foreign line movements until affected track section is reported clear by employee who requested protection.

At an automatic interlocking or non-interlocked railroad crossing, flag protection must be provided.

24. In order to assist in avoiding muscle strain, all train and engine service employees are required to perform five minutes of stretching exercises from the warm-up exercise examples depicted in the Safety Rule Book at the beginning of each tour of duty. The conductor, or in the absence of the conductor, the engineer, is responsible for ensuring that all crew members, including himself, perform the stretching exercises. Stretching exercise is a safety preparation to be used in advance of performing your work that presents potential strenuous activity.

Take care of yourself by doing the stretching preparation in a reasonable and moderate manner within your physical ability.

25. When a train, engine, on-track equipment, or men performing maintenance are reported clear of the limits authorized by a track warrant or Form 23-A, the following must be stated to insure against misunderstanding:

- (a) Number of track warrant or Form 23-A being cleared; and
- (b) Limits being cleared; and
- (c) Designation of track being cleared when operating in multiple track territory.

If the employee reporting clear fails to give this information, the dispatcher or control station must ask for and obtain it before the limits are considered to be clear.

7b. DIVISION WIDE

1. When operating train or engines on tracks on the Illinois Division protected by derail, the employee handling the derail must be positive the derail is off and that the switch(es) is lined for their movement. In addition, employee handling the derail must communicate to the engineer that "switch(es) is lined and derail(s) is off." The engineer is to repeat this information to sending employee before movement begins.

Additionally when shoving movements will pass block signals (see definition), employee controlling movement will communicate (to the engineer) by name the indication of each signal affecting movement as soon as the signal is clearly visible. The engineer must acknowledge information concerning signal indication and obtain information regarding signal indication prior to beginning shove movement if employee controlling movement fails to provide same.

Each signal must be called as soon as it is clearly visible and again if other than stop signal, just before signal is passed.

Requirements of Rules 34, 103, 507, and 508 remain in effect.

2. Employees are prohibited from riding the leading end of a car when it PLACES THE EMPLOYEE BETWEEN THE GAUGE OF THE

TRACK, except when it is necessary to operate the hand brake on a moving car. This does not prohibit an employee from riding under the slope sheets of a hopper, covered hopper, or on the end platform of a tank car outside the gauge of the track.

In addition, employees must not cross over on end of moving cars or between moving coupled cars.

3. Use of a drawbar alignment strap has been approved at Decatur, Illinois; St. Louis Terminal; Kansas City, Missouri, and Claycomo, Missouri.

4. Crews relieved on line of road must leave waybills in possession of relief crew or on the lead locomotive or caboose, advising the Chief Dispatcher where waybills are left. Chief Dispatcher will advise where to leave the waybill(s) for car(s) set out on line of road account tonnage reduction or bad order. It is the conductor's responsibility to assure that waybills accompany cars picked up on the line of road. Cars should not be carried into final terminal without waybills.

5. Auxiliary tracks, sidings, and industrial tracks are subject to drifting snow, accumulations of ice and snow, and build up of mud on track structures in and around road crossings, buildings, ramps, and other structures and shelters. Extreme care must be taken when entering, passing through, or leaving such tracks to prevent derailment due to these conditions. Whenever necessary, a crew member must be sent ahead of movement to walk track and make a thorough inspection of track and structure before movement is made, and must remain in position to keep close watch while movement is being made, in the event it becomes necessary to stop the movement to avoid derailment.

6. Engineers must work a minimum of 1 trip every 6 months to remain qualified on a particular district or terminal. Engineers whose seniority allows them to work on multiple districts and/or divisions must make a qualifying trip prior to accepting assignment on a district or terminal over which they have not operated in over 6 months. It is the responsibility of each Engineer to contact the Division Road Foreman of Engines or District Road Foreman of Engines to make arrangements for qualifying trip prior to taking assignment on district or terminal for 6-month qualification.

7. Conductors will ride on the controlling, lead unit, of moving freight trains, unless instructed otherwise by Division Officer; Conductor may then ride other than controlling unit.

8. A crew member on the controlling locomotive will communicate by radio the name and location of each signal affecting his movement as soon as the signal becomes clearly visible.

If there are crew members on trailing units, they will acknowledge transmissions, repeating the information to crew member(s) on the controlling locomotive.

9. Before a rail train unloads rail within the limits of a railroad crossing at grade or interlocked junction, protection as prescribed below must be established and maintained to ensure that a crossline or conflicting movement will not enter the limits until the rail is clear of affected routes.

At a controlled interlocking or a junction equipped with power-operated switch, time and working limits (Form 23A) must be obtained. At locations where the home signal for crossline or conflicting route is controlled by a foreign line railroad, communication must be established with foreign line dispatcher or control operator and it must be ascertained that positive protection has been established and will be maintained against foreign line movements until affected track section is reported clear by employee who requested protection.

At an automatic interlocking or non-interlocked railroad crossing, flag protection must be provided.

10. Hopper cars must not be pulled with hopper doors open.

11. All trains and engines operating within the State of Missouri are to be governed by the following:

Cars left standing must be at least 250 feet from edge of road crossing, except as provided below:

- (a) Physical conditions requiring temporary use of track.
- (b) Physical conditions are such that the 250 feet minimum distance cannot be obtained, and then only as to cars awaiting loading or unloading (or pickup thereafter), or to bad order cars set out from trains.

These minimums will not apply to cars placed on yard tracks.

12. Trains entering sidings through hand throw switches (spring switches) must not line the siding switch back to normal position until the rear of the movement has passed the leaving signal.

7c. BY LOCATION

Lafayette District and Frankfort Branch

1. Within the STATE OF INDIANA, the following laws are in effect:

Engine whistle to be sounded four times beginning not less than 80 rods, (1,320) feet, from the approach to any public highway, street, or turnpike. The sounding shall be prolonged and repeated until the crossing is reached. Also the engine bell shall be rung continuously from the time of the sounding of the whistle until the engine has fully passed the crossing.

When such a whistle and bell are not in good working order, the engine must be stopped before each such crossing and proceed only after manual protection is known to be provided.

It is unlawful for a train, railroad car or engine to obstruct public travel at a public crossing at grade for a period in excess of ten minutes, except where such train, railroad car or engine cannot be moved by reason of circumstances over which the railroad has no control.

It is unlawful to permit successive train movement to obstruct vehicular traffic at a public crossing at grade until all vehicular traffic previously delayed by such train movements has been cleared, or a period of five minutes has elapsed between train movements.

Personal liability is imposed by the State of Indiana upon any engineer or any other person who fails to comply with these laws.

A city or incorporated town must receive the permission of the Public Service Commission of Indiana before making any regulation as to the sounding of whistles or ringing of bells. Otherwise, the above requirements must be met.

2. State of Indiana whistle regulations are modified to the following extent within the city limits of Lafayette:

The whistle will not be sounded except as a danger signal in extreme emergency;

The engine bell must be run constantly while the locomotive is in motion within the corporate limits of the city.

3. Within the City of Frankfort:

Except in emergency to prevent an accident, and also except as noted, ordinance prohibits the sounding of whistle or other engine signals for any street or alley. (NOTE; Whistle WILL BE SOUNDED for Rossville Ave. and O'Neil St. crossings in accordance with Rule 14(l), Book of rules.)

4. Within the city of Lafayette:

Underwood St. M.P. D254.1 can be blocked in excess of 10 minutes.

5. A permanent derail has been installed on the Frankfort Branch, west of Smith Street, at M.P. SP258.5. This derail is installed to protect cars being delivered by the KBSR in interchange at Lafayette, Indiana.

6. Frankfort Yard:

Road engines will receive instructions from South or East Yard Clerk, Lafayette, designating tracks to be used to yard train.

To avoid unnecessary blocking of crossings within the City, both public and railroad, Frankfort and CERA movements will be governed as follows:

- (a) Eastward movements will not depart until authorized by Lake Division Dispatcher.
- (b) CERA westward movements must contact Illinois Division Dispatcher by radio or by telephone located at M.P. SP204.29.

A crew member of westbound trains will promptly notify the Decatur Dispatcher when train is ready to depart.

7. Within yard limits between Junction and West Peru all movements are under the jurisdiction of the dispatcher at Fort Wayne.

Movements against the current of traffic within these limits must not be made without permission of the dispatcher at Fort Wayne, who must arrange for protection of such movements.

No train or engine will enter the main track or cross over from one main track to the other through hand-operated switches without his permission (Rule 404 applies).

All movements against the current of traffic within these limits must be made at a speed that will permit stopping within one-half the range of vision, but not exceeding 20 miles per hour.

The dispatcher at Decatur will not display a proceed signal for an eastward movement at West Peru without the permission of the Fort Wayne dispatcher.

All trains or engines must secure permission from the dispatcher at Fort Wayne to depart Peru. It will be the responsibility of the conductor and/or engineer to secure this permission.

Operation of on-track equipment will be under the provisions of Operating Rule 809.

8. All movements over the WSRV from Logansport to Clymers will be authorized by the CERA Dispatcher at Kokomo. CERA's dispatcher monitors AAR radio channel 23 (160.455 MHZ) or can be reached at 317-459-3196 Monday through Friday between the hours of 7:00 AM and 11:00 PM. All movements on the WSRV will be made at yard speed, Rule 93 will govern.

9. When trains meet at Attica, if eastbound train exceeds 8400 feet in length, the eastbound train should avoid blocking Perry Street until the opposing train is near.

10. NS trains will operate on the IC, Champaign District, from Tolono, Illinois, M.P. IC137.1, to Champaign, Illinois, M.P. 127.8. Engineer or Conductor on NS crews will contact the IC Dispatcher in Chicago, Illinois, at 821-7743 microwave or 1-800-338-0790, to receive General Orders and permission from IC Dispatcher to enter the IC Railroad at Tolono, Illinois. Conductor will also report to IC Dispatcher in Chicago when clearing the IC Railroad at Champaign and Tolono, Illinois.

NS employees operating on the IC will comply in all respects with IC Operating Rules and Regulations, and the movement of NS trains and equipment will at all times when operating on the IC be subject to the instructions and rules of the IC Railroad.

IC Bulletin Orders are located at Crew Report Room at Tilton for government of NS employees operating over the IC Railroad between Tolono, Illinois, and Champaign, Illinois.

At Champaign, before proceeding to Solo Cup, permission must be secured from the ConRail North Route Dispatcher located at Indianapolis, Ind. who will then issue a ConRail Form D order. This permission must be secured before opening switch and/or fouling ConRail main track. A telephone is located at Randolph St. for the ConRail North Dispatcher. The Dispatch number is 1-317-267-4261 or 1-317-267-4850.

11. Cars left on Tracks 1 and 2 and 3 at Quaker Oats, M.P. D299.0, Danville, Illinois, will be secured with 100% hand brakes.

Bloomington District

1. No restricted car that exceeds 10'8" in width or 15'6" in height, or is in excess of plate "B" as designated in the equipment register, will be allowed to depart Peoria in any "NS" train without proper waybill 694 attached to car and clearance message.

2. P&PU JUNCTION

- (a) All trains run via P&PU RR between P&PU Jct. and East Peoria, and P&PU Operating Rules and Special Instructions, revised November 1, 1991, govern movements in this territory.
- (b) All trains, engines, and track equipment must receive permission from the Train Dispatcher before fouling main track for movement in either direction between P&PU Jct. and Wesley Jct.
- (c) A remote control switch located at West Washington Street crossing, East Peoria, is controlled by P&PU's dispatcher. Trains, engines, and track equipment will operate over territory on signal indication.

3. Between Farmdale, M.P. SP410.6 and P&PU Jct.:

Operating Rule 93 is in effect, and all movements are under direction of the TPW Dispatcher.

Permission must be received from the TPW Train Dispatcher before any movement enters this track section. Train and engines must not enter this track section through a hand-operated switch without permission from TPW Dispatcher, and movements clearing this track section through a hand-operated switch must be reported clear to him.

4. Good Yard:

At SPCSL interlocking, flasher light highway warning signals at Washington Street do not protect movement on SPCSL interlocking connecting track. Movements over this crossing on that track must be protected by a crew member on the ground.

Normal position for CR connecting track switch at Dean (M.P. SP373.56) will be lined and locked for NS main track. Connecting track is equipped with hand-operated derail.

5. Central Soya Track, located at M.P. SP340.1 on the Bloomington District, Gibson City, Illinois, has two elevator tracks, No. 10 and No. 11, with a car capacity of approximately 10 covered hoppers each. Do not operate engine south of Central Soya's loading facility.

When crews set off equipment for loading, do not block the truck drive, located on the lead just south of the NS main line switch.

Employees must not ride side of equipment south of the No. 10 and No. 11 switch account close clearance at the rail unloading shed. Close clearance signs are posted at three locations on the north side of the rail loading shed.

Decatur Terminal

1. Operation on Main Track between Brush Interlocking and Wabic Interlocking.

No train or engine will enter the main track through a hand-operated switch within these limits without permission from the dispatcher. Permission must be secured before switch is opened.

Trains or engines clearing the main track through any of these switches must be reported clear to the dispatcher.

2. There are two IC/NS Railroad Crossings at Grade located at:

- (a) IC/NS crossing is located just west of Brush College Road on old Illinois Terminal main track.
- (b) IC/NS crossing is located north of North Yard Office, approximately 8 car lengths north of yard office, or approximately 15 car lengths south of Woodford Street.

These crossings are non-interlocked and protected by swinging gates which are to be left in the position last used. Trains and engines finding gate across NS track must stop and, after determining that

no IC movement is closely approaching the crossing, position gate across IC track, securing same. After gate is positioned and secured across IC track, NS movement may be made.

NS movements approaching either crossing are not required to stop if gate is seen positively to be positioned across IC track and protecting NS movement.

St. Louis Terminal

1. All operations between St. Louis and the locations shown below will be under the supervision of the Superintendent of Terminals, St. Louis.

- M.P. S46.7 (St. Louis Dist.)
- M.P. D469.1 (Brooklyn Dist.)
- Entire Madison Branch
- Entire Alton Dist.
- M.P. 8.3W (Coapman Yard)

2. Trains and engines will be governed by Terminal Railroad Association of St. Louis operating rules and special instructions between WR Tower and May St. Interlocking (when operating by the Merchants Bridge route), between Coapman and SH Interlocking (when operating by Illinois Transfer Dist.) and at all other times when operating on their tracks.

3. The following train handling procedure must be used by enginemen on the curve descending Merchants Bridge between West Approach and May Street on the TRRA.

No more than 12 powered axles (except high adhesion units, 10 powered axles) may be on line and when necessary trailing units will be isolated to comply with this requirement. When approaching and negotiating curve, throttle must not be in a position higher than Notch 2. When speed cannot be controlled by this method, brake application may be made and released as necessary to control train speed. This procedure is in effect until the rear of train has cleared the curve at Grand Avenue, M.P. SL3.0. On train consist of 2750 feet or less, the dynamic brake may be used not to exceed 400 amps until the rear of train has cleared the curve at Grand Avenue, M.P. SL3.0.

Eastward trains that enter into the 8° curve just west of Merchants Bridge must not make a showing movement until brakes have had sufficient time to fully release, and then only with no more than 12 powered axles (except high adhesion units, 10 powered axles) and throttle at the lowest possible position.

Crew members assigned yard transfer or shifters work will be responsible to ensure that large blocks of empty automobile rack cars or empty 85' or longer flat cars must be handled on rear of trains when moving over Merchants Bridge.

NOTE: This instruction applies to all thru freight trains as well as all yard transfer jobs and yard cuts. This instruction does not apply to Triple Crown RoadRailer trains.

4. St. Louis District

- (a) Except in case of emergency, the use of engine whistle within the city limits of St. Louis is prohibited. These limits extend from M.P. SL1.6 (St. Louis Avenue Yard) to M.P. SL7.2 (200 feet west of Goodfellow Blvd.).
- (b) Crossing protection at Missouri Bottom Road on the Brown Campus Lead (M.P. S17.4) and at Earth City Expressway on the Earth City Lead (M.P. S21.2) is not equipped for track circuit operation. Prior to any movement entering these crossings, an employee must unlock push button located approximately fifty feet from each edge of crossing, depress start button and allow crossing protection to operate a minimum of twenty seconds before any part of the movement enters the crossing.

Crossing protection must remain in operation until the entire movement has cleared the crossing. After movement has cleared, the stop button must be depressed and both boxes will be left locked.

5. Luther Yard

- (a) Dwarf signals are in service on both east and west ends of tracks 11 through 27, inclusive, for the purpose of indicating blue signal protection. When a blue light is displayed it indicates that workmen are on or about railroad rolling equipment and Operating Rule 26 applies. A yellow light displayed indicates that use of track is permitted. Absence of a light will have the same meaning as if a blue light were displayed.
- (b) Trains moving east out of Luther Yard must not foul turnout, M.P. SL3.1, located just west of East Grand Ave., until permissive signal indication is displayed on Home Signal to May St. interlocking.
- (c) Account short track circuits, all eastward trains, engines, and non-insulated on-track equipment must wait a sufficient length of time after having occupied the track circuit for Carrie Avenue crossing, M.P. SL4.3, for crossing protection to engage to ensure that the crossing gates are in the full down position prior to entering the crossing.
- (d) While equipment is moving through No. 1 Pocket at the east end of Luther Yard, personnel shall not attempt to line adjacent switches account close clearance.
- (e) When equipment of excessive dimensional width is operated on either the River track or Broadway track between Carrie Avenue, Luther Yard, and Grand Avenue, located immediately west of Merchant's Bridge, the adjacent track must be clear, unless arrangements have been made to observe and protect excessive width equipment.
- (f) Due to problems with locomotive fumes being pulled into the Beck Flavor Co. central air conditioning system, crews of eastward trains from Luther Yard will stop their trains short of Prairie Ave. (M.P. SL3.3) or pull them down to the clearance point at the end of the double track at Grand Ave. (M.P. SL3.1) when instructed to pull down for an air test or when waiting for a signal from the TRRA at May St.

6. A&E Line

- (a) The track section between M.P. AE13.4 (south end absolute block) and M.P. AE9.8 (WR Tower) is designated the A. O. Smith Thoroughfare and is not considered a main track, Operating Rule 105 governs. All switches on the A. O. Smith Thoroughfare may be left lined and locked as last used. Authority to occupy the A. O. Smith Thoroughfare must be granted by the A. O. Smith Trainmaster or by the Luther operator when the Trainmaster has so designated.
- (b) The track section between Hoyt Jct., M.P. AE9.3 and Bridge Jct, M.P. AE3.9 in under the control of the Luther Operator. Operation of trains, engines and on track equipment must be authorized by the Luther Operator who will enter all information pertinent to each movement on the prescribed form. When movement is complete and clear of this track section, crew member or employee in charge of on track equipment will report clear to Luther Operator.
- (c) A "Time Out" feature has been installed on the warning lights on old Route 3 in Granite city, Illinois, on the A O Smith old yard lead. Trains stopping, no closer than one car length from the crossing, after lights have been activated, will cause warning lights to time out after approximately 16 seconds.

After warning lights have timed out, movement must use extreme caution when approaching crossing, making sure warning device has been activated a sufficient amount of time to warn motorists.

- (d) Southward trains and engines approaching 22nd Street crossing, Granite City, Illinois, from Yard Tracks No. 11 thru No. 16, proceeding onto Yard Track No. 10, will not exceed a speed of 5 MPH from start of crossing signal circuit until leading end of movement occupies the crossing. Crews yarding trains at the south end of A.O. Smith New Yard must not leave cars fouling the crossing protection circuits at 22nd St. Crossing rails on both sides of 22nd St. are painted yellow on tracks 8, 9 and 10 approximately 100 feet from the crossing to mark the limits of the circuits.

7. T&E Line

The track section between M.P. A0.3 (ADM stop sign) and M.P. A5.0 (Woodriver interlocking) is designated the Federal Thoroughfare and the track section between M.P. A5.0 (Woodriver interlocking) and M.P. A9.2 (south of Roxana Yard) is designated the Roxana Thoroughfare. These thoroughfares are not considered main track and Operating Rule 105 governs. All switches on the T&E Line may be left lined and locked as last used. Trains, engines and on track equipment will use the Federal Thoroughfare and the Roxana Thoroughfare on verbal authority of the Luther operator. When movement is complete and clear of these thoroughfares, crew member or employee in charge of on track equipment will report clear to Luther operator.

8. Brooklyn District

- (a) Movements against the current of traffic between WR Tower and Poag Jct. may be made on authority of the operator at Luther, who must not grant such authorization until protection against opposing movements has been provided. Trains or engines must not enter the main track or cross over from one main track to the other through hand-operated switches within these limits without permission of the operator at Luther.
- (b) Following instructions shall govern crews operating in and out of Mitchell Yard on the Alton and Southern Railroad:
 - (1) Absolute Block is in effect between Mitchell Yard, M.P. 20.9 (Absolute Signal to Lennox Interlocking) and M.P. 16.4.
 - (2) Trains or engines must not enter this block without authority of A&S Crest Yardmaster.
 - (3) Crews must report promptly to Crest Yardmaster when entire train has cleared absolute block and switches have been restored to normal position.
- (c) Upon arrival Mitchell, M.P. D474.6, if A&S crew is waiting for train, NS crew will secure permission to use crossover, line switches for movement to the A&S, wait prescribed time, then cross over to the A&S, stopping at the dwarf signal governing movement to the A&S Railroad. NS crews will turn train over to the the A&S crew at that point. NS crew will remain at the crossover until the rear of train has cleared onto the A&S Railroad and will restore all switches to normal position. If NS crew arrives and A&S crew is not there or permission to cross over will not be granted for an extended period of time, NS crew will deliver train on the southbound main as in the past.
- (d) The Brooklyn Main between WR Tower Interlocking, M.P. D480.63, and VC Belt switch at the north end of Brooklyn Yard, M.P. D483.55, is within yard limits and all train and engine movements must be made at a speed that will permit stopping within one-half the range of vision but not exceeding 10 MPH. Operation of trains, engines and on-track equipment between WR Tower Interlocking, M.P. D480.63, and the VC Belt switch at the north end of Brooklyn Yard, M.P. D483.55,

must be authorized by and made under the direction of the Luther operator. The operator at Luther will enter all information pertinent to each movement on the prescribed form. When movement is complete and clear of this track section, crew member or employee in charge of on track equipment will report clear to Luther Operator.

9. V&C Belt

The VC Belt between the north end of Brooklyn Yard, M.P. D483.55 and the W-Line Y Switch Coapman Yard, M.P. 4.3W, is within yard limits and all train and engine movements must be made at a speed that will permit stopping within one-half the range of vision but not exceeding 10 MPH. Operation of trains, engines, and on-track equipment between the north end of Brooklyn Yard, M.P. D483.55 and the W-Line Y Switch Coapman Yard, M.P. 4.3W must be authorized by and made under the direction of the Luther operator. The operator at Luther will enter all information pertinent to each movement on the prescribed form. When movement is complete and clear of this track section, crew member or employee in charge of on track equipment will report clear of Luther Operator.

10. Coapman

- (a) All train and engine movements and all movements of on-track equipment between Yard Limit sign, M.P. 8.3W and Coapman Wye, M.P. 4.3W, must be authorized by the operator at Luther.
- (b) Westward trains arriving Coapman Yard must not pass the Yard limit sign at M.P. 8.3W without first securing permission and yarding instructions from the operator at Luther. Kentucky Division trains will not have timetable schedule authority within Coapman yard limits.
- (c) Within Yard Limits between M.P. 8.3W and A&S Crossing all trains and engines operating on the main track must move prepared to stop within one-half the range of vision but not exceeding 20 MPH unless moving on a Clear signal. Movements on tracks other than main track will be governed by Operating Rule 105.

The operator at Luther will enter all information pertinent to each movement on the prescribed form.

- (d) Eastward Kentucky Division trains arriving on main track adjacent east end of Coapman siding, M.P. 8.2W, and awaiting Amtrak No. 59, will activate signal request button located on signal bungalow in vicinity of spring switch to clear signal for No. 59. Signal request has a time release limit of **ten (10) minutes**. If signal does not clear at end of ten (10) minute wait period, thence crew will notify No. 59 upon arrival that time limit has expired. It **will not** be necessary for No. 59 to wait an additional ten (10) minutes, nor line spring switch for No. 59's movement. Train No. 59 only has to comply with Rule 402 and other applicable rules.

When signal fails to clear for train leaving east end of Coapman siding, M.P. 8.2W, thence signal request button must be activated and, if signal fails to clear after **ten (10) minutes**, train will proceed in accordance with Rule 402 and other applicable rules. It will not be necessary to line spring switch and/or wait an additional **ten (10) minutes**.

Any signal failure must be reported to the Kentucky Division chief dispatcher.

- (e) In an effort to minimize blocking of the A&S interlocking at the east end of Coapman Yard, eastward/southward trains making pickups at Coapman will precharge and pretest the pickup in accordance with Form NS-1., Rule A-15, prior to doubling the pickup to the body of their train.

Tail air gauges to be used in pretesting the pickups will be available from railroad police officers working in the Coapman Yard area. Prior to their train arriving Coapman Yard, conductors will contact the police officer by radio to determine the officer's location and make arrangements to obtain the tail gauge from the officer at that location, as the officer may be engaged in equipment surveillance. Upon completion of the pretest of the pickup, the conductor will arrange to return the gauge to the officer or leave it at a secure, agreed-to location (such as phone box, bill box, etc.) for the officer to retrieve at a later time.

In the event that a railroad police officer is not present at Coapman Yard at the time a pickup is to be made, it will be made in accordance with Form NS-1., Rule A-14. However, all effort to minimize the blocking of the A&S crossing during operations at Coapman Yard are required.

All northward/westward trains working at Coapman Yard must clear the A&S interlocking while making setoffs.

- (f) When picking up interchange cars at Coapman Yard, East St. Louis, Illinois, crew members must inspect cars to determine if any cars are high and wide loads, including double stack containers. If any of these type cars are found in pickup, then conductor must contact chief dispatcher at Somerset, Kentucky, for movement authority.

These instructions are in addition to all other instructions and rules regarding handling interchange cars.

- (g) Locomotives, cabooses, EOT devices and other "high risk" equipment must not be left at Coapman without permission from proper authority.
- (h) The normal position of the switch connecting the Outbound Track and the A&S Connection Track east of A&S crossing is lined and locked for movement from the Outbound Track to the A&S Connection Track.
- (i) The normal position of the switch connecting the Outbound Track and the A&S Connection Track west of A&S crossing is lined and locked for straight movement on the Outbound Track.
- (j) The normal position for switches at Coapman Yard between A&S crossing and TRRA Connection Track (M.P. 4.8W) will be lined and locked for movement on main track. Main line switch governing movement to TRRA Connection Track (M.P. 4.8W) may be left lined as last used.
- (k) When deliveries are made to A&S Railway at Coapman Yard, it will be the responsibility of the conductor to report time of delivery to the operator at Luther.

11. Madison Branch

- (a) Westbound trains must not proceed beyond A&S without instructions from the operator at Luther.
- (b) Before entering Eastern connection, trains and engines and on-track equipment must secure permission from TRRA.
- (c) Two derails are installed at LeClaire, Illinois, on the Madison Branch main track. The west derail is located at M.P. TS433.4 and the east derail is located at M.P. TS432.3. Derail signs are located adjacent to each derail. These derails must be locked in the non-derailing position unless the track between them is occupied by unattended cars or equipment. All trains and on-track equipment movements must approach these derails prepared to stop, expecting to find them in the derailing position.
- (d) CNW trains must have permission from NS Dispatcher at Decatur prior to entering NS Madison District Main Track at LeClaire. After permission has been received, CNW crews may use east crossover, M.P. TS432.3, and west crossover, M.P. TS433.4, to yard train on main track between crossovers.

Brooklyn District

1. When switching the following locations, use flag protection account rusty rails not activating automatic crossing protection at all times:

Palmer	Elevator Track
Morrisonville	Elevator Track and Old Northward Track
Harvel	Elevator Track and Siding
Raymond	Elevator Track - Protect Main Street and Springfield Road.
Litchfield	Old Northward Track - Protect Ferdon Street.

2. Any trains being delayed at Karnes for meets more than ten (10) minutes must cut road crossing. Contact dispatcher to see how long your train will be there on arrival.

Springfield/Hannibal District

1. Gravel unloading pit at Henry Nelch & Son, Springfield, Illinois, has weight restriction that prohibits locomotives on it. Cars for unloading at this industry are to be set to the Gravel Track just to clear the Engine Lead. The cars will then be pulled to spot by Nelch personnel and pulled back for NS when empty.

2. Account steep grade on the Mobil Lead, M.P. 446.8, Jacksonville, Illinois, the minimum number of hand brakes on six (6) or more cars is four (4) hand brakes.

Additional hand brakes must be applied where four (4) is not a sufficient number of hand brakes to properly secure equipment left standing.

3. Naples Terminal Facility, M.P. DH470.6

Equipment must not be handled within 100 feet of building on tracks 2 or 3 until a clear understanding has been reached with the Loading Foreman as to the moves to be made.

Account close clearance, employees must not ride side of equipment while in building.

Normal position for both switches of the crossover at the east end of this facility will be for straight track movement and must be left in this position after use.

4. Hannibal - Outer Depot

Trains and engines must not enter the main track through a hand-operated switch, and on-track equipment must not occupy the main track, between Bridge and Oakwood, M.P. H4.4, without first securing permission from the Operator at Bridge.

Before granting such authority, the Operator at Bridge must secure permission from the Train Dispatcher and, in addition, must know that the track section to be entered is clear of approaching movements.

5. Sidings at Huntington, Clapper and Holliday will be used for the meeting or passing of trains.

6. Eastward Hannibal District trains will not depart from Moberly Yard unless a clear indication is displayed by signal at Coates Street, and permission is secured from the Dispatcher.

7. Operation between Hannibal and Quincy.

Trains will operate between Hannibal and Quincy via Burlington Northern, Galesburg Division, 8th Subdivision (West side of river), and will be governed by their rules and timetable.

Trains originating at Hannibal for operation over BN Trackage to Quincy will receive BN Track Warrant and Track Bulletin at Bridge.

Trains from BN at Hannibal may proceed to Outer Depot on signal indication.

Kansas City Terminal

1. Movement of trains and engines between Birmingham and 5th St. will be under jurisdiction of BN Dispatcher and governed by BN Rules, BN signal aspects are displayed between Birmingham Jct. and 5th St., exception eastward signals at Birmingham Jct. display NS aspect.

2. Between Birmingham Jct. and 5th St. there are two (2) main tracks, North track is track No. 1 and South track is track No. 2. TC in effect Birmingham to Block 224; Interlocking in effect between Block 224 and Fifth Street.

3. In case of train accident or personal injury occurring between Birmingham and Fifth Street conductors will promptly notify the Superintendents of the BN and NS.

4. Train or enginemmen observing that highway crossing signals or gates are not operating properly should report this fact promptly to the Superintendents and Chief Dispatcher BN and NS.

5. TC is in effect between Birmingham and Claycomo Spur track switch.

6. Train and engine movements on Claycomo Spur between Claycomo Yard and TC signal Kearney Branch must proceed prepared to stop within one-half the range of vision, but not exceeding 15 MPH.

7. Trains and engine movements will be governed by NS Rules and the Greater Kansas City Area Operating and Special Instructions while on K.C.T. Trackage.

8. North Kansas City Yard

(a) Normal position for switches at east end of Roundhouse departure track: and at east end of Tracks 54 and 55, will be lined for movement on the lead. They must be left in this position after use.

(b) When necessary to make switching arrangements (lining of power switches, signals, etc.) with the operator at KN, North Kansas City, such arrangements must be made direct with him when communication is available.

9. All trains and engines must have permission from the trainmaster on duty at Claycomo prior to entering the Claycomo Spur from Birmingham. If no Trainmaster is on duty permission must be secured from N. Kansas City Trainmaster.

10. At south end of Claycomo Yard, trains doubling cuts of 25 or more cars must have air cut in and know that brakes apply and release on rear car of the first cut.

Trains and engines switching at south end of yard, when handling 25 or more cars, must have brakes cut in on 5 cars next to engine and know that brakes apply and release on all 5 cars.

11. Armourdale Terminal (SP Yard)

Due to roll outs in the Fruit Yard, a minimum of four (4) hand brakes must be set on the east end of these tracks (401 thru 404) when leaving a cut of cars or a made up train in these tracks.

All locomotives destined to the roundhouse facility at Armourdale will be required to enter this facility via the east end. All inbound engineers will be required to contact the roundhouse foreman prior to entering this facility to ascertain where the roundhouse foreman wants the units located.

All outbound locomotive consist will be made up to depart the roundhouse facility from the west end.

Moulton/Des Moines District

1. Home signals governing movement through interlocking at Albia-BN display Burlington Northern aspects.

2. Maintenance of Way forces must notify BN Train Dispatcher at Galesburg, IL, of slow orders or requirements restricting any train movements between Albia and Des Moines.

3. In case of accident, personal injury, or any emergency between Albia and Des Moines, both BN and NS Chief Dispatchers must be notified.

4. Northward trains approaching the BN Railroad at Albia must not pass M.P. SD270.5 before securing permission from the BN Train Dispatcher to pass through the interlocking at Albia. Southward trains

approaching the BN Railroad Crossing at Albia must not pass BN M.P. 0.5 before permission is secured from the BN Train Dispatcher to pass through the interlocking at Albia. In the event of radio communication failure, wayside telephones have been installed at M.P. SD270.5 and BN M.P. 0.5. The BN Train Dispatcher can be contacted through the wayside phone at these locations.

St. Louis and Kansas City Districts

1. Westbound trains picking up cars off CMLA Track, Mexico, Missouri are to cut and leave train south of JJ Street Crossing unless train length is 5300 feet or less.

2. Union Pacific track warrant and associated track bulletins will be issued to Norfolk Southern trains at Moberly, and yard engines at North Kansas City, if necessary. NS crews operating on UP trackage must have UP warrant, bulletins and UP Timetable in their possession. If unable to secure the UP track warrant and dispatcher bulletin, contact the train dispatcher at Decatur prior to leaving Moberly.

3. All trains and engines using siding at Centralia, Missouri, must protect the crossing and not enter the crossing until the warning device is known to be operating at the following locations:

Howard Berton Drive	at M.P. S123.7
Jefferson Street	at M.P. S123.9
Allen Street	at M.P. S124.3

4. Effective immediately, use of Emerson Street Crossover, M.P. S149.2, is restricted as follows:

- Trains or engines pulling out of the west end of Tracks 2 and 3 or doubling cars into west end of Tracks 2 and 3, must utilize the Tail Track.
- Trains and engines doubling to and from any tracks other than Tracks 2 and 3 at the west end, must use Tail Track when possible.

7d. YARD LIMITS

All trains and engines, including First Class Trains, must move at yard speed (Rule 93) with Yard Limits as follows:

(Note: All mainline movements on Illinois Division are governed by TC, RC, 251 and TWC Rules. Rules governing First Class Trains are not applicable.)

STATION NAME YARD LIMITS EXIST

Lafayette District

Peru	M.P. D204.5 (West)		
East Yd./Lafayette Jct.	M.P. D253.1	to	M.P. D257.2
Eldan/NT Jct.	M.P. D296.2	to	M.P. D306.7
Decatur	M.P. D370.5 (East)		

Frankfort Branch

Frankfort	M.P. SP237.0 (West)
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Brooklyn District

Poag Jct. (St. Louis Term)	M.P. D469.1 (North)
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Madison Branch

CNW Madison Yard	M.P. TS445.0 (East)		
Leclaire/Edwardsville	M.P. TS433.7	to	M.P. TS431.0
Coffeen	M.P. TS396.0 (West)		

Springfield/Hannibal District

Moberly	M.P. H68.5 (East)
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Meredosia Branch

Bluffs	M.P. M467.0 (North)
Meredosia	M.P. M470.8 (South)

St. Louis District

Urbandale	M.P. S146.4 (East)
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7d. YARD LIMITS (Cont'd)

STATION NAME YARD LIMITS EXIST

Kansas City District

Huntsville	M.P. S155.0 (West)
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Moulton Des Moines District

Moberly	M.P. SD150.4 (North)		
Albia	M.P. SD272.4	to	M.P. BN0.8
Des Moines	M.P. SD334.1 (South)		

7e. JOINT TRACKAGE

Trains and engines of the Illinois Division will use tracks of other Divisions and foreign lines in accordance with their timetables, rules and regulations, as shown below:

- Lake Division between West Peru (M.P. D204.5) and Junction (M.P. D200.2)
- Winnamac Southern (WSRY) between Logansport (M.P. WSRV 73.0) and Clymers (M.P. WSRV66.0)
- Illinois Central (Champaign Dist.) between Tolono, IL (M.P. IC137.1) and Champaign, IL (M.P. IC127.8)
- Conrail (Pekin Secondary Track) between Rising (M.P. CR40.0) and Urbana (M.P. CR29.0)
- Illinois Central Railroad (Gilman District) between Gibson City (M.P. IC110.0) and Gilman (M.P. IC81.1)
- Illinois Central Railroad (Chicago District) between Gilman (M.P. IC81.1) and 95th Street (M.P. IC12.4)
- TRRA between WR Tower (M.P. D480.4) and May Street Interlock (M.P. SL3.1)
- TRRA between SH Interlock and Coapman Yd. (M.P. 4.8W)
- TRRA between SH Interlock and CNW Madison Yd. (M.P. TS447.0)
- TRRA between West Approach and North Market.
- BN Railroad between Hannibal (M.P. DH515.0) and Quincy (M.P. BN515.2)
- ATSF Railroad between WB Jct. (M.P. S212.8) and CA Jct. (M.P. S242.4)
- ATSF and KCT Railroad between CA Jct. (M.P. S242.4) and KCT Railroad between CA Jct. (M.P. S242.4) and Argentine Yard (M.P. ATSF3.9)
- BN Railroad between Birmingham (M.P. S266.6) and 5th St. (M.P. S276.4)
- KCT Railroad between 5th St. (M.P. S276.4) and Kansas City (M.P. S279.1)
- BN Railroad between Albia (M.P. SD272.4) and Des Moines (M.P. DU340.2)

Trains and engine of other Divisions and foreign lines will use Illinois Division tracks in accordance with NS timetables, rules, and special instructions as shown below:

- Conrail between Wabash River Bridge (M.P. SP259.1) and Altamont (M.P. SP254.8)
- CR Railroad between Dean (M.P. SP373.3) and Farmdale (M.P. SP410.8)
- TP&W Railroad between Crandall (M.P. SP402.5) and Farmdale (M.P. SP410.8)
- IC Railroad at Gibson City between (M.P. SP340.1) and M.P. (SP342.0)
- BLOL Railroad at Gibson City between (M.P. SP340.2) and M.P. SP342.0)
- Kentucky Division between Coapman Yard and A.O. Smith Yard via V&C Belt and Brooklyn District
- GWWR between Bridge Jct. (M.P. AE3.9) and CNW Madison Yd (M.P. AE6.6)
- CNW between Stock Yd. Crossover (M.P. AE4.6) and A O Smith Yd. (M.P. AE11.4)

7e. JOINT TRACKAGE (Cont'd)

- CNW at LeClaire between (M.P. TS432.3) and (M.P. TS433.4)
- SPCSL at Alton, Illinois between (M.P. A0.0) and (M.P. A1.0)
- TRRA between A.O. Smith Yard (M.P. AE11.4) and Edwardsville Road (M.P. AE8.0)
- TRRA between May Street (M.P. SL3.1) and Luther Yard (M.P. SL5.1)
- IC Railroad between Wood River (M.P. A5.0) and Federal (M.P. A1.7)
- WGR Railroad between Kelly (M.P. S188.6) and Brunswick (M.P. S185.6)

7f. FLAGGING DISTANCES

The following will be observed by Engineering Department employees when providing flag protection:

Maximum Authorized Speed	Minimum Flagging Distance
0 - 10 MPH	1/4 Mile
11 - 20 MPH	1/2 Mile
21 - 30 MPH	3/4 Mile
31 - 40 MPH	1 Mile
41 - 50 MPH	1 1/4 Miles
51 - 60 MPH	1 1/2 Miles
61 - 70 MPH	1 3/4 Miles
71 - 80 MPH	2 Miles

Torpedoes will be placed the same distance in advance of the flagman, but not exceeding one (1) mile.

7g. LOCATIONS WHERE RUNNING SWITCHES ARE AUTHORIZED

Running switches in accordance with Rule 103(c) are permitted at:

Brooklyn District

Staunton	M.P. D445.4	Livingston Pipe
Taylorville	M.P. D402.8	GP Lead
	M.P. D402.5	New Yard Lead

St. Louis Terminal

Edwardsville	M.P. TS431.7	Richards Brick
Wood River	M.P. A5.5	Wilds 1 and 2
Roxana	M.P. A6.3	Hartford 1 and 2
Robertson	M.P. S20.4	Westlake Spur
Earth City	M.P. S21.2	Earth City Lead
St. Peters	M.P. S33.0	Arrowhead Industrial Park
O'Fallon	M.P. S36.4	O'Fallon Lumber & Supply Co.
Wentzville	M.P. S45.0	Metallife Company
	M.P. S45.3	MFA Fertilizer
	M.P. S46.4	Missouri Concrete Products

St. Louis District

Mexico	M.P. S108.0	CMLA
	M.P. S108.8	TK Lead
	M.P. S110.0	North Storage Crossover

Moulton/Des Moines District

Des Moines	M.P. SD335.2	West End McCoy Siding
	M.P. SD337.0	Armstrong
	M.P. DU338.3	West Leg Wye
	M.P. DU340.2	Wye (South Side)

Bloomington District

Bloomington	M.P. SP379.0	Good Yard
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Lafayette District

Logansport	M.P. D220.6	Wilson Foods
Logansport	M.P. D220.9	Logan Refrigeration

Frankfort Branch

Lafayette S. Yd.	M.P. SP253.2	East End A Yard
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8. SPRING SWITCHES

Spring switches are located as follows:

Taylorville	Both ends siding
Midway	Both ends siding
Karnes	Both ends siding
Huntington	Both ends siding (Note 1)
Clapper	Both ends siding (Note 1)
Holliday	Both ends siding (Note 1)
Benton City	Both ends siding
High Hill	Both ends siding
Coapman (M.P. 8.3W)	East End Outbound Track

While a train or engine is operating under signal indication, indicating proceed at restricted speed at a facing point spring switch, the following instructions are in effect:

- (a) A crew member must be on the ground at the switch ahead of the movement and examine the facing spring switch point to determine that it is properly fitting up and remain there until the leading wheel occupies the point.
- (b) Exception: This procedure is not required when spring switch is equipped with a spring switch light displaying the color green.

NOTE 1 - If leaving signal from siding continues to display stop, Rule 423 will apply. If authorized to proceed, crew member must line switch to reverse position and observe that points are properly positioned, then line switch back to normal position. If signal does not then indicate proceed, proceed at restricted speed.

9-a. SPEED RESTRICTIONS General Speed Restrictions

CONDITIONS	MAXIMUM Miles Per Hour All Trains and Engines
CARS	
Trains handling more than 40 empty multi-levels unless handled as solid block on the rear of train (up to 70 empty multi-levels) or in solid train (up to 150 empty multi-levels).	25
Trains handling more than 40 OTTX flat cars either loaded or empty.	30
PRR (or PC or CR) short gons in series	
13000-15999 and 500000-502920,	
loaded	30
empty	35
Short ore hopper cars:	
DM&IR, loaded	40
empty	45
Other, loaded	30
empty	35
Trains handling empty bulkhead flat cars and/or empty woodrack cars, foreign or system	45
EXCEPTION: Restriction does not apply to center beam flat cars.	
Southern log cars series 118000 - 118039 when empty	45
Trains handling flat cars loaded with creosoted poles	45

9-a. SPEED RESTRICTIONS (Cont'd)
General Speed Restrictions

CONDITIONS	MAXIMUM Miles Per Hour All Trains and Engines
LOCOMOTIVES	
Controlling locomotive not equipped with speed indicator	20
Single light locomotive	30
All steam locomotives	40
All other light locomotive consists of 2 or more units	50
TRAINS	
Key Trains (See Sect. 17)	50
Loaded Welded Rail Trains	50
All other trains	50
Trains consisting entirely of Triple Crown, TOFC/COFC, Multi-level, or Stack equipment will be governed by passenger train speed on curves and turnouts not to exceed ..	60
When Triple Crown or freight trains handling one or more loaded cars is operated on jointed rail, the engineer will avoid prolonged operation in speed range of 16 to 21 MPH. If speed cannot be maintained above 21 MPH, it must be reduced to 15 MPH.	
Passenger Trains	65
OTHER	
Snow plow NW 590000, when plowing	25
Shoving movements with NS31 on leading end	25
Single unit of self-propelled work equipment that is designed to shunt track circuits (i.e. FRA T-10, Sperry Rail Test cars, Loram railgrinder and ballast cleaner)	30
Lucky Loader, NW 14317 loaded on gon NW 59802	35

9-b. SPEED RESTRICTIONS BY DISTRICT

A train entering or leaving a siding or moving through a crossover or turnout must not exceed 15 MPH unless otherwise provided.

Except when authorized by Timetable, or Special Instructions, speed on siding must not exceed 10 MPH.

Maximum speeds through turnouts listed below govern all trains. When moving in accordance with Rule 283 (Diverging Clear), a train must approach these turnouts not exceeding the speed authorized for that turnout.

LOCATIONS AND CONDITIONS	Miles Per Hour All Trains and Engines
(1) FRANKFORT BRANCH:	
All industrial tracks (Frankfort Yard)	5
All yard tracks (Frankfort Yard)	10
Main line between CR Diamond, M.P. SP234.8, and Frankfort, M.P. SP236.0	15

9-b. SPEED RESTRICTIONS BY DISTRICT (Cont'd)

LOCATIONS AND CONDITIONS	Miles Per Hour All Trains and Engines
(1) FRANKFORT BRANCH (Cont'd):	
Between:	
Frankfort, M.P. SP236.0 and west end of South Yard Siding, M.P. SP252.9	49
Except at Frankfort between M.P. SP236.2 and M.P. SP237.0, engines only	20
M.P. SP252.9, west end South Yard and M.P. SP256.4, west end Altamont Siding	45
Except:	
Between M.P. SP252.9 and M.P. SP256.4, engines only	20
M.P. SP256.4 and M.P. SP257.7, Power Switch Transfer Track	30
M.P. SP257.7 and M.P. SP259.1, west end Wabash River Bridge	10
All yard tracks in A and B Yards, except main track	10
No. 3 and No. 4 Tracks, Altamont Pass	10
TURNOUTS, CROSSOVERS AND CONNECTING TRACKS:	
Through crossover at East Demun	30
Entering, leaving and through Demun connecting track	30
Entering and leaving through Transfer Track	10
(2) LAFAYETTE DISTRICT:	
Between:	
M.P. D200.2 and M.P. D204.5, Peru (Engines only, Ordinance)	25
M.P. D204.5 and Brush, trains consisting entirely of TCS, TOFC/COFC, stack equipment, or passenger trains	60
M.P. D204.5 and Brush, all other trains	50
EXCEPT:	
Between westward Home Signal CR crossing Logansport, and a point 2500 feet west, between M.P. D218.5 and M.P. D219.2	25
Clymers, over CR crossing, M.P. D224.5	50
On curve at Delphi, between M.P. D238.5 and M.P. D239.0	35
On curve one mile west of Delphi, M.P. D239.4	45
Lafayette between M.P. D253.1, East Yard and and M.P. D257.2, Lafayette Jct., eastbound (#1 track)	25
Lafayette between M.P. D254.0, and M.P. D257.2, Lafayette Jct., westbound (#2 track)	25
On curve east of Attica, between M.P. D276.3 and M.P. D276.5	35
On curve at Attica, between M.P. D276.7 and M.P. D277.0	35
Over Wabash River bridge and on first curve west of bridge, Attica, between M.P. D277.0 and M.P. D278.0	40
Danville, between CR and CSXT crossings	25
Between CR Crossing, Danville, M.P. D300.8, and 14th Street, Tilton, M.P. D303.5	30

9-b. SPEED RESTRICTIONS BY DISTRICT (Cont'd.)

LOCATIONS AND CONDITIONS	Miles Per Hour All Trains and Engines
(2) LAFAYETTE DISTRICT (Cont'd):	
Tolono, over IC crossing	40
Bement, between Station and a point 2000 feet west, between M.P. D355.2 and M.P. D355.5	45
Within interlocking limits Wabic, M.P. D375.5	15
Covington Branch, Attica	10
Champaign Connection Track	10
TURNOUTS, CROSSOVERS, SIDINGS AND CONNECTING TRACKS:	
West Peru, through turnout to and from westward track (#2 Track)	25
East Yard, Lafayette, through turnout to and from eastward track (#1 Track)	25
Lafayette Jct., end of double track, M.P. D257.2	25
Entering, leaving, and through Demun Connection track	30
Entering, leaving, and through Transfer Track, Lafayette	10
Eldan, through turnout to and from eastward (#1 track)	40
N. T. Jct., through turnout to and from westward (#2 track)	40
East Bement, through turnout to and from westward (#2 track)	40
BEMENT:	
Through crossovers	40
Through turnout to and from Bloomington Dist.	40
VEECH:	
Through crossovers, M.P. D357.5	30
Entering, leaving, and through sidings at Danes, Clymers, Rockfield, Colburn, West Point, Attica, Tolono (westward siding only) and Sloan	25
Through turnouts East Passing Siding Tolono and East and West Ends of Passing Siding Ryan and Homer	25
Except:	
The maximum speed through the East Passing Siding Tolono and through the Passing Sidings Ryan and Homer is yard speed not exceeding 20 MPH until the head end of the movement passes the leaving signal at either end of the siding.	
When making trailing movements out of west end of Homer trains must not exceed 10 MPH until train occupies 1st crossing. After occupying 1st crossing, trains may proceed at prescribed speed.	
(3) DECATUR TERMINAL:	
Between Brush and Wabic on Loop Track	20
All tracks known as Old IT curve, Old IT main, Old IT sidings, and all tracks in North Yard	10
All tracks in Staleys	5

9-b. SPEED RESTRICTIONS BY DISTRICT (Cont'd)

LOCATIONS AND CONDITIONS	Miles Per Hour All Trains and Engines
(4) SPRINGFIELD/HANNIBAL DISTRICT:	
Within interlocking limits at Wabic	15
Between:	
Wabic and Mosser, both tracks	30
Mosser and M.P. DH425, Curran, trains consisting entirely of TCS, TOFC/COFC, stack equipment, or passenger trains	60
Mosser and M.P. DH425, Curran, all other trains	50
Except:	
On two curves west of Riverton, between M.P. DH408.2 and M.P. DH408.8	35
Between M.P. DH408.8, Riverton, and M.P. DH416.2, Iles (engines only)	40
M.P. DH425, Curran, and M.P. DH433, Island Grove	50
M.P. DH433, Island Grove, and M.P. DH447, Jacksonville, trains consisting entirely of TCS, TOFC/COFC, stack equipment or passenger trains	60
All other trains	50
BN Wye Track, Jacksonville	10
M.P. DH447 and M.P. DH448, Jacksonville (Engines only)	35
M.P. DH448, Jacksonville, and M.P. DH503, Kinderhook	50
Except:	
On curves between M.P. DH454.7 and M.P. DH456.7	45
On curve between M.P. DH460.4 and M.P. DH460.7	45
On curve between M.P. DH460.7 and M.P. DH460.9	40
On curves between M.P. DH464.2 and M.P. DH466.3, east and west of Bluffs	40
On curve east of Valley City Bridge between M.P. DH472.8 and DH473.6	30
Over Illinois River Bridge, between M.P. DH473.6 and M.P. DH473.9, Valley City	30
On curves between west end Illinois River Bridge, M.P. DH473.9, and M.P. DH475.5	40
On curve between M.P. DH475.5 and M.P. DH476.0	35
M.P. DH503, Kinderhook, and M.P. DH512, East Hannibal, trains consisting entirely of TCS, TOFC/COFC, stack equipment or passenger trains	60
All other trains	50
M.P. DH512, East Hannibal, and M.P. DH514, Bridge	50
M.P. DH514, Bridge, and M.P. DH515.1, over Mississippi River Bridge and through tunnel to Bridge Street	10
Bridge Street, M.P. DH515.1 and M.P. H3, located between Hannibal Bridge and Oakwood	20
Note: When engine of westward train passes over the point of switch located at M.P. H3, this restriction is complied with.	

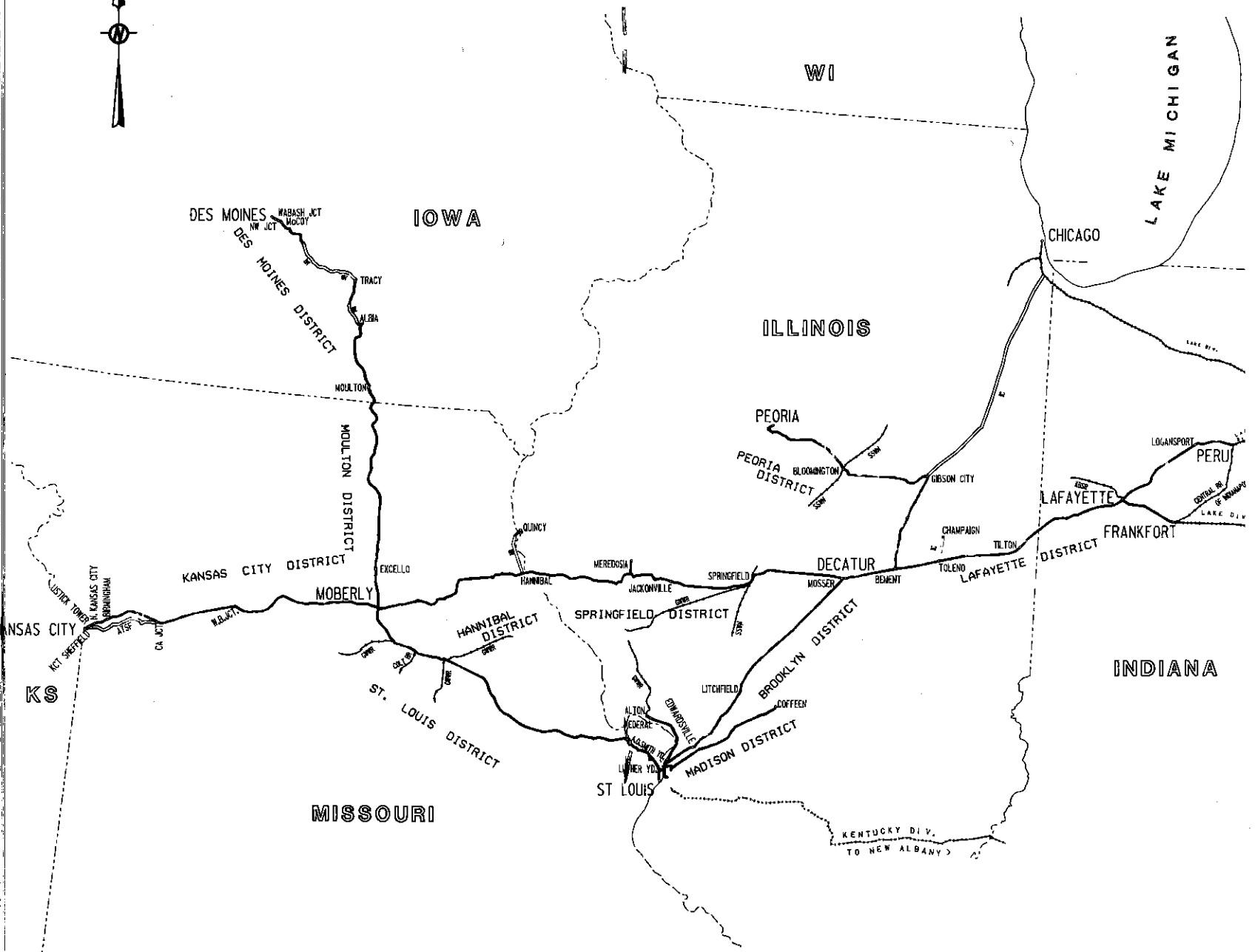
9-b. SPEED RESTRICTIONS BY DISTRICT (Cont'd.)

LOCATIONS AND CONDITIONS	Miles Per Hour All Trains and Engines
(4) SPRINGFIELD/HANNIBAL DISTRICT (Cont'd):	
Meredosia Branch	
Between Bluffs and M.P. M470.5	25
Between M.P. M470.5 and M.P. M472	10
Between M.P. DH515.1 and Orchard Street, M.P. H3.3 (engines only)	*25
*When engine of westward train passes Orchard Street, M.P. H3.3, the restriction will have been complied with.	
Between M.P. H3.3 and Coates Street, Moberly, M.P. H69.8	50
Except:	
On curve between M.P. H35.8 and M.P. H36.2	45
On curves between M.P. H69.6 and M.P. H69.9, east of Moberly	35
Over Coates Street crossing, Moberly, M.P. H69.8, until engine occupies crossing	15
TURNOUTS, CROSSOVERS AND SIDINGS:	
Mosser, through crossover at M.P. D376.5	15
Entering, leaving, and through sidings at Harristown, Dawson, New Berlin, Arnold, Chapin, Hadley, E. Hannibal, and Huntington ...	25
Except: Restricted speed must be observed when approaching inside crossover switch located at M.P. H14.1 and Pit Track Switch M.P. H14.8, Huntington	
Entering, leaving, and through siding at Griggsville	25
Exception: Trains and engines leaving siding in an eastward direction must not exceed 20 MPH until lead unit occupies crossing located at M.P. DH478.9	
Through turnouts in other than main track	10
(5) MOBERLY YARD:	
Between Urbandale, M.P. S146.4 and Carpenter St., M.P. S147.7	40
Between Carpenter St. and Coates St., M.P. S148.2	25
Between Coates St. and Hannibal Jct. switch, M.P. S148.3 (St. Louis Dist.)	15
Between M.P. S148.3 and M.P. S148.4	25
Between Stamper Crossover, M.P. S148.4 and M.P. S151.0 (Both Main Tracks)	35
Between M.P. S151.0 and M.P. S155.0	60
Except: On curves between M.P. S154.3 and M.P. S155.0	50
Between Coates St., M.P. H69.8 and Stamper ...	25
Through turnout Stamper between eastward and westward main tracks, M.P. S148.5	25
Through Hannibal Jct. switch	25
Through all other main track turnouts and crossovers	10
All movements over Coates St. until leading end occupies crossing	15

9-b. SPEED RESTRICTIONS BY DISTRICT (Cont'd.)

LOCATIONS AND CONDITIONS	Miles Per Hour All Trains and Engines
(5) MOBERLY YARD (Cont'd):	
Moberly Yard, between M.P. SD148.1 and M.P. SD148.5	10
Between M.P. SD148.5 and Queen City, M.P. SD219	40
(6) BLOOMINGTON DISTRICT:	
Between M.P. C113.3 and M.P. C153.0, Bement ...	50
New Connection Track located at 95th Street. ...	10
End of block signs are located at various locations on the IC to indicate non- assignable territory. Trains must proceed in accordance with IC Operating Rule 105.	
Old NKP Wye (BLOL Rwy.)	10
West Wye at M.P. C113.3	15
East Wye (IC Conn.)	10
North Wye (IC conn.)	15
Over CR Crossing, M.P. C131.8	40
Except on curve Bement, M.P. C152.3 to C153.0.	40
Between M.P. SP410.6 and M.P. SP395.3	40
Except interlocking Crandall (engines only)	20
Between M.P. SP395.3 and M.P. SP377.0	49
Except on curves between M.P. SP392.3 and SP391.5	45
Between M.P. SP377.0 and M.P. SP373.5	20
Between M.P. SP373.5 and M.P. SP340.5	49
Except on curves between M.P. SP373.5 and SP372.8	40
Between M.P. SP340.5 and M.P. SP340.2	20
Loop Track, Good Yard, Bloomington/Normal ...	5
TURNOUTS:	
Bement, through turnout to and from Lafayette District	40
(7) BROOKLYN DISTRICT:	
Between:	
M.P. D375.5 and M.P. D479.8, trains consisting entirely of Triple Crown, TOFC/COFC, multi- level, stack equipment or passenger trains ...	60
M.P. D375.5 and M.P. D479.8, all other trains ...	50
Except:	
Within interlocking limits at Wabic, both tracks ...	15
Between Wabic and Mosser, both tracks	30
Within interlocking limits at Mosser, both tracks	25
Between Mosser and M.P. D376.8, both tracks ...	25
Between M.P. D376.8 and M.P. D377.5, both tracks	40
M.P. D402.5 and M.P. D405.5, Taylorville	50
M.P. D436.0 and M.P. D437.4, Litchfield	50
M.P. D437.4 and M.P. D437.8, Winston	40
Decamp, over CNW crossing, M.P. D452.1	40
On curve between M.P. D466.8 and M.P. D467.4 ...	50
Mitchell, over UP crossing, M.P. D474.7 to M.P. D474.8, both tracks	40
Between M.P. D479.8, 22nd Street, and end of double track at WR Tower, M.P. D480.4, both tracks	35

ILLINOIS... DIVISION



9-b. SPEED RESTRICTIONS BY DISTRICT (Cont'd.)

LOCATIONS AND CONDITIONS	Miles Per Hour All Trains and Engines
(7) BROOKLYN DISTRICT (Cont't):	
Through interlocking WR Tower	
Toward TRRA	15
Toward Brooklyn	10
Turnouts and sidings:	
Entering, leaving and through sidings at Taylorville, Midway and Karnes	25
Except:	
Taylorville siding-Trains using turnout at the south end of Taylorville siding, M.P. D403.2, do not exceed 10 MPH through turnout approaching the main Cross Street crossing at M.P. D403.4 until gates are seen to be in the down position. After the gates are seen to be in the down position, train or engine may proceed at prescribed speed.	
Midway siding-Restricted speed must be observed when approaching Harvel Elevator track switch located at M.P. D422.4.	
Karnes siding-Restricted speed must be observed when approaching Karnes stub track switch located at M.P. D466.1. The most favorable indication that can be displayed by the signals governing movement through this siding is restricting. Restricted speed applies until the leading end of the movement is through any crossovers, turnouts, or interlocking limits governed by that signal; then train and engines can proceed at yard speed not exceeding 25 MPH. When trains meet at Karnes and the northbound train goes into the siding, do not line the south switch to normal position until the rear end of the northward train has cleared the southbound signal.	
Mosser, M.P. D376.4, both crossovers east of interlocking	15
BD Jct., M.P. D381.0, through turnout to and from northward track (#1 Track)	40
Poag Jct., M.P. D469.1, through turnout to and from northward track (#1 Track)	40
(8) ST. LOUIS DISTRICT & ST. LOUIS TERMINAL:	
Between:	
End of track east of Branch Street, M.P. SL1.4 and TRRA May Street Interlock, M.P. SL3.1 ...	10
River Track and Broadway Track between TRRA May Street Interlock, M.P. SL3.1, and Carrie Avenue, M.P. SL4.2	10
Luther, M.P. SL6.2 and Evergreen, M.P. S14.0 ...	35
Evergreen, M.P. S14.0 and M.P. S15.0	25

9-b. SPEED RESTRICTIONS BY DISTRICT (Cont'd.)

LOCATIONS AND CONDITIONS	Miles Per Hour All Trains and Engines
(8) ST. LOUIS DISTRICT & ST. LOUIS TERMINAL (Cont'd):	
M.P. S15.0 and Urbandale, M.P. S146.4	60
Except:	
Over Missouri River Bridge, between M.P. S21.3 and M.P. S22.9	30
Curve between M.P. S25.1 and M.P. S25.6 ...	50
Montgomery City, between Walker St., M.P. S83.57 and Route B, M.P. S85.19, engines only	45
Within city limits Mexico, between M.P. S108.7 and M.P. S111.7	30
Between M.P. S112.3 and M.P. S112.5	40
Centralia, over Jefferson St., M.P. S123.9, and Allen St., M.P. S124.3, engines only	25
Between M.P. S131.6 and M.P. S132.4, Sturgeon (Ordinance)	35
Between Urbandale, M.P. S146.4, and Carpenter St., Moberly, M.P. S147.7	40
Between Carpenter St., Moberly, M.P. S147.7, and Coates St., Moberly, M.P. S148.2	25
TURNOUTS, CROSSOVERS, AND SIDINGS	
Through turnout at Ferguson, M.P. S12.5	30
Berkeley lead between Ferguson (M.P. S12.5) and Evergreen (M.P. S14.0)	30
Berkeley lead between Evergreen (M.P. S14.0) and Berkeley (M.P. S14.2)	25
Through turnouts in other than main track	10
Through sidings at Wentzville Siding, High Hill sidings and Benton City	25
Note: When making trailing movements out of sidings at east end of High Hill and Benton City, trains must not exceed 10 MPH until train occupies crossings. After occupying crossing, trains may proceed at prescribed speed.	
Through turnout west switch Wentzville Siding ...	15
Through turnout east switch Wentzville Siding ...	25
Through turnout Middle Lead Switch (M.P. S42.3) in siding, Wentzville Siding	15
ST LOUIS TERMINAL ROUTES:	
Brooklyn Main between WR Tower (M.P. D480.6) and North End Brooklyn Yard (M.P. 483.5) ...	10
V&C Belt between North End Brooklyn Yard (M.P. D483.5) and Coapman Yard (M.P. 4.3W) .	10
Coapman Yard between M.P. 4.3W and A&S Crossing (M.P. 6.3W)	20
Between A&S Crossing (M.P. 6.3W) and East Yard limit sign (M.P. 8.3W)	30
Outbound track M.P. 5.0W to M.P. 8.2W	10
ALTON DISTRICT (T&E LINE):	
Between:	
Begin T&E, M.P. A0.3, and Henry Street, M.P. A0.5	10
M.P. A0.5 and M.P. A8.8	20
Except over crossings at Wood River Interlocking, M.P. A4.9 to M.P. A5.0	10

9-b. SPEED RESTRICTIONS BY DISTRICT (Cont'd.)

LOCATIONS AND CONDITIONS	Miles Per Hour All Trains and Engines
(8) ST. LOUIS DISTRICT & ST. LOUIS TERMINAL (Cont'd):	
ALTON DISTRICT (T&E LINE) (Cont'd):	
M.P. A8.8 to end of track, M.P. A9.2.....	10
Through all sidings, yard tracks, and turnouts unless otherwise provided.....	10
ALTON DISTRICT (A&E LINE):	
Between:	
End of track, M.P. AE27.8, and begin T&E, M.P. AE26.0 (M.P. A0.3).....	10
Through turnout IT Jct., M.P. AE21.8.....	15
IT Jct., M.P. AE21.8 and Rand Avenue, M.P. AE20.1.....	15
M.P. AE20.1 and Shaffer Road, M.P. AE13.4... Except over road crossings in Hartford, M.P. AE20.1, to M.P. AE19.1, leading end only.....	25
Shaffer Road, M.P. AE13.4, and switch to AO Smith Old Yd. (M.P. AE11.3).....	10
Switch to AO Smith Old Yd. (M.P. AE11.3) and WR Tower (M.P. AE9.6).....	20
Except over 20th Street Crossing, M.P. AE10.1 (Leading end only).....	15
WR Tower (M.P. AE9.6) and Bridge Jct., (M.P. AE3.9).....	10
Through all sidings, yard tracks, and turnouts unless otherwise provided.....	10
(9) KANSAS CITY DISTRICT:	
Between:	
Stamper Crossover, M.P. S148.5 and M.P. S151. M.P. S151 and WB Jct., M.P. S212.8.....	35
Except:	60
On curves between M.P. S154.3 and M.P. S155.....	50
Between M.P. S155.8 and M.P. S166.8.....	50
On curve between M.P. S176.2 and M.P. S176.5, Keytesville.....	50
On curves between M.P. S187 and M.P. S187.5, Brunswick.....	35
On curves between M.P. S188.8 and M.P. S189.9, west of Kelly.....	50
On curve between M.P. S191.8 and M.P. S192.2, DeWitt.....	50
On curve between M.P. S198.5 and M.P. S199.....	50
Between M.P. S200.3 and M.P. S203.0.....	50
On curve between M.P. S210.5 and M.P. S211.3, Carrollton.....	55
BETWEEN W.B. JCT., M.P. S212.8, AND C.A. JCT., M.P. S242.4 (NS-ATSF Joint Trackage)	
North Track, between W.B. Jct. and C.A. Jct. .	60
Middle Track, between C.A. Jct. and Hardin ...	60
South Track, between Hardin and W.B. Jct.	60

9-b. SPEED RESTRICTIONS BY DISTRICT (Cont'd.)

LOCATIONS AND CONDITIONS	Miles Per Hour All Trains and Engines
(9) KANSAS CITY DISTRICT (Cont'd):	
South Track, between C.A. Jct. and Hardin	50
Except:	
Curve between M.P. S241.12 and M.P. S241.40.....	40
On connection track, west of Hardin, to South Track, only.....	25
NOTE — Between W.B. Jct. and C.A. Jct. only, the following speed restrictions also apply:	
Freight trains when averaging 90 tons or over per car, or over 7,000 tons total.....	45
On all sidings.....	20
Between:	
C.A. Jct., M.P. S242.4, and Birmingham, M.P. S266.6.....	60
Except:	
On curves between M.P. S256.5 and M.P. S257.0.....	55
On curves between M.P. S257.0 and M.P. S258.2.....	50
Birmingham, M.P. S266.6 and Block 222, M.P. S271.9.....	
No. 1 Main.....	35
No. 2 Main.....	50
Except on curves between Birmingham and North Kansas City.....	35
Block 222, M.P. S271.9 and Ustick Tower, M.P. S275.4.....	
No. 1 Main.....	20
No. 2 Main.....	35
Ustick Tower, M.P. S275.4, and east end Missouri River Bridge.....	10
East end Missouri River Bridge and Fifth St., M.P. S276.4.....	10
TURNOUTS, CROSSOVERS, CONNECTION TRACKS, AND SIDINGS:	
Through equilateral turnout at Huntsville.....	50
Through crossovers at W.B. Jct.	40
Through crossovers at Hardin.....	30
Through connection tracks between Middle Track and South Track at C.A. Jct.	30
Through crossovers between Middle Track and North Track at C.A. Jct.	40
Through turnout at Maxwell.....	35
Through turnout at Birmingham Jct.	30
Through SOO connection at Birmingham.....	13
Through crossover at Birmingham.....	12
Through Kearney Branch Turnout Birmingham....	15
Through crossover at Randolph.....	10
Through crossover at Block 222.....	12
Through crossover at Block 224.....	20
Through turnouts in other than main track.....	10
Entering, leaving and through siding at Salisbury Brunswick, DeWitt and Wakenda.....	25
Entering, leaving and through Sido, Carrollton, Orrick, Excelsior Springs, and South Liberty,....	10
On Kearney Branch.....	15
On Claycomo Spur.....	15

9-b. SPEED RESTRICTIONS BY DISTRICT (Cont'd.)

LOCATIONS AND CONDITIONS	Miles Per Hour All Trains and Engines
(10) MOULTON/DES MOINES DISTRICT:	
Moberly Yard between M.P. SD148.1 and M.P. SD148.5	10
Between M.P. SD148.5 and Queen City, M.P. SD219.0	40
Except: Macon, approach Bridge 1941, M.P. SD170.8	*15
NOTE — Train or engine must approach Bridge 1941, M.P. SD170.8, Macon, at 15 MPH to ascertain proper track alignment. When it is ascertained that track is properly aligned, train or engine may resume prescribed speed.	
Kirksville, (Ordinance) over highway crossings at M.P. SD204.0	25
M.P. SD205.0	25
M.P. SD205.4	25
M.P. SD205.9	25
M.P. SD207.8	25
Speed restriction over crossings at Kirksville will have been complied with when leading end occupies crossing at M.P. SD207.8 for westward movement, and crossing at M.P. SD204.0 for eastward movement.	
Between: Queen City, M.P. SD219.0, and Coatesville, M.P. SD234.0	25
Coatesville, M.P. SD234.0, and Moulton, M.P. SD242.0	40
M.P. SD242.0 and M.P. SD246.0	20
To ensure proper operation of automatic warning devices, speed must not exceed 35 MPH in approach (1,500 feet) to the highway crossings listed below. Speed restriction will have been complied with when leading end of movement occupies crossing.	
Cairo, M.P. SD154.54 Atlanta, M.P. SD183.85	
Excello, M.P. SD163.41 LaPlata, M.P. SD190.99	
Atlanta, M.P. SD182.44 Kirksville, M.P. SD201.75	
Queen City, M.P. SD220.43	
Thomas Hill Lead, between Excello and Thomas Hill Power Plant	10
Between: M.P. SD246, Moulton, and Albia-BN, M.P. SD272.4	40
Except, between home signals of interlocking at Moravia, M.P. SD260.6	20
Albia-BN, M.P. SD272.4, and Wabash Jct., M.P. SD337.3	35
Except: Between M.P. SD270.6 and M.P. SD271.3	25
Between M.P. SD271.3 and highway crossing No. 5, one-half mile west of Albia-BN	10
Between M.P. SD7.0 BN and M.P. SD10.5 BN	25
Between M.P. SD283.8 to M.P. SD291.4	25
Between M.P. SD291.4 and M.P. SD294.34	40

9-b. SPEED RESTRICTIONS BY DISTRICT (Cont'd.)

LOCATIONS AND CONDITIONS	Miles Per Hour All Trains and Engines
(10) MOULTON/DES MOINES DISTRICT (Cont'd):	
Between M.P. SD23.3 BN and M.P. SD23.7 BN*	25
Between M.P. SD31.5 BN and M.P. SD35 BN	25
Between M.P. SD318.8 and M.P. SD332.8	25
* Speed limit signs in place.	
Between M.P. SD333.0 and M.P. SD336.9	30
Between M.P. SD336.9 and M.P. DU354.7	10
TURNOUTS:	
Through all turnouts	10

9c. CHECKING LOCOMOTIVE SPEED INDICATOR

Tests for accuracy will be made at the following locations and Engineers will adjust speed in accordance with any inaccuracy.

WESTWARD/SOUTHWARD

EASTWARD/NORTHWARD

Lafayette District

M.P. D205 to M.P. D206	M.P. D369 to M.P. D368
M.P. D212 to M.P. D213	
M.P. D225 to M.P. D226	M.P. D361 to M.P. D360
M.P. D269 to M.P. D270	

Frankfort Branch District

M.P. SP242 to M.P. SP243

Bloomington District

M.P. C116 to M.P. C117	M.P. C150 to M.P. C149
M.P. SP398 to M.P. SP397	M.P. SP344 to M.P. SP345

Brooklyn District

M.P. D391 to M.P. D392	M.P. D473 to M.P. D472
M.P. D409 to M.P. D410	

Springfield/Hannibal District

M.P. DH386 to M.P. DH387	M.P. H63 to M.P. H62
M.P. DH395 to M.P. DH396	M.P. DH504 to M.P. DH503
M.P. DH425 to M.P. DH426	M.P. DH402 to M.P. DH401
M.P. H13 to M.P. H14	

St. Louis District

M.P. S140 to M.P. S139	M.P. S28 to M.P. S29
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Kansas City District

M.P. S158 to M.P. S159	M.P. S259 to M.P. S258
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Moulton/Des Moines District

M.P. SD330 to M.P. SD329	M.P. SD157 to M.P. SD158
M.P. SD239 to M.P. SD238	M.P. SD247 to M.P. SD248

NOTE: Tests for accuracy will be made at other locations when necessary. Engineers operating in outlying local freight or branch line service will choose location appropriate for making tests to check speed indicators.

TABLE FOR DETERMINING TRAIN SPEEDS

Sec. Miles per Mile	Miles per Hour	Sec. Miles per Mile	Miles per Hour	Sec. Miles per Mile	Miles per Hour	Sec. Miles per Mile	Miles per Hour
45	80.0	61	59.0	84	42.9	116	31.0
46	78.3	62	58.1	86	41.9	118	30.5
47	76.6	63	57.1	88	40.9	120	30.0
48	75.0	64	56.3	90	40.0	122	29.5
49	73.5	65	55.4	92	39.1	124	29.0
50	72.0	66	54.5	94	38.3	126	28.6
51	70.6	67	53.7	96	37.5	128	28.1
52	69.2	68	52.9	98	36.7	130	27.7
53	67.9	69	52.2	100	36.0	135	26.7
54	66.7	70	51.4	102	35.3	140	25.7
55	65.5	72	50.0	104	34.6	145	24.8
56	64.3	74	48.6	106	34.0	150	24.0
57	63.2	76	47.4	108	33.3	180	20.0
58	62.1	78	46.2	110	32.7	240	15.0
59	61.0	80	45.0	112	32.1	360	10.0
60	60.0	82	43.9	114	31.6	720	5.0

10a. DIESEL UNIT RATING IN TONS

D8-40C	C30-7	D8-32B	B30-7A	B36-7	GP40X	GP49	B23-7
SD50		GP50	GP38				
SD60		GP59	GP40				
C36-7		GP60	U23B				
C39-8	SD40						

WEST OR SOUTHBOUND				
Peru-Tilton	4700	3500	2800	2100
Tilton-Decatur	6800	5000	4000	3000
Decatur-Bluffs	5200	3800	3100	2300
Bluffs-Moberly	3600	2700	2400	1800
Moberly-Brunswick	5300	3991	3533	2650
Brunswick-Kansas City	7200	5300	4300	3200
Peoria-Gibson City	3700	2775	2466	1850
Chicago-Decatur	6000	4500	4000	3000
Decatur-SH Tower	8000	6000	5333	4000
SH Tower-Luther	6200	4650	4133	3100
Luther-Moberly	4300	3200	2500	1900
Frankfort-Lafayette	6800	5000	4000	3000
Coffeen-SH Tower	5000	3750	3325	2500
EAST OR NORTHBOUND				
Kansas City-Brunswick	7200	5300	4300	3200
Brunswick-Moberly	6300	4725	4200	3150
Moberly-Decatur	4700	3525	3133	2350
Decatur-Rockfield	6500	4875	4333	3250
Rockfield-Peru	8600	6450	5733	4300
Moberly-Luther	5300	3991	3533	2650
Luther-SH Tower	3600	2700	2400	1800
SH Tower-Litchfield	6400	4800	4266	3200
Litchfield-Decatur	7200	5300	4300	3200
Decatur-Chicago	7600	5700	5066	3800
Gibson City-Peoria	4700	3525	3133	2350
Lafayette-Frankfort	4700	3525	3133	2350
SH Tower-Coffeen	4500	3300	2700	2250

These ratings are based on maximum grades and can be increased over certain parts of the line, when necessary. When engines will not handle their rating, a report must be made to the Chief Dispatcher by the Engineer. Conductor will make written report to Trainmaster.

Note: In making computations, less than 1,000 pounds will be dropped. 1,000 pounds will be counted a ton.

Note: A GP-40 and slug combination is rated at 90,500 lbs. maximum continuous traction effort and will be rated the same as a standard 6-axle unit (SD40-2, C30-7) when used in road service.

10b. NORFOLK SOUTHERN SYSTEM LOCOMOTIVES SERIES TABLE

ROAD NOS.	MODEL	ROAD NOS.	MODEL
50-59	SD9M	** 4606-4641	GP59
67-83	SW1500	5000-5256	GP38-2
100-104	TC10	6073-6206	SD40-2
115-116	F40PH	* 6500-6505	SD50
1002-1012	SW1	** 6506-6525	SD50
1209	SW12	** 6550-6700	SD60
1329-1388	GP40	** 7000-7002	GP40X
1580-1624	SD40	** 7003-7092	GP50
1625-1652	SD40-2	** 7101-7150	GP60
1733	SW1500	8003-8082	C30-7
2105	SW1	* 8500-8542	C36-7
2290-2347	SW1500	* 8550-8563	C39-8
2348-2435	MP15	** 8564-8688	C39-8
** 2501-2506	SD70	** 8689-8763	D8-40C
2717-2822	GP38	9710-9713	RP-E4
2823-2878	GP38AC	9714-9741	RP-E4D
2879-2886	GP38	9816-9817	RP-F4
3170-3200	SD40	9818	RP-B4U
3201-3328	SD40-2	9819-9827	RP-F4U
** 3500-3521	B30-7A	9830-9831	RP-B4
** 3522-3566	D8-32B	9833	RP-B4U
* 3815-3820	B36-7	9834	RP-E4U
3900-3969	U23B	9835-9841	RP-A4U
3970-4023	B23-7	9842-9855	RP-E4U
4100-4159	GP38AC	9900-9919	RP-F6Y
** 4600-4605	GP49	9920-9923	RP-E6Y

* — High Adhesion

— High Capacity Dynamic Brake

10c. HIGH ADHESION UNITS AND MIXED CONSIST FORMULA

Head End Power Limitations are the equivalent of 20 conventional axles in power or 18 conventional axles in dynamic brake:

IN POWER

1 — High Adhesion Axle = 1.33 Conventional Axles

1 — 6-Axle High Adhesion Unit = 8.00 Conventional Axles

1 — 4-Axle High Adhesion Unit = 5.33 Conventional Axles

IN DYNAMIC BRAKE

1 — High Capacity Axle = 1.35 Conventional Axles

10d. TABLE OF MAXIMUM TRAIN LENGTHS

When ambient temperature is 34° or less, train length should not exceed that indicated below.

TRAINS WITH HEAD END BRAKE PIPE SUPPLY ONLY

Ambient Temp. °F	*Maximum Train Length Based on 50-foot Cars	
	Cars	Feet
32° to 34°	200	10,000
29° to 31°	185	9,250
26° to 28°	175	8,750
20° to 25°	160	8,000
15° to 19°	150	7,500
10° to 14°	140	7,000
5° to 9°	130	6,500
0° to 4°	120	6,000
-1° to -5°	110	5,500
-6° to -10°	100	5,000
-11° to -15°	90	4,500
-16° to -25°	80	4,000

*Long cars such as bi-level, tri-level, TTX, or high cube cars are to be counted as two (50-foot) cars. Radio trains may be increased

50% over the number of cars prescribed above, and in no case are radio trains to be restricted to less than 9,350 feet account temperature.

11. LOAD LIMITS AND EQUIPMENT RESTRICTIONS

a. Locomotives — Instructions and Restrictions

1. Engineers operating multiple unit engine consist equipped with MU hose must have the MU hose coupled and cut in service.

2. During switching moves with multiple unit engine consist, the independent brake must be applied gradually to a safe level to control slack run in or run out for the prevention of damage to equipment. After the slack is bunched or stretched throughout the cars being handled, a heavier application of the independent brake make be made to complete the stop.

3. All units of radio operated empty coal trains must be on head end of train and in accordance with Rule R-304 of NS-1. The lead unit and the first unit behind the Radio Control Car must be on line. All other units will be shut down in accordance with Rule L-238 of NS-1 unless tagged by Mechanical Department to not shut engine down. Radio continuity must be maintained and feed valve on radio unit must be maintained in the "Out" position.

4. Air brakes are not to be cut out on Radio control mid train power (not radio receiver car) by air bleeders or other employees when bleeding air on train in yards.

Additionally, hostlers and yard crews, when operating such locomotive units, are to make brake test prior to moving locomotive units from trains, set out track or other locations.

5. Employees setting up radio units and radio receiver cars on radio trains must see that all windows and doors on radio units are closed before train departs terminal, in compliance with Operating Rule GR-18.

6. When picking up a locomotive at an outlying point, a crew member will see that the switch lock, that is used to lock the engine, is left with a station employee at that location or in the waybill receptacle at that station.

7. When a locomotive is set out at an outlying point, including on line of road, a 27-point jumper cable must be left with the locomotive or at that location.

8. When locomotives are to be separated, angle cocks must not be closed and MU hoses must not be uncoupled until the folding walkway boards are properly secured and pinned in the upright position and the safety chains between the units to be separated are properly disconnected and secured.

9. If it is necessary to add oil to a locomotive air compressor, governor, or engine crankcase at any outlying point where a Mechanical Department representative is not present, the employee who is to add the oil must first check with the Mechanical Department.

b. Diesel Unit and Car Restrictions

The weight of diesel units and cars is limited as follows:

GROSS WEIGHT IN POUNDS

Between	UNIT		LOADED CAR	
	4-AXLE	6-AXLE	4-AXLE	6-AXLE
Peru & Decatur	(e) 291,000	(d) 420,000	263,000 (b) 286,000 (c) 315,000	394,500
Peoria & Bement	291,000	(d) 420,000	263,000 (b) 286,000 (c) 315,000	394,500
Decatur & E. St. Louis	(e) 291,000	(d)(e) 420,000	263,000 (b) 286,000 (c) 315,000	394,500
Decatur & Bridge	(c)(g) 291,000	(d)(e) 420,000	(f) 263,000 (b)(f) 286,000 (c)(f) 315,000	(k) 394,000

11. LOAD LIMITS AND EQUIPMENT RESTRICTIONS (Cont'd)

b. Diesel Unit and Car Restrictions (Cont'd)

The weight of diesel units and cars is limited as follows:

GROSS WEIGHT IN POUNDS

Between	UNIT		LOADED CAR	
	4-AXLE	6-AXLE	4-AXLE	6-AXLE
Madison & Coffeen	291,000	(d) 420,000	(h) 263,000 263,000 (b) 286,000 (c) 315,000	(h) 300,000
Frankfort & Lafayette	291,000	(d) 420,000	263,000 (b) 286,000 (c) 315,000	394,500
St. Louis & Moberly	(e) (i)(k) 291,000	(d)(e) (g)(i)(k) 420,000	(b) 263,000 286,000 (c) 315,000	394,500
Moberly & Kansas City	(e) (g)(i) 291,000	(d)(i) 420,000	263,000 (b) 286,000 (c) 315,000	394,500
Moberly to Des Moines	(c) 291,000	(d)(e) 420,000	263,000	300,000
Bridge & Hannibal	(c) 291,000	(d)(e) 420,000	270,000	(j) 315,000
Hannibal & Moberly	(e) 291,000	(d)(e) 420,000	263,000 (b) 286,000 (c) 315,000	394,000
Bluffs & Meridosia	291,000	Prohibited	263,000	300,000
Alton & Roxana	291,000	(d) 420,000	263,000 (b) 286,000 (c) 315,000	394,500
IT Jct. & Bridge Jct.	291,000	(d) 420,000	263,000 (b) 286,000 (c) 315,000	394,500

EXCEPTIONS TO WEIGHT RESTRICTIONS

Cars with gross weight exceeding the limitations shown in the foregoing must not be operated without authority of the Superintendent.

When authorized by the Mechanical Department, 6-axle tank cars up to 394,000 lbs., and 8-axle tank cars up to 526,000 lbs. may be handled where the maximum allowable weight is 263,000 lbs. or greater.

THE ABOVE EXCEPTION DOES NOT APPLY FOR MOVEMENT OVER BRIDGE 651, M.P. DH514.47, HANNIBAL.

(a) NOT USED.

(b) Loaded 4-axle cars weighing not more than 286,000 lbs. may be handled at the weight shown in the table provided their coupled length, truck centers and axle spacing are not less than the following:
 Coupled Length.....37'-7"
 Truck Centers.....25'-3"
 Axle Spacing in Trucks.....5'-8"

These cars must not be operated over open deck trestles on side or industrial tracks, except where authorized.

(c) Loaded 4-wheel cars weighing not more than 315,000 lbs. may be handled at the weight shown in the table provided their coupled length, truck centers and axle spacing are not less than the following:
 Coupled Length.....49'-0"
 Truck Centers.....36'-8"
 Axle Spacing in Trucks.....6'-0"

These cars must not be operated over open deck trestles on side or industrial tracks, except where authorized.

(d) 6-axle units prohibited

1. **Lafayette District**

- a. Covington Branch
- b. Lafayette Belt Line - Union Street East
- c. Tilton
 - East Wye Track
 - Tats Track

2. **Brooklyn District**

- a. Staunton
 - Livingston Pipe, O/M

3. **Frankfort Branch**

- a. Frito Lay
- b. Sun chemical
- c. Crellin
- d. Vicks Metal
- e. Forest Products
- f. Industrial Lead, Lafayette
- g. Tracks 3 and 4, Altamont

4. **Springfield/Hannibal District**

- a. Starne
 - J & A Track beyond ITS switch
- b. Springfield
 - All Industrial Tracks
- c. Valley City
 - Watson Track
- d. Meredosia Branch
- e. Illiopolis
 - Borden Co. Tracks 1, 2, 3 & 4
- f. Jacksonville
 - Team Tracks

5. **Bloomington District**

- a. Bloomington
 - SSWN Connection Track
 - Union Camp Track

6. **St. Louis District**

- a. St. Charles
 - Old Downtown Track
- b. St. Peters
 - Kaplan Lumber Track
 - Elevator Track
- c. O'Fallon
 - Industrial Lead Tracks
- d. New Florence
 - Fertilizer Spur
- e. Mexico
 - A.P. Green Ind. Tracks
- f. Berkley
 - East Swamp Lead
 - Olin Lead
 - Robertson Wye
 - Chrysler Lead at Brown Campus
 - Westlake Lead
- g. Truesdale
 - Pepsi Spur

7. **Kansas City District**

- a. Salisbury
 - All Industrial Tracks
- b. Wakenda
 - House Track
- c. Carrolton
 - House and Elevator Tracks

Note: Equipment greater than 60' not permitted.
- d. Norborne
 - Turnouts on Elevator Tracks
- e. Hardin
 - Yard Tracks, Hardin Yard
- f. Orrick
 - House and Elevator Tracks
- g. South Liberty
 - House and Industrial Tracks
- h. Brunswick
 - River Terminal, inside switch
 - West End of 3 through Rip Tracks
 - North Side Elevator Track

8. **Moulton and Des Moines District**

- a. All side tracks and leads EXCEPT:
 - (1) LaPlata Transfer
 - (2) West End of Moulton Siding
 - (3) Appanouse Siding
 - (4) Passing Track Runnels may be used, except 6-axle units must not pass over either north or south elevator switch, which are both located on the Passing Track.

9. **Des Moines Union Terminal**

- a. All tracks EXCEPT:
 - (1) Main Line
 - (2) South Track
 - (3) South Fuel Track
 - (4) Middle Track
 - (5) 11th Street Yard Tracks 4, 5, 6, 7, 8, and 9
 - (6) East Side of Wye Track

10. **Madison Branch**

- a. Stallings
 - Siding
- b. LeClaire
 - House Track
- c. Edwardsville
 - Richards Brick
- d. New Douglas
 - Siding
- e. Gilmore
 - Richards Brick

11. **A&E District**

- a. CNW Madison Yd.
 - EME Steel
- b. Brooklyn
 - Packards By-Products

12. **T&E District**

- a. Hartford
 - Wildes Yard Tracks 3 & 4
 - Hartford 1 and 2
 - Anlin Lead
- b. Wood River
 - Dome Railway Services
 - Amoco
 - Shell Oil Main Plant
- c. Roxana

(e) Only one unit allowed

1. **Brooklyn District**

- a. Taylorville
 - ADM
- b. Litchfield
 - Elev. Spur, beyond scale
- c. Mt. Olive
 - House Track
 - No. 15 Mine Spur

2. **Springfield/Hannibal District**

- a. Starne
 - J & A Track beyond ITS switch
- b. Springfield
 - All Industrial Tracks
- c. Hannibal
 - Resnick Industrial Track

3. **St. Louis District**

- a. St. Charles
 - Old Downtown Track
- b. High Hill
 - Christi Mineral Spur
- c. New Florence
 - Fertilizer Spur
- d. Mexico
 - A. P. Green Ind. Tracks

Note: Does not include TK Lead back to Bridge.

4. **Kansas City District**

- a. Salisbury
 - All Industrial Tracks

5. **Moulton and Des Moines District**

- a. Macon
 - Stock Track
- b. Kirksville
 - Burroughs Track
- c. McCoy
 - Williams Brothers Lead
 - Armstrong Rubber, all tracks

(f) 250,000 lbs. maximum gross weight

1. **Springfield/Hannibal District**

- a. Starne
 - J & A Track beyond ITS switch

(g) No more than two units allowed

1. **Springfield/Hannibal District**

- a. Valley City
 - Watson Track

(h) If not handled over bridge listed below, cars may be handled with increased weights restricted by the following: 4-axle cars weighing not more than 286,000 lbs. may be handled if they meet the length criteria of note (b); 4-axle cars weighing not

more than 315,000 lbs. may be handled if they meet the length criteria of note (c); 6-axle cars weighing not more than 394,500 lbs.

1. Madison Branch

a. Bridge, M.P. TS404.34

(i) Not allowed beyond sign

1. St. Louis District

a. Truesdale - Warrenton Refining Plant Tracks

2. Kansas City District

a. Missouri City - N.W. Elec. Coop

(j) 6-axle or 8-axle cars with gross weight of car and lading not exceeding 394,500 lbs. may be handled over Bridge 651, M.P. DH514.47, Hannibal. Cars must be separated from locomotive and from each other by at least one light car.

Cars with gross weight exceeding 394,500 lbs must not be handled over Bridge 651 without authority from Vice President Transportation.

(k) 287,000 maximum gross weight

1. Springfield/Hannibal District

a. Starne - J & A Track beyond ITS switch

c. DERRICKS

Derricks are grouped as follows:

GROUP 1: SOU 903002, 12, 13, 14, 16 and 26 (250-ton RB)

GROUP 2: NW 514900, 23, 24 and 25, NW 540037, NW 563188 and 89 (200/250-ton PB)

GROUP 3: SOU 903011, 15, 18, 23 and 24 (150-ton RB)

1. General Restrictions:

(a) Derricks must not be operated coupled to engine or car weighing more than 90,000 lbs.

(b) For line-of-road movement:

1. Derrick must be handled on head end of train with the required spacer car next to the engine.
2. Boom must be in trailing position except when in use or when the derrick is to be picked up on line by other trains where facilities for turning are not available.
3. Must have swinging or rotating mechanism properly secured.

(c) Derricks must not be operated over structures on industrial tracks without specific authority.

(d) Derrick speed shall not exceed the slowest of the following:

1. Authorized freight train speed.
2. Group 1 Derricks, 45 MPH; Group 2 Derricks 35 MPH; Group 3 Derricks 25 MPH.
3. Speed restriction for line or structure over which derrick is handled.

(e) When work train movements are being made with the equipment in service, particular care must be taken to avoid contact with overhead or side obstructions.

2. Special Restrictions:

Derricks may be handled except as listed below:

(a) Meredosia Branch

1. 200 ton can be handled. 240-250 ton derricks must not be handled.
2. 75 ton can be handled. 150-160 ton derricks can be handled, but must not exceed 10 MPH.

c. DERRICKS (Cont'd)

(b) Des Moines District - between Tracy and Des Moines

1. 200 ton can be handled. 240-250 ton derricks can be handled but must not exceed 15 MPH.
2. 150-160 ton derricks must not exceed 20 MPH.

d. LOCOMOTIVE CRANES/DERRICK CARS/PILE DRIVERS

SOU 903093 (DC-3), SOU 992312 (LC-35), NW 500504 (LC-4803), SOU 992340 (LC-8201), NW 514892 (LC-8501), and SOU 992412 (LC-89036)

1. Must not exceed 25 MPH.
2. May be operated on all main and passing tracks.
3. Locomotive cranes, derrick cars and derrick cars with attached boom idler cars, must not be moved over humps or through retarders when being operated under derrick's own power. Retarders must not be set up while such equipment is in the retarders.
4. Pile drivers must not be moved through the retarders under any circumstances due to insufficient clearance. When pile drivers are placed in one of the classification tracks, they must be handled in the same manner as explosive cars.
5. While working, care must be taken to avoid contact with overhead or side obstructions.

e. JORDAN SPREADERS

1. While working, care must be taken to avoid contact with overhead or side obstructions.
2. Movement in trains
 - (a) Must not exceed 40 MPH.
 - (b) Must be handled next ahead of caboose or on rear of train with "B" end trailing so that side spreaders, hinged near the "A" end of the car are in trailing position.
 - (c) Must have swinging or rotating mechanism properly secured.
3. Movement in yards
 - (a) Must not be moved through retarders due to insufficient clearance
 - (b) Must be handled in the same manner as explosive cars when placed in a classification track.

f. SNOW PLOW - NW 590000

1. When plowing:
Except where further restricted, must not exceed 25 MPH.
2. When being moved to a location to begin plowing:
No restrictions apply.
3. Other movements:
Handle within rear five cars of a train.

g. SCALE TEST CARS

1. Two-axle Scale Test Cars: SOU 992501, SOU 992506, SOU 992507, SOU 992508, SOU 992511, NW 514754, MPX 192, MPX 194, MPX 195, MPX 1034, MPX 1900, UP 903145, WWBX 911000, and MKT 77:
 - (a) Must move only on authority of Chief Dispatcher.
 - (b) Must be handled as second car ahead of rear car of train or caboose.
 - (c) Must not be coupled to a car exceeding 50' - 0'' in length.
 - (d) Must not exceed 30 MPH.
 - (e) Must not be humped.

g. SCALE TEST CARS (Cont'd)

- Four-axle scale test cars: SOU 992550, SOU 992551, SOU 992552, NW 514757, NW 514758, NW 514759, NW 514760, NW 514762, NW 514763, MP 15507, MP 15510, MP 15511, MP 15512, UP 900700, UP 903006, WWBX 199917, WWBX 199918, WWBX 199919 must not be humped. If four axle scale test cars are destined to a hump yard, they should be moved as the head or rear car or in an established "Do Not Hump" block.
- Scale Monitor Cars SOU 992520 through SOU 992529 and NW 514761 have no special restrictions.

h. SCHNABEL AND HIGH CAPACITY FLAT CARS

(1) Restrictions for "schnabel" and other high capacity flat cars having eight (8) axles or more:

- (a) Except where further restricted, speed must not exceed that indicated below:

Speed restrictions	Loaded	Empty
8 to 15 axle cars	45 MPH	None
Except as listed below		
16 or more axles, also APWX 1004 (12 axle but excluding CEBX 800	25 MPH	45 MPH
36 axle CEBX 800	15 MPH	25 MPH

- (b) APWX 1004 (12 axle) and all cars having sixteen (16) or more axles must be handled in a special train of no more than ten (10) cars when loaded.
- (c) Loaded cars having twelve (12) or more axles, when not moving in a special train, must be handled at the head end of a train, and train length must not exceed 100 cars. Loaded cars must be accompanied by sufficient cars that can be used as brake cars in the event it becomes necessary to set such load out between terminals and when securing car in yards, terminals, or sidings.
- (d) In addition to the above restrictions, the cars listed below must not be placed in trains requiring pusher service, must not be humped, or flat switched with motive power detached, and when moving empty must be handled on rear end of train, properly locked, secured, and switching moves kept to a minimum.

NO. CAR IDENTITY AND AXLES	NO. CAR IDENTITY AND AXLES
APWX 1004 12	GEX 80000 16
BBCX 1000 20	GEX 80002 16
CAPX 1001 20	GEX 80003 20
CEBX 100 12	GPIX 100 12
CEBX 101 12	HEPX 200 20
CEBX 800 36	KWUX 10 20
CPOX 820 20	ABWX 20002 12
CWEX 1016 12	WECX 101 20
DODX 39898 8	WECX 102 22
DODX 39899 8	PTDX 200 12
GEX 711 12	PTDX 201 14
GEX 40013 12	PTDX 202 20
GEX 40017 12	PTDX 203 14
GEX 40018 12	PTDX 204 12
	WECX 301 22

- (e) Cars with ten (10) axles or more, either loaded or empty must not be forwarded in a train without permission of the Division Superintendent.
- Transformers, rotors, circuit breakers, or similar electrical equipment with net weight exceeding 200,000 lbs., loaded

on well, depressed, or flat car must be handled on or near the head end of trains, except on locals. When these loads are designated to move on locals or high-wide specials, they will be positioned as instructed by Control Center.

- Loads with waybill having "high value" sticker, transformers, rotors, circuit breakers, or similar electrical equipment loaded on well, depressed or flat cars will not be humped or permitted to roll free. Instead, they will be shoved to a coupling with motive power attached. Cars being coupled to such equipment will be handled in the same manner.

i. EXCESSIVE DIMENSION EQUIPMENT

Before handling cars exceeding Plate "B" on tracks other than main tracks or sidings, it must be determined that adequate clearance exists.

- Plate "B", "C", "E" and "F" freight cars.
Freight cars stenciled "C", "E" and "F" and unstenciled general service equipment having dimensions within Plate "B" may be handled on all main tracks and sidings of the Illinois Division.
- Plate "F+" or "Exceeds Plate F" freight cars.
Movement of cars exceeding 17'-0" or stenciled "F+" or "Exceeds Plate F" must be cleared by Chief Dispatcher, except as otherwise noted herein.
- Fully enclosed auto rack cars.
Fully enclosed auto rack cars (exceeding Plate "F" but not exceeding 19'-0" above top of rail) may be handled on all main tracks and sidings of the Illinois Division.
- Double stack cars.
Double stack cars not exceeding 20'-3" above top of rail (two 9'-6" high x 8'6" wide containers) may only be handled on main tracks and sidings between:
Peru and Moberly
St. Louis and Kansas City
Decatur and WR Tower
Frankfort and Lafayette
East Peoria and Bement
Multi-level auto racks with initials TTQX are excessive dimension cars (20' 2" high, loaded or empty) and must be handled in accordance with high-wide clearance message only.

J. EXCESSIVE CURVATURE

Long (73 ft. or more) cars may be handled on main and passing tracks without restrictions account curvature and grade.

The following instructions apply to movement on tracks other than main and passing tracks.

- Long cars must not be handled through No. 6 turnouts.
- Long cars moving over tracks having a curvature in excess of 12 degrees 30 minutes must be coupled on each end to cars not shorter than 50 ft. If curvature is in excess of 15 degrees, or turnouts are No. 7, the movement must be accomplished under observation at slow speed.
- Long cars must not be handled on curves exceeding 17 degrees.

K. OTHER EQUIPMENT RESTRICTIONS

1. Trailing tonnage must be limited on line segments as shown below, behind the following equipment:

- Empty auto multi-level cars.
- Empty intermodal single platform flats or such cars loaded with empty trailers or containers.
- Empty 85-foot long or longer flat cars and such flat cars when loaded with empty trailers or containers or loaded with only one trailer or container.

k. OTHER EQUIPMENT RESTRICTIONS (Cont'd)

- (d) Empty intermodal single axle truck flat cars or such cars loaded with empty trailers or containers.

Between	Maximum Safe Trailing Tonnage
Frankfort Branch	
Frankfort and East Demun	10,000 tons
East and West Demun through Connecting Track	10,000 tons
Bloomington District	
P&PU Jct. and Gibson City	4,500 tons

These instructions do not apply to radio trains or to a flat car loaded with more than one trailer or container, one of which is loaded.

2. Single or multiple unit double stack cars, articulated single platform (SPINE) cars, drawbar connected rapid discharge cars, and any articulated or permanently coupled cars loaded or empty must not be humped or flat switched with motive power detached except to a clear track. Double stack cars must not be moved over hump retarders unless it is known there is proper clearance.

Whenever practical, articulated cars and cars with slackless drawbars should be placed ahead of cars with conventional draft gears, which in turn should be placed ahead of cars with end-of-car cushion units.

Trains handling any of the aforementioned equipment must not be pushed with more than the equivalent of twelve conventional (non-high adhesion) powered axles. High adhesion axles are equivalent to one and one-third conventional axles.

3. Loaded traction motor cars in series SOU 911802 - 911815 and NW 520100 - 520111 must not be humped except when they are humped to a clear track.

4. **Blocks of Empty Cars** - Blocks of 30 or more empty cars must be handled on the rear of trains whenever practicable.

Blocks of Heavy Cars - Blocks of 30 or more loaded cars of coal, grain, phosphate, rock, sand, sulphur or similar bulk commodities must be handled on the head of trains next behind locomotives, whenever practicable.

5. Crews must not pull or switch covered or open-top hoppers with hopper doors open.

Top hatches and bottom outlets on open-top hoppers and covered hoppers are to be closed by the customer prior to pulling car.

6. Any open type car where lading may shift and fall to tracks surface (such as loaded regular flats, gondolas loaded above sides or ends) must not be used as rear car of any train being operated without a caboose.

7. Loaded cars refused by consignee must not be pulled until all doors have been properly closed and sealed.

8. Cars equipped with plug doors will not be moved from industrial tracks or out of yards with doors open. **DOORS MUST BE CLOSED AND LATCHED.**

9. Poles or similar loads on flat car or in open-top equipment loaded above ends of cars must not be handled in trains next to placarded tank cars or open shipments subject to damage by shifting loads on adjacent cars.

k. OTHER EQUIPMENT RESTRICTIONS (Cont'd)

10. A crane or other machine equipped with a boom, even if boom is detached, loaded on open top car or moving on its own wheels must not be handled in trains unless the boom end is trailing except that it may be handled in local freight and work trains with boom forward when properly anchored. (Exception: Machines, including cranes and military equipment, loaded on open top car may be handled in any train with boom or rotating part forward provided that it is properly anchored with visible securement and does not overhang the end of the car.)

11. Cars equipped with chain tie-down devices must not be moved unless chains are properly secured.

Cars with bands improperly secured are not to be moved.

12. Jet Snow Blowers loaded on the flat cars shown below must not be humped or flat switched with motive power detached:

Snow Blower No.	Loaded ON
SB 6702-JN	NW 527602
SB 7901-JN	NW 590349
SB 7902-JN	NW 590332
SB 7903-JN	NW 590330
SB 7904-JN	NW 590344
SB 8001-JN	NW 590341

13. SOU 900096 and similar cars used to handle coal for steam locomotives must be shoved to rest while being switched.

14. Loaded roller bearing equipped cars having a mixture of pedestal-type side frames and converted box-type side frames found moving on Norfolk Southern must be handled within the head ten cars of the train and must be observed frequently enroute for the possibility of an overheated journal.

As explanation, a roller bearing in a pedestal-type side frame is exposed to the direct view of a defective equipment detector, as compared to a converted box-type side frame where the roller bearing is shielded by the box, like a plain bearing.

Mechanical Department personnel have been alerted to notify yardmasters of the presence of these cars. Other concerned employees must be on the lookout for loaded cars with mixed side frames, most especially train crews when adding cars to their train at an outlying point, including interchange points. When such equipment is encountered, the yardmaster, dispatcher, or other proper authority must be promptly notified.

It will be necessary when handling a loaded car with mixed side frames to inform the adjacent Division when the car is moving in a train towards that Division.

15. Loaded multilevel cars must not be placed for movement in trains behind open top hopper cars or gondolas loaded with stone gravel, sand, lime, coal, or soda ash, except when separated by 10 buffer cars.

16. Center partition lumber cars, foreign or system, must not be moved when cars are partially unloaded. These cars must not be pulled from industry or moved without the tie down cables being secured. Loading and unloading instructions, along with warnings not to move car without cables secured, are stenciled on these cars at several locations. System cars are in series SOU 118300 through SOU 118335 and NS 120000 through NS 120249.

k. OTHER EQUIPMENT RESTRICTIONS (Cont'd)

17. NW 525032 and NW 527212 may be handled in all freight trains on NS without restrictions. This includes movement in rail-highway trains at maximum authorized rail-highway or passenger train speeds, not to exceed 60 MPH.

In yard operations, the following restrictions will apply:

- (a) Must not be humped.
- (b) Must not be switched with motive power detached.
- (c) Couple to this car with no more force than necessary to make coupling.

18. All cars handled in rail-highway trains must be equipped with roller bearings. No exceptions.

Rail-highway trains will not handle cars containing LP Gas.

Rail-highway trains (200 series trains, excluding Triple Crown) must handle only intermodal and multilevel cars.

19. Movement of wreck-damaged or disabled rail cars, or parts of such cars loaded on flat cars or in open-top cars, when lading extends above or beyond the car sides, must be confined to locals, shifters, work, or wreck trains, unless authorization for movement in other trains is secured from Transportation Department Clearance Bureau for each individual car.

Before such equipment is handled in any train, it must be inspected by a Mechanical Department employee who will authorize its movement and designate any speed restriction required for its safe handling.

20. When switching or coupling cuts of cars, coupling must be done to prevent mismatched couples.

Cars will not be cut off to roll free against other cars if one or both cars involved in the coupling are on curved track or in a turnout. At any time a coupling is attempted with any equipment on curved track or in a turnout, a member of the crew will be at the point of coupling and will stop the movement short of coupling. The couplers will be aligned when necessary to prevent mismatched couplers before the coupling is completed.

21. Empty OTTX flat cars originating at non-mechanized stations or to be placed in trains at outlying points will be handled on rear of trains.

Empty OTTX flat cars not equipped with the approved end-of-car cushion units will be restricted to rear of trains and will be identified in the following manner.

Car initials will be indicated on advance train consist as OTT (instead of OTTX) with a message to "run on rear only." In the TIPS yard inventory list, under the heading "hand", the handling indicator will show "OTTX."

22. End doors must be closed and secured on enclosed multi-level cars before they are moved.

23. Oversize shipments must not be left on any track adjacent to the main track or sidings unless authorized by the Chief Dispatcher.

24. Crews handling loaded pulpwood cars must inspect the cars to determine if any of the loads are excessive width before meeting or passing passenger trains and high and wide shipments.

Inspection of pulpwood cars must be done sufficiently ahead of the arrival of passenger trains to avoid unnecessary delay.

k. OTHER EQUIPMENT RESTRICTIONS (Cont'd)

A train handling pulpwood must be stopped while passenger train is being met or is passing on adjacent track, except when passenger train is first to arrive at meeting point, train handling pulpwood may pass passenger train at slow speed provided inspection of pulpwood can be made and train stopped short of passenger train if and when excessive dimension loads are detected.

Passenger train will meet or pass standing train handling pulpwood on adjacent track at reduced speed unless notified that train has been inspected and there are no excessive dimension loads of pulpwood in train being met or passed.

When notified that train being met or passed has been inspected and there are no excessive dimension loads of pulpwood in train being met or passed, passenger train may run at maximum authorized speed.

Load must be balanced before switching partially loaded woodrack cars.

25. The equipment listed below must not be placed and handled in a train immediately behind an occupied locomotive unit or immediately ahead of an occupied caboose.

Open end flat cars loaded with poles, pipe, lumber, or similar lading which might shift and protrude beyond the car ends;

Open-top cars or bulkhead flats loaded with similar lading that extends above the car ends or beyond the car sides; or

Flat bed or stake-body trailers loaded with similar lading when the open end is toward the locomotive or caboose or when the lading extends above the end toward the locomotive or caboose.

26. TURNOUT CARS

The following turnout car sets are **not to be separated when in transit, loaded or empty**. In the event of one car being bad ordered, both cars must be set off until repairs are made. If the cars are bad ordered because of mechanical problems, the Master Mechanics Office of that division must notify the Atlanta Track Assembly in Atlanta, Ga.

Set Numbers: (2 cars per set)

SOU 991001 - 991021	SOU 991007 - 991027
SOU 991002 - 991022	SOU 991008 - 991028
SOU 991003 - 991023	SOU 991009 - 991029
SOU 991004 - 991024	SOU 991010 - 991030
SOU 991005 - 991025	SOU 991011 - 991031
SOU 991006 - 991026	

27. Welded Rail Trains and Associated Equipment:

Two loaded rail trains, or one loaded and one empty rail train, may be handled as one movement. When loaded and empty rail trains are handled together, the empty train must be on the rear.

Empty rail trains may now be handled on the rear of revenue freight trains, excluding those designated as corporate trains. Should pusher service be required, the pusher must be placed ahead of the empty rail equipment.

Rail Laying, T&S, and associated equipment may be handled on a loaded rail train, but must be handled on the rear end only.

Rail trains are permanently coupled together by having the approved locking device inserted in the uncoupling lever mechanism and secured with a bolt. These cars are not to be separated, and in the event of a bad order car, the entire train must be set off until repairs are made.

k. OTHER EQUIPMENT RESTRICTIONS (Cont'd)

In the event of bad ordering any rail train and associated equipment the Chief Dispatcher must notify Rail Welding Plant in Atlanta, Ga.

Crew members taking charge of a loaded welded rail train will inspect it to determine that the uncoupling lever mechanism locks are in place on each car before train is moved, except when relieving a crew that has previously handled the train, or when notified by the proper authority that the securement between the cars has been checked. This paragraph does not apply to a rail train originating in Atlanta, Ga.

Loaded rail trains must not be originated from any crew change point without first being inspected and approved for movement by Maintenance of Way forces.

Rail trains and associated equipment must not be handled without air on the trains and all other NS Rules applying to train air brakes and services apply when handling these trains.

In addition, the following **thirteen groups of cars**, coupled together and equipped to pick up and to unload strands of welded or bolted rail, **are not to be separated** account of possible damage to the hydraulic hose connection between these cars:

NW 516813, 516814, 516815, and 516816
NW 516975, 516976, 516977, and 516978
NW 517007, 517008, 517009, and 517010
NW 517037, 517038, 517039, and 517043
SOU 991636, 991639, 991634, and 992997
SOU 991534, 991535, 991536, and 992998
SOU 991734, 991735, 991736, and 992999
SOU 992834, 992835, 992836, and 992990
SOU 992936, 992935, and 992934
SOU 992984, 992985, and 992986
NW 527956 and NW 527957
NW 517041 and NW 517042
NW 527986 and NW 527909

12. PASSENGER TRAIN NOTES

Not applicable to Illinois Division. Passenger trains operated over former Forrest District are under supervision of Chicago Terminal.

13. PHYSICIANS' DIRECTORY

P. R. Petrich, GP Attica, IN
B. J. Rodriguez, GP Barry, IL
M. I. Alperin, IM Belleville, IL
P. M. Auner, FP Belleville, IL
T. L. Bryan, IM Belleville, IL
W. G. Doubek, GS Belleville, IL
K. O. Green, OPH Belleville, IL
D. L. Jerome, OTO Belleville, IL
E. J. Szewczyk, OPH Belleville, IL
C. W. Carlson, GP Bussey, IA
G. G. Sloan, FP Carrier Mills, IL
D. L. Kampschmidt, FP Carrollton, MO
M. A. Junidi, GS/FP Centralia, IL
E. F. Stephens, Jr., GS Centralia, IL
J. A. Diaz, GS Collinsville, IL
M. R. Ochoa, GS Danville, IL
S. P. Paruchuri, IM Danville, IL
M. Ravace, IM Danville, IL
R. Stein, FP Danville, IL
E. Beyda, IM Decatur, IL
D. J. Fletcher, OM Decatur, IL
P. Gowdar, FP Decatur, IL

13. PHYSICIANS' DIRECTORY (Cont'd)

L. S. Webster, EM Decatur, IL
M. J. Zia, PUD Decatur, IL
H. Rosen, FP Des Moines, IA
S. W. Konarski, FP Fairfield, IL
A. R. Marks, GP Fairfield, IL
D. A. Blum, IM Ferguson, MO
C. Tansuwan, IM Ferguson, MO
C. E. Bush, Jr., GP Frankfort, IN
L. G. Schachter, GP Frankfort, IN
S. D. Tharp, IM Frankfort, IN
S. Supawanich, GS Gibson City, IL
A. Ahmad, IM Granite City, IL
I. A. Jatala, P Granite City, IL
L. R. Jones, FP Harrisburg, IL
W. D. Tuttle, GS Harrisburg, IL
J. E. Hinchey, GP Jacksonville, IL
T. R. Anderson, OM Lafayette, IN
R. C. Bolin, GP Lafayette, IN
R. T. Gripe, FP Lafayette, IN
R. L. Mather, OPH Lafayette, IN
E. L. VanBuskirk, OPH Lafayette, IN
T. H. Hendren, GS Liberty, MO
J. R. Waltz, GS Liberty, MO
R. F. Sommer, FP Litchfield, IL
J. E. Campbell, FP Macon, MO
R. L. Morgan, ORS Marion, IL
G. D. Comfort, FP Mexico, MO
G. R. Deves, FP Montgomery, MO
T. A. Aguilera, GS Moberly, MO
R. L. Bautista, GS Moberly, MO
M. M. Daly, FP Moberly, MO
J. A. Dasovich, IM Moberly, MO
J. A. Duff, IM Moberly, MO
D. A. Fleming, IM Moberly, MO
G. W. LaMonda, IM Moberly, MO
L. K. Noel, GP Moberly, MO
R. V. Thompson, GS Moberly, MO
W. B. Gill, FP Normal, IL
D. C. Boone, OM N. Kansas City, MO
R. D. Hedges, FP N. Kansas City, MO
G. R. McNamara, ORS N. Kansas City, MO
G. H. Woy, ORS N. Kansas City, MO
D. F. Werner, FP N. Kansas City, MO
D. A. Lewis, GP Paris, MO
C. R. Warbritton, GP Paris, MO
R. L. Johnson, FP Pittsfield, IL
H. C. Parkhill, GP Pontiac, IL
D. D. Pressley, FP Salisbury, MO
G. D. Quinn, FP Salisbury, MO
M. Koeck, FP Sidney, IL
J. G. Meyer, GS Springfield, IL
F. VanHagen, GS Springfield, IL
T. A. Schneider, GS St. Charles, MO
V. H. Balster, OM St. Louis, MO
W. Berner, OM St. Louis, MO
C. F. Dennison, OM St. Louis, MO
J. H. Krickbaum, OM St. Louis, MO
R. C. Lehman, ORS St. Louis, MO
H. B. Rogers, GP St. Louis, MO
E. Shaw, OM St. Louis, MO
W. A. Stillings, PSY St. Louis, MO
A. C. Umbright, OM St. Louis, MO

13. PHYSICIANS' DIRECTORY (Cont'd)

S. J. Wayne, ORS St. Louis, MO
 P. H. Young, NS St. Louis, MO
 T. Delvalle, FP Taylorville, IL
 C. A. Nelson, GP West Lebanon, IN
 J. R. Beckmeyer, GP Wright City, MO

KEY TO PHYSICIANS' DIRECTORY SPECIALTY CODES

A Allergy	NR Nuclear Radiology
ABS Abdominal Surgery	NS Neurological Surgery
ADL Adolescent Medicine	NTR Nutrition
AI Allergy and Immunology	OBG Obstetrics and Gynecology
AM Aerospace Medicine	OBS Obstetrics
AN Anesthesiology	OM Occupational Medicine
BE Broncho-Esophagology	ON Oncology
BLB Bloodbanking	OPH Ophthalmology
CD Cardiovascular Diseases	ORS Orthopedic Surgery
CDS Cardiovascular Surgery	OS Other, i.e., Physician designated a speciality other than appearing here.
CHN Child Neurology	OT Otolaryngology
CHP Child Psychiatry	OTO Otolaryngology
CLP Clinical Pathology	P Psychiatry
CRS Colon and Rectal Surgery	PA Clinical Pharmacology
D Dermatology	PD Pediatrics
DIA Diabetes	PDA Pediatric Allergy
DMP Dermatopathology	PDC Pediatric Cardiology
DR Diagnostic Radiology	PDE Pediatric Endocrinology
EM Emergency Medicine	PDR Pediatric Radiology
END Endocrinology	PDS Pediatric Surgery
FOP Forensic Pathology	PH Public Health
FP Family Practice	PHO Pediatric Hematology—Oncology
GE Gastroenterology	PM Physical Medicine and Rehabilitation
GER Geriatrics	PNP Pediatric Nephrology
GP General Practice	PS Plastic Surgery
GPM General Preventive Med.	PSF Facial Plastic Surgery
GS General Surgery	PTH Pathology
GYN Gynecology	PUD Pulmonary Diseases
HEM Hematology	PYA Psychoanalysis
HNS Head & Neck Surgery	PYM Psychosomatic Medicine
HS Hand Surgery	R Radiology
HYP Hypnosis	RHI Rhinology
ID Infectious Diseases	RHU Rheumatology
IG Immunology	RIP Radioisotopic Pathology
IM Internal Medicine	TR Therapeutic Radiology
LAR Laryngology	TRS Traumatic Surgery
LM Legal Medicine	TS Thoracic Surgery
MFS Maxillofacial Surgery	U Urological Surgery
N Neurology	VS Vascular Surgery
NA Neuropathology	
ND Neoplastic Diseases	
NEP Nephrology	
NM Nuclear Medicine	
NPM Neonatal-Perinatal Medicine	

14. AUTHORIZED WATCHES

Watches Authorized for use under Rule 2 are:

POCKET WATCHES

BALL

16 Size Official Railroad Standard - 21 Jewel
 16 Size Official Railroad Standard - 23 Jewel

BULOVA

Quartz Model

ELGIN

16 Size B. W. Raymond - 21 Jewel
 16 Size B. W. Raymond - 23 Jewel

HAMILTON

16 Size Model 992 - 21 Jewel
 16 Size Model 950 - 23 Jewel

HOWARD

16 Size Howard Model - 21 Jewel
 16 Size Howard Model - 23 Jewel

ILLINOIS

16 Size Bunn Special - 21 Jewel
 16 Size Bunn Special - 23 Jewel
 16 Size Sangamo Special - 23 Jewel

WALTHAM

16 Size Crescent Street Model - 21 Jewel
 16 Size Vanguard Model - 23 Jewel

WRIST WATCHES

ACCUTRON

Railroad Approved
 Railroad Approved - Calendar Model
 Railroad Approved - Quartz Model
 Railroad Approved - Ladies Quartz Model

BALL

Official Railroad Standard
 Automatic Trainmaster

BULOVA

Railroad Approved - Quartz

CITIZEN

Railroad Approved - Quartz Model

ELGIN

B. W. Raymond Chronometer Model - 21 Jewel

HAMILTON

Electric Railroad Special
 Electric - Model 910917, White

PULSAR

Railroad Approved - Quartz Model

RODANIA

Quartz - Model 9361

SEIKO

Railroad Approved - Quartz Model

SPEIDEL

Railroad Approved - Quartz Model

WYLER

Railroad Approved - Incafex Model

15. ASSIGNMENT OF AGENTS AND OPERATORS

STATIONS	WEEKDAYS	SATURDAY	SUNDAY
Lafayette District			
Lafayette, IN	7:00 am-4:00 pm	7:00 am-4:00 pm	Closed
Tilton, IL	8:00 am-5:00 pm	7:00 am-4:00 pm	Closed
Decatur, IL	8:00 am-9:00 pm	8:00 am-5:00 pm	Closed
Bloomington District			
Bloomington, IL	Continuous	7:00 am-11:00 pm	7:00 am-11:00 pm
Bloomington, IL (SPCSL)	Continuous	Continuous	Continuous
Peoria, IL (P&PU)	Continuous	Continuous	Continuous
Brooklyn District			
Luther, MO	Continuous	Continuous	Continuous
Springfield/Hannibal District			
Springfield, IL	8:00 am-5:00 pm	5:00 am-5:00 pm	7:00 am-4:00 pm
Isles, IL	Continuous	Continuous	Continuous
Naples, IL	7:00 am-6:00 pm	7:00 am-3:30 pm	Closed
Hannibal, MO	Continuous	Continuous	Continuous
St. Louis District			
Berkeley, MO	Continuous	Continuous	Continuous
Kansas City District			
Moberly, MO	Continuous	Continuous	Continuous
Kansas City, MO (KN)	Continuous	Continuous	Continuous
Moulton/Des Moines District			
Des Moines, IA	Continuous Except 2nd Shift Thur. & Fri.	10:30 pm-7:00 am	10:30 pm-7:00 am

16. COMMUNICATION & SIGNAL INFORMATION

a. Instructions for handling Electric Switch Locks.

1. G.R.S. Electric Locks

The locking mechanism is located in a metal housing on a post adjacent to the switch stand and is connected by means of a lock rod to the switch points. Release of the locks is automatic for trains entering the switches from the main track. For trains or engines moving from the siding or spur track to the main track after clearing the main track, a predetermined release time is required before the lock and switch can be operated.

- (a) For movement from main track to siding or spur track:
 1. Stop engine or cars just ahead of switch points.
 2. Open door of lock housing which has a standard switch lock.
 3. Lift lock lever until it rests against stop in 45 degree position. When indicator clears or moves to the unlock position, complete the movement of lock lever to the extreme left hand position. This unlocks the switch and it can be operated the same as any other hand thrown switch.

16. COMMUNICATION & SIGNAL INFORMATION (Cont'd)

- (b) For movements from siding or spur track to the main track:
 1. Secure permission from the control station to operate the electric lock and enter the main track. The switch must be unlocked and thrown before the derail or inside crossover switch is operated.
 2. Lift lock lever until it rests against stop in 45 degree position. Immediately or after predetermined time interval has expired, indicator should show "clear" or "unlock" and switch can be unlocked by completing the movement of the lock lever to the extreme left hand position.
- (c) For movements using controlled electric locks:
 1. Proceed as above after obtaining release from control station.
- (d) After a movement into or out of the switch has been completed and the hand lever of switch returned to normal position, the crank handle in the lock housing must be restored to the right hand or normal position and the door on the lock housing closed and locked.

An emergency release is provided in the lock housing for use in case of trouble or if the electric lock fails to operate promptly. To operate the emergency release, after obtaining permission from control station, break seal and move emergency lever to release position, then operate in the usual manner. When emergency release is operated to enter main track from a spur, Rule 404 must be observed. If emergency release is operated, notify control station immediately as signals will remain in stop position until mechanism has been reset by signal maintainer.

2. US&S Electric Locks

One type of locking mechanism is located in a metal housing on a post adjacent to the switch stand and is connected by means of a lock rod to the switch point and is actuated by operating handle. The second type of locking mechanism locks the operating lever of switch and is actuated by a foot pedal. The release of the locks is automatic for train entering the switches from the main track.

- (a) For movement from main track to siding or spur track:
 1. Stop engine or cars just ahead of switch points.
 2. Actuate operating handle or foot pedal to unlock position. This unlocks the switch and it can be operated the same as any other hand throw switch.
- (b) For movement from siding or spur track to the main track:
 1. Secure permission from the control station to operate the electric lock and enter main track. The switch must be unlocked and thrown before the derail or inside crossover switch is operated.
 2. Actuate operating handle or foot pedal to request unlock of switch. Immediately or after predetermined time interval has expired the switch is unlocked and it can be operated the same as any other hand throw switch.
- (c) For movements using controlled electric locks:
 1. Proceed as above after obtaining release from control station.
- (d) When movement over switch is completed, return handles and padlocks to normal position.

When an emergency release is provided in the lock housing for use in case of trouble or if the electric lock fails to operate properly, advise and secure authority from control station to break the seal, insert switch key and turn to release electric lock, then switch may be lined and movement made. When emergency release is operated to enter main track from a spur, Rule 404 must be observed.

16. COMMUNICATION & SIGNAL INFORMATION (Cont'd)

If electric lock is not equipped with emergency release seal, communicate with control station for instructions.

16b. DETECTORS

1. Location of Detectors

Location	Mile Post	Type	Radio Acknowledgement Point	
			East/North	West/South
Lafayette District				
New Waverly	D209.5	TSA	D207	D213
Clymers	D225.5	TSA	D223	D229
Delphi	D240.9	TSA	D238	D244
East Yard	D250.5	TSA	D248	D254
Flint	D268.8	TSA	D266	D272
Williamsport	D280.4	TSA	D277	D283
State Line	D295.0	TSA	D292	D298
Catlin	D309.3	TSA	D306	D312
Sidney	D325.9	TSA	D323	D329
Sadorus	D343.2	TSA	D340	D346
Milmine	D359.5	TSA	D357	D363
Bloomington Dist.				
Foosland	C120.8	TSA	C118	C124
Lodge	C139.3	TSA	C136	C142
Brooklyn District				
Blue Mound	D387.7	SAD	D385	D391
Willey's	D397.4	SAD	D394	D400
Clarksdale	D409.4	SAD	D406	D412
Harvel	D419.2	SAD	D416	D422
Honey Bend	D431.0	SAD	D428	D434
Mt. Olive	D443.3	SAD	D440	D446
Worden	D454.5	SAD	D452	D458
Edwardsville	D465.8	SAD	D463	D469
Granite City	D477.7	SAD	D475	D481
Springfield Hannibal District				
Niantic	DH388.1	TSA	DH385	DH401
Riverton	DH407.2	TSA	DH404	DH410
Curran	DH423.1	TSA	DH420	DH426
Alexander	DH437.6	TSA	DH435	DH441
Markham	DH453.2	TSA	DH450	DH456
Bluffs	DH467.5	TSA	DH465	DH470
New Salem	DH485.2	TSA	DH482	DH488
Barry	DH499	TSA	DH496	DH502
Hull	DH506.3	TSA	DH503	DH509
Rensselaer	H9	TSA	H6	H12
Clapper	H26.7	TSA	H24	H30
Paris	H43.9	TSA	H41	H47
Madison	H56.5	TSA	H54	H59
St. Louis District				
Robertson	S19	SAD	S22	S16
St. Peters	S27.1	SAD	S30	S24
O'Fallon	S37.5	SAD	S40	S35
Wentzville	S45.4	SAD	S48	S42
Wright City	S53.9	SAD	S57	S51
Warrenton	S63.0	SAD	S66	S60
Jonesburg	S71.5	SAD	S74	S69
Montgomery	S83.0	SAD	S86	S80
Martinsburg	S95.1	SAD	S98	S92
Mexico	S106.8	SAD	S110	S104

16b. DETECTORS (Cont'd)

1. Location of Detectors

Location	Mile Post	Type	Radio Acknowledgement Point	
			East/North	West/South
St. Louis District (Cont'd)				
Thompson	S118.2	SAD	S121	S115
Centralia	S129.1	SAD	S132	S126
Renick	S140.2	SAD	S143	S127
Kansas City District				
Clifton	S165.0	TSA	S162	S168
Dalton	S179.5	TSA	S177	S183
Miami	S195.6	TSA	S193	S199
Carrollton	S208.5	TSA	S206	S212
Hardin	S226.0	TSA	S223	S229
South Track				
Camden	S239.8	TSA	S237	S243
South Track				
Missouri City	S258.0	TSA	S255	S261

TSA = Track Side Analyzer

SAD = Stand Alone Detector

SADD = Stand Alone Dragging Equipment Detector

2. INSTRUCTIONS FOR DETECTORS

a. TRACK SIDE ANALYZERS (TSA)

TSA make automatic analysis of train condition by monitoring hot journals and dragging equipment, followed by an automatic radio transmission concerning same.

- When approaching, passing, or departing TSA location, crew members must be alert for TSA radio transmission (on road frequency for the territory). When in the vicinity of TSA locations, all employees must keep radio transmissions to an absolute minimum to avoid interference with TSA radio messages.
- When a train is occupying a TSA and a defect has been detected, an automatic radio transmission as shown in example (a) or (b) below will occur:
 - A "TONE" will indicate that a hot bearing has been detected and, after rear has cleared TSA, train must be stopped for inspection. When rear has cleared TSA, a radio message will be transmitted twice to indicate nature of defect and its location in train. The location will be given by axle count, counting from the first axle in the locomotive consist. TSA will identify track to which message is applicable in double track territory.
 - When an excessively hot journal or dragging equipment has been detected, a radio message stating "CRITICAL ALARM" will be transmitted at once and train must be stopped for inspection as soon as possible, consistent with safe train handling procedures. When TSA has stopped analyzing the train (this will occur when train clears TSA, when train is stopped on TSA, or when train speed over TSA drops below 8 MPH), a radio message will be transmitted twice to indicate nature of defect and its location in train. The location will be given by axle count counting from the first axle in the locomotive consist. TSA will identify track to which message is applicable (in double track territory).

Note: When inspection is required by either (a) or (b) above, a thorough inspection will be made of both sides of car(s) indicated as being defective. If no apparent defects are found, five cars on either side of designated car(s) will be thoroughly inspected on both sides. After a defect message has been received, if train is stopped

while occupying TSA, or if train speed over TSA drops below 8 MPH, all cars following the last car indicated as being defective must be inspected. While enroute to and from either end of train to car(s) to be inspected, crew members will, when practicable and safe to do so, make a visual inspection of both sides of train. All defect messages, including nature of defect and its location in train, must be acknowledged to the Dispatcher. Dispatcher must be notified of results of inspection, even if no trouble is located.

3. When no defects have been indicated, and one of the following conditions exist, a visual inspection must be made of both sides of train by crew member(s) on the ground, unless a visual inspection of both sides of train can or is to be made by other employees located in the near vicinity:

- Train stops on TSA;
- Train speed over TSA drops below 8 MPH;
- Train is operated over a track which causes it to by-pass a TSA it normally would pass over.

EXCEPTION: If the dispatcher has positive knowledge that a proper reading was obtained for all or a portion of the train, he will instruct crew members to inspect only the portion for which a proper reading was not obtained.

4. When no defects have been detected, the exit radio message will be: "NS TSA, mile post location, and identification of track to which message is applicable (in double track territory), followed by axle count of the train and message "NO DEFECTS". When a "NO DEFECTS" message has been received, it will not be necessary to acknowledge same to the dispatcher. Operating Rules 506 and 609 are modified accordingly.

NOTE: If "NO DEFECTS" message has not been received from either TSA or dispatcher before passing the designated radio acknowledgment point, train must be stopped and dispatcher contacted for further instructions. If dispatcher cannot be contacted, entire train must be inspected in accordance with Item 4.

5. When a TSA reports "Analyzer Failure" to a train crew, the train must be stopped and inspected. If any message other than "Analyzer Failure" is transmitted to a train, and the crew does not understand the message, the CRT in Dispatcher's Office may be used to determine if train needs inspected.

When notified that a defect has been detected that requires stopping for inspection before yarding train, stop must be made promptly and inspection of indicated car(s) made in accordance with noted Item 3.

6. If radio message "Train too slow from axle (XXX)" is received, the train must be inspected from the identified axle to end of train in accordance with Item 4.

b. Stand Alone Detectors (SAD)

SAD makes automatic analysis of train condition by monitoring hot journals and dragging equipment, followed by an automatic radio transmission concerning same.

1. When approaching, passing, or departing SAD location, crew members must be alert for SAD radio transmission (on road frequency for the territory). When in the vicinity of SAD locations, all employees must keep radio transmissions to an absolute minimum to avoid interference with SAD radio messages.
2. When a train is occupying a SAD and a defect has been detected, an automatic radio transmission as shown in example (a) or (b) below will occur:
 - (a) A "TONE" will indicate that a hot bearing has been detected and, after rear has cleared SAD, train must be stopped

for inspection. When rear has cleared SAD, a radio message will be transmitted twice to indicate nature of defect and its location in train. The location will be given by axle count, counting from the first axle in the locomotive consist. SAD will identify track to which message is applicable in double track territory.

- (b) When SAD has stopped analyzing the train (this will occur when train clears SAD, when train is stopped on SAD, or when train speed over SAD drops below 8 MPH), a radio message will be transmitted twice to indicate nature of defect and its location in train. The location will be given by axle count counting from the first axle in the locomotive consist. SAD will identify track to which message is applicable (in double track territory).

NOTE: When inspection is required by either (a) or (b) above, a thorough inspection will be made of both sides of car(s) indicated as being defective. If no apparent defects are found, five cars on either side of designated car(s) will be thoroughly inspected on both sides. After a defect message has been received, if train is stopped while occupying SAD, or if train speed over SAD drops below 8 MPH, all cars following the last car indicated as being defective must be inspected. While enroute to and from either end of train to car(s) to be inspected, crew members will, when practicable and safe to do so, make a visual inspection of both sides of train. All defect messages, including nature of defect and its location in train, must be acknowledged to the Dispatcher. Dispatcher must be notified of results of inspection, even if no trouble is located.

3. When no defects have been indicated, and one of the following conditions exist, a visual inspection must be made of both sides of train by crew member(s) on the ground, unless a visual inspection of both sides of train can or is to be made by other employees located in the near vicinity:

- Train stops on SAD;
- Train speed over SAD drops below 8 MPH;
- Train is operated over a track which causes it to by-pass a SAD it normally would pass over.

EXCEPTION: If the dispatcher has positive knowledge that a proper reading was obtained for all or a portion of the train, he will instruct crew members to inspect only the portion for which a proper reading was not obtained.

4. When no defects have been detected, the exit radio message will be: "NS SAD, mile post location, and identification of track to which message is applicable (in double track territory), followed by axle count of the train and message "NO DEFECTS". When a "NO DEFECTS" message has been received, it will not be necessary to acknowledge same to the dispatcher. Operating Rules 506 and 609 are modified accordingly.

NOTE: If "NO DEFECTS" message has not been received from SAD before passing the radio acknowledgment point, train must be stopped and dispatcher contacted for further instructions. If dispatcher cannot be contacted, entire train must be inspected in accordance with Item 4.

5. When a SAD reports "Detector Malfunction" to a train crew, the train must be stopped and inspected. If any message other than "Detector Malfunction" is transmitted to a train, and the crew does not understand the message, contact the dispatcher for further instructions.

When notified that a defect has been detected that requires stopping for inspection before yarding train, stop must be made promptly and inspection of indicated car(s) made in accordance with noted Item 3.

If a detector announces "NO DEFECTS, CALL MAINTAINER," the crew should notify the Chief Dispatcher immediately for further handling. The train should not be stopped.

6. If radio message "Train too slow from axle (XXX)" is received, the train must be inspected from the identified axle to end of train in accordance with Item 4.

**c. Stand Alone Dragging Equipment Detectors
(Voice Radio Alarm Only)**

Springfield-Hannibal District, M.P. DH514.2 and M.P. DH514.6

When the voice radio alarm is activated at a detector, the train must be stopped promptly for inspection. The dispatcher must be advised of the stop and results of inspection and corrections made. Train crews receiving messages transmitted from voice radio alarms located at defect detector sites will stop their train only if their trains are actually passing the detector identified on the radio or if the rear of their train is within 1/2 mile of the detector after having passed it.

When a train is stopped for dragging equipment indication, the following information must be given to the dispatcher as quickly as radio communication can be established.

1. Car number.
2. Type of dragging equipment found.
3. Type of car.
4. Loaded or empty.
5. Disposition of car.

This information must be furnished each time train is stopped.

16c. ALL CHANNEL RADIOS

The following table lists designated AAR channels when using "All Channel" radios:

FREQUENCY	AAR (TX) TRANSMIT CHANNEL	AAR (RX) RECEIVE CHANNEL
SOU 1-Road	56	56
SOU 2-Dispatcher	48	09
NW 1	72	72
NW 2	76	76
NW 3	22	22
CSX 1-Road	84	84
CSX 2-Dispatcher	94	94
CSX 3-Road	32	32
CSX 4-Road	66	66
Claycomo Terminal	18	18
CNW Road	62	62
CNW Yard	14	14

When operating on other railroads, it will be necessary to consult the governing foreign line timetable or special instructions to ascertain the AAR transmit and receive channels for that road.

Transmitting on unauthorized channels is a violation of Federal Law, and is prohibited.

To contact the dispatcher, the proper "DTMF" signal code must be dialed in by using the "TONE" selector knob and then depressing the "DISP" selector button. The following conversion table shows the "DTMF" code to be used:

ACOUSTIC ACCESS CODE	DTMF CODE
1	2
2	5
3	8
4	0

**16d. LOCATION OF DISPATCHER-CONTROLLED
RADIO BASE STATIONS**

Location	Frequency	Accousti- couple Access Code	DTMF Code	Hours
Lafayette District				
Peru, IN	NW 3	3	8	Continuous
Clymers, IN	NW 3	3	8	Continuous
Lafayette, IN	NW 3	3	8	Continuous
Williamsport, IN	NW 3	3	8	Continuous
Tilton, IL	NW 3	3	8	Continuous
Philo, IL	NW 3	3	8	Continuous
Bement, IL	NW 3	3	8	Continuous
Decatur, IL	NW 3	3	8	Continuous
Frankfort Branch				
Frankfort, IN	NW 3	3	8	Continuous
Bloomington District				
Peoria, IL	NW 3	3	8	Continuous
Bloomington, IL	NW 3	3	8	Continuous
Gibson City, IL	NW 3	3	8	Continuous
Bement, IL	NW 3	3	8	Continuous
Brooklyn District				
Decatur, IL	NW 3	1	2	Continuous
Mt. Auburn, IL	NW 3	1	2	Continuous
Greenwood, IL	NW 3	1	2	Continuous
Litchfield, IL	NW 3	1	2	Continuous
Carpenter, IL	NW 3	1	2	Continuous
St. Louis, MO	NW 3	1	2	Continuous
Springfield/Hannibal District				
Decatur, IL	NW 3	1	2	Continuous
Mt Auburn, IL	NW 3	1	2	Continuous
Springfield, IL	NW 3	1	2	Continuous
Arnold, IL	NW 3	1	2	Continuous
Bluffs, IL	NW 3	1	2	Continuous
Baylis, IL	NW 3	1	2	Continuous
Hannibal, MO	NW 3	1	2	Continuous
Hannibal, MO	NW 3	2	5	Continuous
Clapper, MO	NW 3	2	5	Continuous
Moberly, MO	NW 3	2	5	Continuous
St. Louis District				
St. Louis, MO	NW 3	1	2	Continuous
Wentzville, MO	NW 3	1	2	Continuous
New Florence, MO	NW 3	1	2	Continuous
Mexico, MO	NW 3	1	2	Continuous
Moberly, MO	NW 3	1	2	Continuous
Kansas City District				
Moberly, MO	NW 3	1	2	Continuous
Dalton, MO	NW 3	1	2	Continuous
Carrollton, MO	NW 3	1	2	Continuous
Carrollton, MO (ATSF)	NW 3	3	8	Continuous
Camden, MO	NW 3	1	2	Continuous
Kansas City, MO	NW 3	1	2	Continuous

All road trains will use the road channel (NW 3) to communicate with Claycomo yardmaster, operator at North Kansas City, and operator to BN-Ustick Tower. Yard crews will use the road channel (NW 3) to communicate with BN-Ustick channel.

When use of DTMF code or Acousticouple Access code is required, field personnel will receive an answer back tone after the calling signal tone is sent, but they will not be able to communicate with the dispatcher until he answers their call.

EMERGENCY CALL-IN FEATURE

After transmitting access signal tone, press "O" if using DTMF Code, or "4" if using Accousticouple Access Code, within ten seconds an answer back tone will be heard in the field, enabling the dispatcher to monitor all radio transmission on the channel being used.

16e. LOCATION OF WAYSIDE RADIO BASE STATIONS

LOCATION	FREQUENCY	HOURS
Lafayette District		
Lafayette, IN (East Yard)	NW 2 & NW 3	Continuous
Tilton, IL	NW 2 & NW 3	Continuous
Decatur, IL	NW 2 & NW 3	Continuous
Frankfort Branch		
Lafayette, IN (South Yard)	NW 2 & NW 3	Continuous
Bloomington District		
Bloomington, IL	NW 3	See Sect. 15
Springfield/Hannibal District		
Springfield, IL	NW 3	Continuous
Valley City, IL	NW 3	Continuous
Hannibal, MO	NW 3	Continuous
St. Louis District		
St. Louis, MO	NW 2 & NW 3	Continuous
Berkeley, MO	NW 2 & NW 3	Continuous
Wentzville, Mo	NW 3	Continuous
Kansas City District		
Moberly, MO	NW 2 & NW 3	Continuous
Kansas City, MO	NW 2 & NW 3	Continuous
Claycomo, MO	Claycomo	Continuous
Moulton/Des Moines District		
Des Moines, IA	NW 3	See Sect. 15

17. HAZARDOUS MATERIALS

A. GENERAL INSTRUCTIONS

1. Compliance with the Code of Federal Hazardous Materials Regulations (49 CFR) of the U.S. Department of Transportation (found in the current edition of the AAR Bureau of Explosives Tariff BOE-6000 Series), and Norfolk Southern's special rules for handling hazardous materials, is required of all employees of Norfolk Southern Railway Company. References to specific sections of the 49 CFR included in the BOE Tariff are enclosed in brackets, for example [174.24].

2. A carrier must forward each shipment of hazardous materials promptly and within 48 hours (Saturdays, Sundays, and holidays excluded) after acceptance at the originating point, except that where biweekly or weekly service only is performed, a shipment of hazardous materials must be forwarded on the first available train [174.14].

3. Definitions of terms for these instructions are listed in 49 CFR Section 171.8. For technical interpretations on these instructions call Hazardous Materials Management in Roanoke at 7-981-3762 or (703)-981-3762; or in Atlanta at 7-529-2242 or (404)-529-2242.

B. SWITCHING OF PLACARDED CARS:

1. Every employee involved in the switching of hazardous materials cars, both on line of road and in yards, must be familiar with and be governed by the instructions contained in the "Hazardous Materials Switching Chart" found in the back of the timetable [174.82-174.83].

17. HAZARDOUS MATERIALS (Cont'd)

2. When switching loaded placarded tank cars, or switching cars that will couple to loaded placarded tank cars, maximum reasonable efforts must be made to achieve couplings at speeds not to exceed 4 MPH.

3. Employees must position themselves at least fifteen (15) feet, and more if possible, from the manway and valves prior to coupling. Contents of tank cars may splash during or immediately following coupling due to improperly secured closures.

4. Persons having access to waybills or shipping instructions must see that concerned employees are notified when hazardous materials are to be handled.

5. Cars placarded "EXPLOSIVES", "FLAMMABLE GAS", or "FLAMMABLE" must not be left on any track unless track is free from combustible material such as dead grass and weeds.

C. TRAIN PLACEMENT OF PLACARDED CARS:

1. Every employee involved in the positioning in train of hazardous materials cars, must be familiar with and be governed by the instructions contained in the "Hazardous Materials Position in Train Chart" found in the back of the timetable [174.82-174.85].

2. The "Hazardous Materials Position in Train Chart" will also apply to yard movements on a main track if the intended movement will exceed one mile.

3. At the commencement of each trip, the conductor or competent crew member directed by the conductor must inspect the six head cars behind the engine and the six rear cars ahead of an occupied caboose to ascertain that placarded hazardous material cars are properly positioned. This will not be required at a terminal when relieving an NS crew, and the train has remained intact.

4. The train crew must have a document (consist, wheel report, or hazardous materials list) indicating the position in train of each loaded placarded car containing hazardous materials, except when the position is changed or the placarded car is placed in the train by a crew member of the train (See Operating Rule 573), [174.26(b)].

5. At each terminal or other place where trains are made up or switched by crews other than the outbound train crew, the outbound train and engine crew must receive a consecutively numbered notice (NS FORM 11562) indicating the position in the train of each car placarded Division 1.1 or 1.2 (Class A Explosives), Division 2.3 Hazard Zone A (Poison Gases), or Division 6.1 PG I Hazard Zone A (Poison). These placards will be mounted on white square background for ease of identification. (See Operating Rule 573), [174.26(a) & 172.510].

6. When loaded cars containing hazardous materials are picked up on line of road and there is no agent or clerical force on duty, the train dispatcher or other appropriate authority (trainmaster, yardmasters, and operators as applicable), must be notified that pick-up includes hazardous materials.

7. An "empty/residue" tank car placarded as in Group 2 on the Train Placement Chart, can be handled in the same manner specified for an "empty/residue" tank car placarded as in Group 4 on the train placement chart.

D. KEY TRAINS:

1. The definition of a "KEY TRAIN" is:

- Any train handling five (5) or more carloads of POISON INHALATION HAZARD (Hazard Zone A or B) gases or liquids;

- OR -

- Any train handling any combination of twenty (20) or more carloads, including intermodal portable tank loads, of:
 - (a) POISON INHALATION HAZARD (Hazard Zone A or B) gases or liquids;
 - (b) Division 1.1 or 1.2 (Class A Explosives);

17. HAZARDOUS MATERIALS (Cont'd)

- (c) Division 2.1 (Flammable Gas); or
 - (d) Environmentally Sensitive Chemicals
- A commodity designated as a Poison Inhalation Hazard "PIH" will be identified by the "Poison Inhalation Hazard" or "Inhalation Hazard" notation on waybill or shipping document. The same notation will be stenciled in 4-inch letters on each side of tank cars containing "PIH" materials.
- Division 1.1 or 1.2 (Class A Explosives) and/or Division 2.1 (Flammable Gas) commodities will be identified by the corresponding placard, or the Hazard Class on the waybill or shipping document.
- Environmentally Sensitive Chemicals can be identified by the chemical name or commodity code on the following list:

List of Environmentally Sensitive Chemicals

1. Allyl Chloride (4907412)
2. Carbon Tetrachloride (4940320/4921830/4921831)
3. Chlorobenzene (4909153)
4. Chloroform (4940310/4940311/4921767/4921769)
5. Dichlorobenzene (4941127/4921869)
6. Dichloropropane (4909269)
7. Dichloropropane/Dichloropropene mixture (4907640)
8. Dichloropropene (4909255)
9. Ethyl chloride (4908162)
10. Ethylene Dibromide - (Also PIH) (4921497)
11. Ethylene Dibromide and Methyl Bromide Mixtures - (Also PIH) (4921438)
12. Ethylene Dichloride (4909166)
13. Epichlorohydrin (4907420/4921005)
14. Methyl Chloroform (4941176/4921848)
15. Methylene Chloride (4941132/4921735)
16. Perchloroethylene (4940355/4921868)
17. Perchloroethylene/Trichloroethylene mixture (4940373)
18. Trichloroethylene (4941171/4921847)

NOTE: Yard movements on a main track will also be governed by the definition and operating requirements of **KEY TRAINS** if the intended movement will exceed one mile.

2. **KEY TRAINS** will be identified at certain locations on train consist copy, but at all locations conductor will be responsible for examining waybills to ascertain whether or not hazardous materials cars in train meet **KEY TRAIN** criteria. Conductor will promptly notify the dispatcher, or the appropriate authority for notification purposes (trainmasters, yardmasters, and operators as applicable) who in turn will notify the dispatcher, if the train or yard movement is to be designated as a **KEY TRAIN**.

3. In addition to the above, yard clerical forces handling outbound trains at train makeup or intermediate terminals must notify the dispatcher or the appropriate authority for notification purposes, if a train is to be designated as a **KEY TRAIN**. This notification should be made as soon as possible and may be made by telephone, or by entering information directly into the Computer Aided Dispatching system where this capability is available. In the event the computer is down, or if not equipped to determine this information by computer, a review of waybills must be made to determine **KEY TRAIN** status.

4. If train sets out or picks up loaded hazardous materials cars on line of road, and set-out or pick-up changes **KEY TRAIN** status, conductor will promptly notify dispatcher. The positions of the hazardous materials cars picked up will be recorded by the conductor on his consist.

17. HAZARDOUS MATERIALS (Cont'd)

5. The following **RESTRICTIONS** must be observed for movement of **KEY TRAINS**:

- (a) Maximum authorized speed of 50 MPH, unless further restricted.
- (b) At meeting or passing points, when practicable, **KEY TRAIN** will hold main track unless a speed of 15 MPH or greater is authorized for siding or auxiliary track.
- (c) When any track with an authorized speed of 10 MPH or less is used for meeting or passing a **KEY TRAIN**, one of the trains must be stopped before the other train passes.
- (d) When a **KEY TRAIN** is stopped by an emergency brake application or by some unknown cause, the train must be inspected for derailed or defective cars in accordance with **NS Operating Rule 102**.
- (e) If a defect in a **KEY TRAIN** journal is reported by a wayside detector, but inspection of the journal fails to confirm evidence of a defect, the train will not exceed 30 MPH until it has passed over the next wayside detector. If the same car again sets off the next detector, it must be set out from the train.

E. DOCUMENTATION:

1. No hazardous materials car, loaded or residue (empty), may be moved on line of road without a waybill, consist, switch list, wheel report, or other shipping document which identifies its contents or previous contents by proper shipping name, hazard class, UN/NA 4-digit identification number, a 24-hour emergency contact number, and quantity (may be properly specified as "One (1) Tank Car Load", or "1 T/C"). Other common elements which must be included if applicable are the packing group, placard notation, placard endorsement, reportable quantity (RQ), poison inhalation hazard notation, hazard zone, residue notation, marine pollutant notation, and/or shipper certification [172.210 & 174.24].

2. EXAMPLE OF SHIPPING PAPER DESCRIPTION:

1 T/C CHLORINE
2.3 (POISON GAS)
UN 1017
RQ (CHLORINE)
MARINE POLLUTANT (CHLORINE)
POISON INHALATION HAZARD ZONE B
PLACARDED: POISON GAS
EMERGENCY TELEPHONE: (###)###-####

3. At the commencement of each trip, the conductor or competent crew member directed by the conductor must examine waybills and/or consist to identify cars containing hazardous materials. A member of the train crew of a train transporting hazardous materials must have in his possession a copy of the shipping papers (as described in 1 above) for all shipments of hazardous materials [174.24].

4. A member of a train or yard crew is required to have a copy of the shipping papers (as described in 1 above) for any hazardous materials shipments before they are removed from the shipper's plant for direct or eventual forwarding to the yard; or when making delivery of hazardous materials shipments to a consignee's plant or siding. Documentation is not required for respotting within a plant or for movement to adjacent carrier tracks when the cars are to be respotted within the plant confines and are not being forwarded to the yard [174.24].

5. When picking up a hazardous material shipment from the shipper, the train crew should assure that the shipper's certification and signature are on the shipping papers received from the shipper. Shipper's certification is a signed statement from the shipper declaring that the hazardous materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to DOT regulations. This is not required if Norfolk Southern

17. HAZARDOUS MATERIALS (Cont'd)

is not the original carrier, if the certification is already in possession of the agency or central waybilling center, or for the return of empty tank cars which previously contained hazardous materials [172.204 & 174.24].

6. Agents, yardmasters, dispatchers, and train and engine service employees (both road and yard), must have a copy of the DOT Emergency Response Guidebook accessible when on duty. A crew member's copy maintained on the engine will be considered as being accessible to crews performing yard or switching service. Conductors will ascertain that a copy is on the controlling unit at the start of each trip or tour of duty [172.602].

F. INSPECTION:

1. Rail cars carrying hazardous materials and each rail car immediately adjacent thereto, must be inspected before acceptance at originating point, when received in interchange, and at any point where a train is required to be inspected (including the point where the car is placed in the train). The cars may continue in transit only when the inspection indicates that the cars are in safe condition for transportation [174.8].

2. Before coupling to a placarded tank car, loaded or residue (empty), employees must by observation from the ground determine that there is no visible or detectable leak; that all loading and unloading lines are disconnected; that platforms are raised or in the clear; and that manway covers and manway cover bolts, valve housing covers, bottom outlet caps, and plugs or caps on other openings are securely in their proper places.

EXCEPTION: Heater coil inlet and outlet pipes on residue (empty) tank cars which previously contained hazardous materials must be left open for drainage.

If any exceptions are noted, the tank car must not be coupled to or moved, and the industry and proper railroad authority must be notified promptly [174.9].

3. Before any closed (box or hopper) car containing hazardous materials is coupled into or moved, the crew must determine that the doors are closed and securely fastened [174.8 and 174.104].

4. Loaded or residue (empty) hazardous materials placarded tank cars not equipped with top and bottom shelf couplers must not be accepted in interchange, placed, or pulled at industrial tracks, or moved in a train. The Mechanical Department must be notified of such cars when offered in interchange or when released from industries.

5. Check to make sure the safety valve and tank test due dates are current (a car is within test until the last day of the month or year shown). These will appear on the right-hand side of the car under the specification marking. If they are not in date, notify your supervisor.

When a test of the safety valves or tank becomes due when a car is in transit, the car must be forwarded to its destination once the Mechanical Department has carded each side of the car with a card exhibiting the notice, "Safety Valves overdue for test or Tank overdue for test moving under authority of 49 CFR 174.9(c). A prompt report of such movement showing the car initials and number must be made to the Bureau of Explosives."

G. MARKING AND PLACARDING HAZARDOUS MATERIALS:

1. Hazardous Materials shipments must not be accepted at industries or in interchange unless placards, as specified on shipping papers, are affixed on each end and on each side of the car as required by regulations. Such placards must be securely in place before pulling loaded and/or residue (empty) tank cars, or other type rail cars containing hazardous materials. Cars with missing, damaged, faded, or improper placards must not be pulled [172.508 & 174.59].

17. HAZARDOUS MATERIALS (Cont'd)

2. Each agent or yardmaster shall maintain an adequate supply of placards or markers (which are available through the NS Material Management System), to replace those that are lost or damaged, based on the information on the shipping papers [174.33]. Missing, damaged, or faded placards discovered in transit should be replaced at the next inspection point, and those not required must be removed at the next terminal where the train is classified [174.59]. Each specific operating location should have a standard procedure for replacing placards.

3. Until October 1, 1994, placards which conform to Pre-HM-181 specifications (right column), may be used in place of the placards specified in HM-181 (middle column) in accordance with the following **Placard Substitution Table** [171.14 & 174.25]:

Hazard Class or Division Number	HM-181 Placard Name (Current Name)	Pre-HM-181 Placard Name (O.K. Until Oct. 1, 1994)
DIVISION 1.1	EXPLOSIVES 1.1	EXPLOSIVES A
DIVISION 1.2	EXPLOSIVES 1.2	EXPLOSIVES A
DIVISION 1.3	EXPLOSIVES 1.3	EXPLOSIVES B
DIVISION 1.4	EXPLOSIVES 1.4	DANGEROUS
DIVISION 1.5	EXPLOSIVES 1.5	BLASTING AGENTS
DIVISION 1.6	EXPLOSIVES 1.6	DANGEROUS
DIVISION 2.1	FLAMMABLE GAS	FLAMMABLE GAS
DIVISION 2.2	NON-FLAMMABLE GAS	NON-FLAMMABLE GAS
DIVISION 2.3	POISON GAS	POISON GAS
CLASS 3	FLAMMABLE	FLAMMABLE
COMBUSTIBLE LIQUID	COMBUSTIBLE	COMBUSTIBLE
DIVISION 4.1	FLAMMABLE SOLID	FLAMMABLE SOLID
DIVISION 4.2	SPONTANEOUSLY COMBUSTIBLE	FLAMMABLE SOLID
DIVISION 4.3	DANGEROUS WHEN WET	FLAMMABLE SOLID W
DIVISION 5.1	OXIDIZER	OXIDIZER
DIVISION 5.2	ORGANIC PEROXIDE	ORGANIC PEROXIDE
DIV. 6.1, PG I or II	POISON	POISON
DIV. 6.1, PG III	KEEP AWAY FROM FOOD	(NONE REQUIRED)
CLASS 7	RADIOACTIVE	RADIOACTIVE
CLASS 8	CORROSIVE	CORROSIVE
CLASS 9	CLASS 9 (OPTIONAL FOR DOMESTIC)	(NONE REQUIRED)
ORMs	(NONE REQUIRED)	(NONE REQUIRED)

NOTE: Commodities classified as Poison Inhalation Hazards must be placarded with the HM-181 Placard effective October 1, 1992.

4. Federal regulations require SECONDARY placards for certain commodities which have subsidiary hazards. The addition of the SECONDARY placard does not change switching or position in train requirements, and the PRIMARY placard will govern. The PRIMARY and SECONDARY placards can be identified as follows: 1) the PRIMARY placard classification is the first hazard class following the proper shipping name on the shipping documents; 2) the use of the UN/NA 4-digit identification number is prohibited on the SECONDARY placard; and 3) no hazard class or division number may be displayed in the lower quadrant of a SECONDARY PLACARD [172.505 & 172.519].

5. If more than one of the UN/NA 4-digit identification number markings on placards, orange panels, or white square-on-point configurations are lost, damaged, or destroyed in transit, the carrier shall replace them as soon as practicable. The numbers may be entered legibly by hand using an indelible marking material [172.338].

17. HAZARDOUS MATERIALS (Cont'd)

6. A bulk packaging that contains a marine pollutant must be marked on each end and each side with the MARINE POLLUTANT mark. EXCEPTION: On a bulk packaging, freight container, or transport vehicle that bears a placard specified in hazardous materials timetable Rule G.3, the MARINE POLLUTANT marker is not required [172.203(1) & 172.322]. (NOTE: mandatory compliance date - Oct. 1, 1993)



7. Except for bulk packagings containing molten aluminum or molten sulfur, which must be marked "MOLTEN ALUMINUM" or "MOLTEN SULFUR" respectively, a bulk packaging containing an elevated temperature material must be marked on two opposing sides of the vehicle with the word "HOT" in letters at least 3.9 inches high. These materials will be described on the shipping papers as follows: 1) the proper shipping name will be "Elevated Temperature Material . . ."; or 2) the word "HOT" will immediately proceed the proper shipping name [172.202(n) & 172.325]. (NOTE: mandatory compliance date - Oct. 1, 1993)

H. HAZARDOUS WASTE AND PCB WASTE MANIFESTS:

1. Hazardous waste and polychlorinated biphenyl (PCB) wastes shipments must be handled with hazardous waste manifest forms. Manifests must be signed and dated when subject waste materials are picked up and appropriate signed and dated documents obtained when the wastes are delivered. Tracking of the waste by rail will be handled by waybill or other appropriate document with initial and final rail transporters being responsible for executing manifest requirements outlined above. A copy of the manifest may or may not be attached to the waybill or switchlist. Modified waybills may be used in lieu of hazardous waste manifest.

2. Whenever Norfolk Southern Railway Company is the origin or destination carrier, and you are pulling or placing a hazardous waste or PCB waste car at industry, coordinate with agent for instructions regarding signing and dating of the required waste management documents.

I. HYDROCYANIC ACID (HCN) TANK CARS

1. Tank cars containing Hydrocyanic Acid (HCN), are painted white with horizontal and vertical red stripes and placarded on each side and each end. They must be handled in accordance with the following instructions:

- To be handled only when authorized by the Chief Dispatcher.
- NS FORM 11562**, "Notice of cars placarded Division 1.1 or 1.2 (Class A Explosives), Division 2.3 Hazard Zone A (Poison Gases), or Division 6.1 PG I Hazard Zone A (Poison)", must be issued to conductor and engineer (See Operating Rule 573).
- The Chief Dispatcher must be notified immediately of any occurrence that may be hazardous.
- In case of suspected leakage, car must be isolated and all except authorized persons kept away.
- Under no circumstances should other than authorized persons get close to car in case of derailment.
- The instructions posted on bulletin boards, in cabooses, and in cars assigned to wreck outfits must be read carefully.

17. HAZARDOUS MATERIALS (Cont'd)

- Instructions attached to each waybill and placarded instructions on each car must be followed.
- These instructions (a-g above) are applicable to both LOADED and RESIDUE (empty) cars.

J. LEAKING TANK CARS:

1. Except where movement to a repair point has been authorized, placarded hazardous materials cars must not be moved if there is any indication of leaking. The employee granting authority for the movement of such equipment must be sufficiently qualified to know that the move can be made safely, and will be responsible for issuing necessary instructions to the crew [174.50].

2. An industry must be notified before a leaking tank car is spotted on its track for unloading and then only with their permission.

K. REPORTING HAZARDOUS MATERIALS INCIDENTS:

CAUTION: Hazardous Materials can cause injury by inhalation, contact, ingestion, explosion, or fire. Chlorine, Anhydrous Ammonia, Sulfur Dioxide, Petroleum Products, as well as many other materials have distinct odors. Anytime such odors are detected in association with a shipment of hazardous materials **YOU SHOULD GET OUT OF THE AREA AS SOON AS POSSIBLE** and report the detection to the yardmaster, chief dispatcher and/or your immediate supervisor.

THE FOLLOWING MUST BE REPORTED IMMEDIATELY TO THE CHIEF DISPATCHER:

1. All unauthorized, unintentional and/or accidental spills or releases (including minor leaks) of commodities classified as hazardous under federal and/or state department of transportation and environmental protection agency regulations, including hazardous materials, hazardous substances, and hazardous wastes.

2. All spills or releases of oil (lubricating, hydraulic, etc.), fuel (diesel, gasoline, etc.), or any other materials that can cause damage to the environment, including water discoloration.

3. All incidents that result in any derailment or any damage to tank cars, intermodal tanks and containers, or any other rolling stock containing hazardous materials, substances, and/or wastes.

L. INSTRUCTIONS TO EMPLOYEES IN THE EVENT OF A HAZARDOUS MATERIALS INCIDENT OR ACCIDENT:

1. CHECK FOR INJURIES, PROVIDE ASSISTANCE AS NEEDED, NOTIFY THE TRAIN DISPATCHER OR YARDMASTER.

2. CHECK WAYBILLS AND DOCUMENTS FOR HAZARDOUS MATERIALS CARS. DOCUMENTS FOR THE MOST ACUTELY HAZARDOUS MATERIALS WILL BE ENDORSED OR STAMPED "EXPLOSIVES, POISON GAS ZONE A", POISON PG I ZONE A", "RADIOACTIVE MATERIAL", AND "DANGEROUS" IN THE UPPER LEFT HAND CORNER. HOWEVER, MANY SLOW ACTING/LONG TERM AND ENVIRONMENTALLY HAZARDOUS MATERIALS DO NOT REQUIRE THIS STAMP OR ENDORSEMENT. REVIEW DOCUMENTS CAREFULLY TO DETERMINE ALL HAZARDOUS MATERIALS PRESENT.

3. DO NOT GO NEAR DERAILED OR DAMAGED HAZARDOUS MATERIAL CARS TO INVESTIGATE ACCIDENT UNTIL IT IS DETERMINED TO BE SAFE.

4. EXTINGUISH ALL CIGARETTES, FUSEES, AND OPEN FLAMES UNTIL IT IS DEFINITELY DETERMINED THERE ARE NO FLAMMABLE VAPORS IN THE AREA.

17. HAZARDOUS MATERIALS (Cont'd)

5. GIVE DISPATCHER OR YARDMASTER INFORMATION ON:
- INJURIES.
 - HOW MANY CARS ARE INVOLVED WITH THEIR LOCATION AND CONDITION WHERE POSSIBLE TO OBTAIN THIS INFORMATION SAFELY.
 - EACH HAZARDOUS MATERIAL CAR; INITIAL AND NUMBER, CONTENTS, COMMODITY CODE, PLACARDS, SHIPPER, AND CONDITION OF CAR WHERE POSSIBLE TO OBTAIN THIS INFORMATION SAFELY.
 - DANGER TO SURROUNDING AREA: HOMES, SCHOOLS, HOSPITALS, STREAMS, LAKES, ETC. AS APPLICABLE.
6. REVIEW EMERGENCY RESPONSE INFORMATION ON TRAIN CONSIST, SHIPPING PAPERS, IN THE D.O.T. EMERGENCY RESPONSE GUIDEBOOK, OR OTHER SOURCE, AND TAKE ACTION AS NECESSARY.
7. IF FIRE OCCURS, **AND IT CAN BE DONE SAFELY**, PULL AWAY ALL CARS THAT ARE MOVABLE AND NOT BURNING.
8. INFORM LOCAL AUTHORITIES (FIRE DEPARTMENTS AND EMERGENCY RESPONDERS) OF THE CONTENTS OF EACH CAR THAT PRESENTS A HAZARD. GIVE THEM INFORMATION ON WAYBILLS, TRAIN CONSISTS, THE D.O.T. EMERGENCY RESPONSE GUIDEBOOK AND ANY OTHER INFORMATION YOU MAY HAVE CONCERNING THE PRODUCTS AND EQUIPMENT INVOLVED. ADVISE THEM TO KEEP PEOPLE AWAY FROM THE INCIDENT. **THIS DOES NOT MEAN** AN EVACUATION UNLESS THE EMERGENCY RESPONSE INFORMATION CALLS FOR SAME.
- NOTE:** The conductor will be responsible for ensuring that waybills, shipping documents and any emergency response instructions are on or near the locomotives and available to authorized emergency responders.
9. REPORT ALL INFORMATION ABOVE TO THE FIRST RAILROAD SUPERVISOR OR OTHER OFFICER(S) AS MAY BE DESIGNATED, WHO REACHES THE SCENE.

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NS NORFOLK SOUTHERN

HAZARDOUS MATERIALS POSITION IN TRAIN CHART

HOW TO USE THIS CHART
TO DETERMINE WHERE A PLACARDED CAR CAN BE PLACED IN A TRAIN,
FOLLOW THESE STEPS:

- 1.) DETERMINE THE TYPE OF PLACARDS APPLIED TO THE CAR
- 2.) DETERMINE THE TYPE OF CAR (TANK CAR OR OTHER RAIL CAR)
- 3.) FOLLOW VERTICALLY DOWN THE APPROPRIATE COLUMN OF THE CHART TAKING NOTE OF THE SYMBOL 'X', WHICH INDICATES A RESTRICTION.
- 4.) FOLLOW HORIZONTALLY ACROSS EACH ROW TO DETERMINE WHAT RESTRICTIONS ARE APPLICABLE.

EQUIVALENT PLACARDS



CARS WITH PLACARDS DISPLAYING 4-DIGIT IDENTIFICATION NUMBERS OR NON-BULK CONTAINERS DISPLAYING A PLACARD WITHOUT THE WORD DESCRIPTION, WILL BE HANDLED THE SAME AS CARS WITH WORD DESCRIPTION PLACARDS.

GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5	GROUP 6
	 Hazard Zone A PEI Hazard Zone A See Note (2)	 See Note (1)	 FLAMMABLE GAS 2 FLAMMABLE LIQUID 3 FLAMMABLE SOLID 3 CORROSIVE LIQUID 8 CORROSIVE SOLID 8 DANGEROUS ORGANIC PEROXIDE 5.2 POISON 6 POISON 6	 COMBUSTIBLE 3 LACRIMATOR 9 TOXIC 6 TOXIC 6 TOXIC 6 DANGEROUS	 RADIOACTIVE 7

RESTRICTIONS

1 WHEN TRAIN LENGTH PERMITS, PLACARDED CAR MAY NOT BE NEARER THAN THE SIXTH CAR FROM ENGINE OR OCCUPIED CABOOSE.

2 WHEN TRAIN LENGTH DOES NOT PERMIT, PLACARDED CAR MUST BE PLACED NEAR THE MIDDLE OF THE TRAIN, BUT NOT NEARER THAN THE SECOND CAR FROM AN ENGINE OR OCCUPIED CABOOSE.

3 ENGINE

4 OCCUPIED CABOOSE

5 OPEN TOP CAR — APPLIES WHEN ANY LADING PROTRUSIONS BEYOND THE CAR ENDS OR IF SHIFTED WOULD PROTRUDE BEYOND THE CAR ENDS. (Includes bulk head flat cars)

6 LOADED FLAT CAR — EXCEPT: CLOSED TOP COFCOFC EQUIPMENT, MULTI-LEVELS, AND OTHER SPECIALLY-EQUIPPED CARS WITH THE-DOWN DEVICES FOR HANDLING VEHICLES.

7 ANY RAIL CAR, TRANSPORT VEHICLE OR FREIGHT CONTAINER WITH TEMPERATURE CONTROL EQUIPMENT OR INTERNAL COMBUSTION ENGINE IN OPERATION

8 GROUP 1: DIVISION 1.1 OR 1.2 (CLASS A EXPLOSIVES)

9 GROUP 2: DIVISION 2.3 HAZARD ZONE A (POISON GAS) OR DIVISION 6.1 PG I HAZARD ZONE A (POISON)

10 GROUP 3: CLASS 7 (RADIOACTIVE)

11 ANY LOADED PLACARDED CAR, OTHER THAN A CAR PLACARDED WITH THE SAME PLACARD, OR ANY CAR PLACARDED AS IN GROUP 5 OR MARKED AS IN GROUP 6

	Any Car	Tank Car	Other Than Tank Car	Any Car	Loaded Tank Car	Empty/Residue Tank Car	Loaded Other Than Tank Car	Any Car	Any Car
	Car	Car	Tank Car	Car	Tank Car	Tank Car	Tank Car	Car	Car
1	X	X			X				
2	X	X			X				
3	X	X	X	X	X	X			
4	X	X	X	X	X	X			
5	X	X			X				
6	X	X			X				
7	X	X			X				
8		X	X	X	X		X		
9	X			X	X		X		
10	X	X	X		X		X		
11	X	X	X		X		X		

NOTES: (1) ANY CAR PLACARDED AS IN GROUP 3, MAY NOT BE PLACED NEXT TO CARS CONTAINING UNDEVELOPED FILM.

(2) ANY CAR PLACARDED AS IN GROUP 1 OR GROUP 2, IN A MOVING OR STANDING TRAIN, MUST BE NEXT TO THE OCCUPIED CABOOSE OR PLACARDED RAIL CAR. HOWEVER, IF A RAIL CAR OCCUPIED BY THE GUARDS OR TEMPERATURE CONTROL EQUIPMENT IN OPERATION, IT MUST BE THE FOURTH CAR BEHIND ANY CAR PLACARDED AS IN GROUP 1.

(3) "EMPTY/RESIDUE TANK CARS, CAN BE HANDLED IDENTICAL TO EMPTY/RESIDUE TANK CARS PLACARDED AS IN GROUP 4".

NS NORFOLK SOUTHERN

HAZARDOUS MATERIALS SWITCHING CHART

HOW TO USE THIS CHART

TO DETERMINE SWITCHING RESTRICTIONS FOR A PLACARDED CAR, FOLLOW THESE STEPS:

- 1.) DETERMINE THE TYPE OF PLACARDS APPLIED TO THE CAR
- 2.) DETERMINE THE TYPE OF CAR (TANK CAR OR OTHER RAIL CAR)
- 3.) FOLLOW VERTICALLY DOWN THE APPROPRIATE COLUMN OF THE CHART TAKING NOTE OF THE SYMBOL X, WHICH INDICATES A RESTRICTION.
- 4.) FOLLOW HORIZONTALLY ACROSS EACH ROW TO DETERMINE WHAT RESTRICTIONS ARE APPLICABLE.

EQUIVALENT PLACARDS



CARS WITH PLACARDS DISPLAYING 4-DIGIT IDENTIFICATION NUMBERS OR NON-BULK CONTAINERS DISPLAYING A PLACARD WITHOUT THE WORD DESCRIPTION, WILL BE HANDLED THE SAME AS CARS WITH WORD DESCRIPTION PLACARDS.

GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5	GROUP 6
 Hazard Zone A	 Hazard Zone A	 	 	 	

SEE NOTE (1)

RESTRICTIONS	Any Car	Any Car	Loaded Tank Car	Loaded Flat Car See Note (2)	Other Loaded Rail Car	Any Loaded Car	Any Car	Any Car
1 SHALL BE SEPARATED FROM ENGINE BY AT LEAST ONE NON-PLACARDED CAR OR BY AT LEAST ONE CAR PLACARDED/MARKED IN ACCORDANCE WITH GROUP 5 OR GROUP 6 OF THIS CHART.	X							
2 SHALL NOT BE CUT OFF IN MOTION OR STRUCK BY A FREE ROLLING CAR.	X	X		X				
3 IF CAR CAN BE CUT OFF, CUT OFF IN NO MORE THAN TWO CAR CUTS AND NO MORE THAN TWO CAR CUTS TO COUPLE INTO SUCH CARS (REFER TO RESTRICTION 2).			X					
4 WHEN HAND BRAKES ARE USED, PRECEDING CAR MUST CLEAR LADDER BEFORE CAR IS CUT OFF AND CUT CONTAINING SUCH CAR MUST CLEAR LADDER BEFORE CUTTING OFF FOLLOWING CUT (REFER TO RESTRICTION 2).			X					
5 COUPLE INTO WITH NO MORE FORCE THAN NECESSARY TO MAKE COUPLING. "NOT MORE THAN FOUR"	X	X	X	X	X	X	X	X

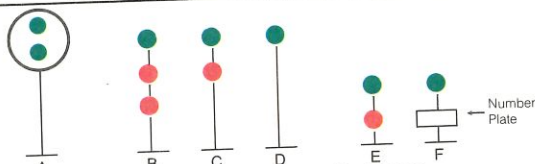
NOTES: (1) A RAIL CAR PLACARDED AS IN GROUP 1 MUST NOT BE PLACED UNDER BRIDGES OR HIGHWAYS, NOR ALONGSIDE A PASSENGER SHED OR STATION EXCEPT DURING TRANSFERS.

(2) RESTRICTIONS GOVERNING SWITCHING OF LOADED PLACARDED FLAT CARS INCLUDE THOSE APPLYING TO TRAILERS, CONTAINERS AND/OR INTERMODAL TANK CONTAINERS (RESIDUE/EMPTY INTERMODAL CONTAINERS ARE NOT CONSIDERED TO BE LOADS).

NORFOLK AND WESTERN Automatic Block, Interlocking, and TC Signals

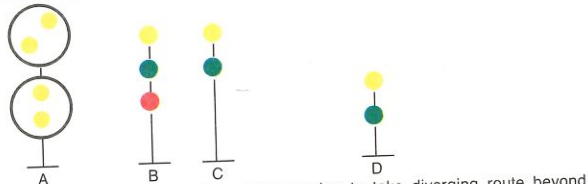
HIGH SIGNAL

DWARF SIGNAL



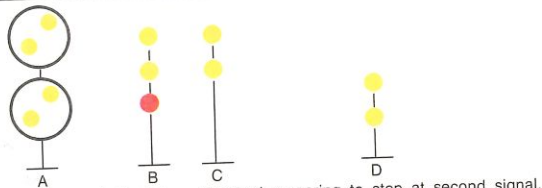
RULE 281

Indication — Proceed at prescribed speed.
Name — Clear.



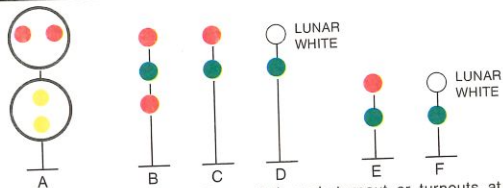
RULE 282

Indication — Proceed preparing to take diverging route beyond next signal at prescribed speed.
Name — Approach Diverging.



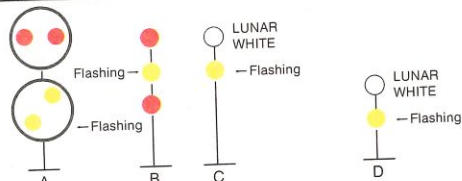
RULE 282-A

Indication — Proceed preparing to stop at second signal.
Name — Advance Approach.



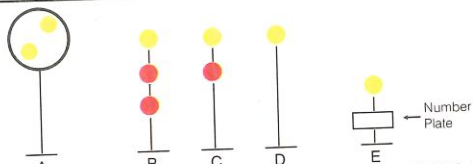
RULE 283

Indication — Proceed through turnout or turnouts at prescribed speed.
Name — Diverging Clear.



RULE 283-B

Indication — Proceed through turnout or turnouts at prescribed speed preparing to take diverging route beyond next signal at prescribed speed.
Name — Diverging Approach Diverging.



RULE 285

Indication — Proceed preparing to stop at next signal. Train or engine exceeding Medium Speed must at once reduce to that speed.
Name — Approach.

SPEED:

MEDIUM SPEED—A speed not exceeding 30 MPH.

REDUCED SPEED—A speed that will permit complying with flagging signals and stopping short of train or obstruction.

RESTRICTED SPEED—A speed that will permit stopping short of train, engine, obstruction, or switch not properly lined and looking out for broken rail, but not exceeding 15 MPH.

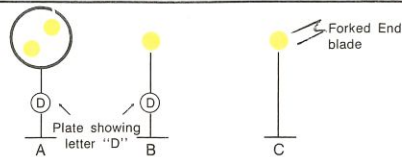
SLOW SPEED—A speed not exceeding 15 MPH.

YARD SPEED—A speed that will permit stopping within one-half the range of vision.

NORFOLK AND WESTERN Automatic Block, Interlocking, and TC Signals

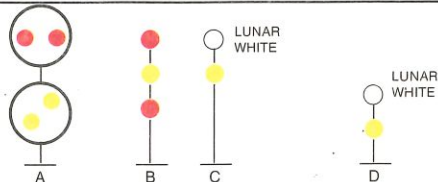
HIGH SIGNAL

DWARF SIGNAL



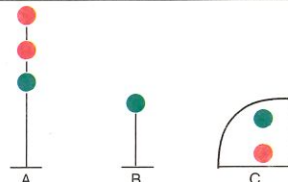
RULE 285-A

Indication — Proceed preparing to stop at next home signal. Train or engine exceeding Medium Speed must at once reduce to that speed.
Name — Approach Distant.
NOTE: Signal DOES NOT afford automatic block protection.



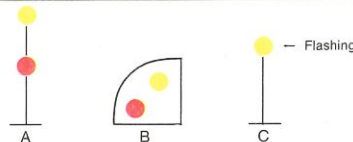
RULE 286

Indication — Proceed through turnout or turnouts at prescribed speed preparing to stop at next signal. Train or engine exceeding Medium Speed must at once reduce to that speed.
Name — Diverging Approach.



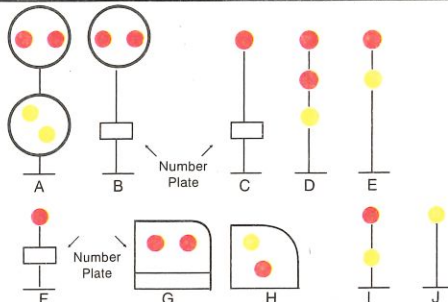
RULE 287

Indication — Proceed; Slow Speed within interlocking limits or through turnout or turnouts.
Name — Slow Clear.
NOTE: Slow Speed applies until leading end of movement reaches opposing home signal when route is lined for straight track movement. Slow Speed applies for entire movement through turnout or turnouts.



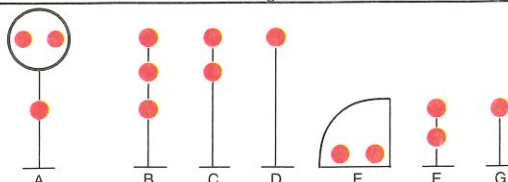
RULE 288

Indication — Proceed preparing to stop at next signal; Slow Speed within interlocking limits or through turnout or turnouts.
Name — Slow Approach.
NOTE: Slow Speed applies until leading end of movement reaches opposing home signal when route is lined for straight track movement. Slow Speed applies for entire movement through turnout or turnouts.



RULE 290

Indication — Proceed at Restricted Speed.
Name — Restricting.



RULE 292

Indication — Stop.
Name — Stop.

RUNNING TIMES OF TRAINS, IN MINUTES — FOR INSPECTION CAR OPERATION ONLY

INSTRUCTIONS — (1) Use MAXIMUM SPEED for kind of train (passenger or freight) unless line-up shows lower train speed (if timetable maximum speed is not listed below, use next higher MPH column); (2) Use MILES from train's last recorded (timetable or line-up) location to point where inspection car clears; (3) Read MPH column down to MILES line for running time of train in minutes. Example — a train at 45 MPH going 11 miles uses 14 minutes; (4) Add running time to the train's time at last recorded location to determine when the train is due at clearing point. CLEAR THIS TIME NOT LESS THAN TEN MINUTES. See Rule 824.

Miles	10 MPH	15 MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	75 MPH	79 MPH
1	6														
2	12	8	6	7	6	5									
3	18	12	9	9	8	6	5								
4	24	16	12	12	10	8	7	6							
5	30	20	15	15	12	10	9	8	6	5	5				
6	36	24	18	14	12	10	9	8	7	6	5	5			
7	42	28	21	16	14	12	10	9	8	7	6	6	5	5	
8	48	32	24	19	16	13	12	10	9	8	7	7	6	6	5
9	54	36	27	21	18	15	13	12	10	9	8	8	7	7	6
10	60	40	30	24	20	17	15	13	12	10	10	9	8	8	7
11	66	44	33	26	22	18	16	14	13	12	11	10	9	8	8
12	72	48	36	28	24	20	18	16	14	13	12	11	10	9	9
13	78	52	39	31	26	22	19	17	15	14	13	12	11	10	10
14	84	56	42	33	28	24	21	18	16	15	14	12	11	10	11
15	90	60	45	36	30	25	22	20	18	16	15	13	12	11	11
16	96	64	48	38	32	27	24	21	19	17	16	14	13	12	12
17	102	68	51	40	34	29	25	22	20	18	17	15	14	13	12
18	108	72	54	42	36	30	27	24	21	19	18	16	15	14	13
19	114	76	57	45	38	32	28	25	22	20	19	17	16	15	14
20	120	80	60	48	40	34	30	26	24	21	20	18	17	16	15
21	126	84	63	50	42	36	31	28	25	22	21	19	18	16	15
22	132	88	66	52	44	37	33	29	26	24	22	20	18	17	16
23	138	92	69	55	46	39	34	30	27	25	23	21	19	18	17
24	144	96	72	57	48	41	35	32	28	26	24	22	20	19	18
25	150	100	75	60	50	42	35	33	30	27	25	23	21	20	18
26	156	104	78	62	52	44	39	34	31	28	26	24	22	20	19
27	162	108	81	64	54	46	40	36	32	29	27	24	22	21	20
28	168	112	84	67	56	48	42	37	33	30	28	25	23	21	21
29	174	116	87	69	58	49	43	38	34	31	29	26	24	23	22
30	180	120	90	72	60	51	45	40	36	32	30	27	25	24	22