

SUBDIVISIONS

EASTERN—	
St. Louis to North Yard	386.0 Miles
COLUMBIA—	
Columbia Subdiv. Jct. to Columbia	8.5 "
MOBERLY—	
Franklin to Moberly	35.0 "
ELDORADO—	
Walker to Eldorado Springs	13.9 "
KANSAS CITY—	
Kansas City to Parsons	136.8 "
NEOSHO—	
North Yard to Piqua	43.6 "
OKLAHOMA—	
North Yard to Oklahoma City	207.7 "
MUSKOGEE—	
North Yard to Ray	275.9 "
JOPLIN—	
Labette to Joplin	46.3 "
TULSA—	
Chase to Profit	54.2 "
WILBURTON—	
North McAlester to Bishop	11.0 "
Total	1,218.9 Miles

SAFETY Is of FIRST IMPORTANCE in the DISCHARGE OF DUTY

ASSISTANT SUPERINTENDENT

J. M. O'Brien Franklin, Mo.

TRAINMASTERS

M. D. Woodroof Denison, Tex.

C. A. Cassidy Denison, Tex.

ASSISTANT TRAINMASTERS

J. D. Harvey Denison, Tex.

W. E. Dusenberry Denison, Tex.

CHIEF DISPATCHERS

R. O. Johnson, Chief Dispatcher Denison, Tex.

G. Harvey, Assistant Chief Dispatcher Denison, Tex.

R. R. Holden, Night Chief Dispatcher Denison, Tex.

DISPATCHERS

J. H. Crane

A. P. Schimmel

L. A. Volcik

G. E. Canaday

R. F. Curwen

H. F. Carter

H. C. Pagel

W. M. O'Dell

C. Clark

J. D. Cupp

J. R. Nash

R. R. McCrery

M-K-T R.R. CO.

NORTHERN DIVISION

TIME TABLE

No.

6

**Effective At 12:01 A. M.
Sunday, August 16, 1964**

**FOR THE INFORMATION AND GUIDANCE
OF EMPLOYEES ONLY**

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

T. S. CARTER,
Vice President — Operations
Dallas, Texas

R. B. GEORGE,
General Superintendent
Denison, Texas

DOWNING MILLER,
Superintendent
Denison, Texas

C. A. BIRGE, JR.,
Superintendent of Rules-Safety
Denison, Texas

SPEED RESTRICTIONS

LIMITS	CLASS OF SERVICE	
	Passenger Trains	Freight Trains
Main track, except as otherwise restricted by Yard Limits, Train Orders, Speed Restriction Signs, General Orders, Special Instructions, or other restrictive conditions.		
MAXIMUM SPEED MPH—DIESEL OPERATION:		
Between Machens and Franklin	45	35
Between Franklin and Boonville	30	25
Between Boonville and Cross	45	35
Except: Sedalia, over Engineer Street	25	25
Approaching Third and Fifth Streets	15	15
Nevada, through city limits	15	15
Over Maple, Austin and Hickory Streets	10	10
Over Bridge 374.7, Neosho River	25	25
Between Paola and Cross	55	40
Except: When handling No. 41's train		45
Paola, between crossover from main track to puzzle switch, to Signal 431		
Southward Movements	20	20
Parsons, over Crawford Avenue	10	10
Between Poole and Oklahoma City	40	30
Except: Between MP A-167 and MP A-169	15	15
On other tracks	5	5
Coffeyville, Tracks 1 and 2 over Sixth and Seventh Streets and Long Bell track over Tenth Street (after stop to clear)	Restricted Speed	
"DY" Jet, MP A-194.5, through switch	15	15
"BE" Jet, MP A-198.2, through switch	10	10
Between "BE" Jet, and north switch Sutton	15	15
Hominy, through station limits	15	15
MP A-277.6, passing Kerr-McGee Refinery	20	20
Turner, "H" track over Reno Avenue (after stop to clear)	Restricted Speed	
Between MP A-343.2 and MP A-343.9	15	15
Between Poole and MP 451	55	40
Except: When handling No. 41's and No. 53's train		45
Oswego, Nos. 1 and 2 passing station to dispatch mail	40	
Vinita, through city limits	30	30
No. 1 passing station to dispatch mail	15	
Between MP 451 and KO&G Crossing MP 501.8	65	40
Except: When handling No. 41's and No. 53's train		45
Pryor, Nos. 1 and 2 passing station to dispatch mail	40	
Wagoner, through city limits	40	40
Between KO&G Crossing, MP 501.8 and SL-SF-MV Crossing, MP 503.9	25	25
Except: Over than main track	10	10
Fondulac St.—Movements on No. 10 track	Flag Crossing	
Between SL-SF-MV Crossing, MP 503.9 and MP 505	40	40
Between MP 505 and MP 527	50	40
Except: When handling No. 41's and No. 53's train		45
Between MP 527 and MP 532	55	40
Except: When handling No. 41's and No. 53's train		45
Between MP 532 and MP 563	75	55
Between MP 563 and Staley	55	40
Except: When handling No. 41's and No. 53's train		45
North McAlester, over Stonewall Avenue (until crossing occupied)	20	20
Atoka, No. 1 passing station to dispatch mail	30	
Durant, between KO&G Crossing, MP 640.8 and SL-SF Crossing, MP 641.4	40	40

LIMITS	CLASS OF SERVICE	
	Passenger Trains	Freight Trains
Between Staley and MP 656.2	30	25
Between MP 656.2 and Denison	45	30
Except: Denison, over street crossings	20	20
Over puzzle switch north of passenger station	15	15
Between MP Q-657 and MP Q-660 (Warner Cutoff)	20	20
Between Columbia Subdivision Junction and Columbia	15	10
Between Franklin and Moberly	15	15
Between Walker and Eldorado Springs	10	10
Between North Yard and Piqua	15	15
Except: Monarch, highway over cement lead	Flag Crossing	
Between Labette and Joplin	20	20
Except: Columbus, Main Street	Flag Crossing	
Between Chase and Profit	25	25
Between North McAlester and Bishop	10	10
MISCELLANEOUS:		
All trains while meeting or passing another train occupying a siding (except where other restrictions require slower speed)	25	25
All trains and engines operating through turnouts	20	15
Except: Through turnouts on Eldorado Subdivision and turnout at Moran to "old Iola Subdivision"	10	10
Parker, Kincaid, Kimball, both siding switches; Erie, south siding switch; Welch, both siding switches; Vinita, south siding switch; Smith, Wagoner, south siding switches; Canadian, Kiowa, Stringtown, Atoka, Cook, Caddo, both siding switches; Burg, north siding switch; Durant, both siding switches; Olive, north siding switch	30	30
No. 41 stop and inspect train within first 40 miles after departure from Glen Park. All freight trains except No. 41 stop and inspect train once within first 40 miles after departure from each terminal.		
During snow storms and fog, all freight trains will stop and inspect their train every 60 miles.		
TRAINS HANDLING:		
Steam derricks, pile driver, ditchers or cranes on their own wheels (except where maximum speed is lower)		30
Derricks X-255 and X-256, (Cooper's rating E-58), Pile Driver X-1030, (Cooper's rating E-53), Crane X-1020, (Cooper's rating E-28) and Seal test car X-77 (except where maximum speed is lower)		25
Derricks X-255, X-256 and Pile Driver X-1030 must be located in train not less than four cars nor more than ten cars from engine. When two of these machines are handled in freight trains, they must be separated by at least six cars.		
When Derricks X-255 and X-256 are operated on tracks other than the main track, on all subdivisions, timber bridges under those tracks must be inspected before allowing machines to pass over those bridges. If the bridges are constructed with fewer than four stringers per chord, machines will not be permitted to pass over until helper stringers are placed or cribbing placed between bents to reduce the span length. The machines must not be spotted on bridges to handle loads and must not travel across a bridge while carrying a load.		
Scale test car X-77 must be handled next ahead of caboose.		
Any Engine - must have air brakes in operation and when set out, must be coupled to car or cars with sufficient hand brakes set to hold; hand brakes must be released while being handled dead in train, and it must not be placed next to cars of pipe, poles, piling or loads liable to shift.		
Engines Towed in Train - Handle next to operating engine of through trains and behind short cars of trains setting out and picking up; except all 70-ton Road Switchers to be handled next ahead of caboose.		

MAXIMUM SPEED OF TRAINS OVER RAILROAD CROSSINGS

Railroad	M.P.	At or Near Station	Not to Exceed MPH	
			Passenger	Freight
Wabash R.R.	O-70.5	Moberly	15, 1200 feet in advance of and between Absolute Signals.	
GM&O R.R.	O-79.7	Higbee	Stop Gate normally against MKT.	Stop
AT&SF Ry.	B-23.7	Chanute	Stop Gate normally against MKT.	Stop
AT&SF Ry.	B-26.8	Chanute	Stop Electric gate normally against MKT. Instructions posted at crossing.	Stop
Mo. Pac. R.R.	B-44.2	Piqua	Stop Gate normally against MKT.	Stop
Mo. Pac. R.R.	S-412.9	Cokedale	Stop	Stop
NEO R.R.	S-418.3	Columbus	Restricted Speed Gate normally against NEO.	
SL-SF Ry.	S-418.7	Columbus	20 between Absolute Signals.	
RCS R.R.	S-427.6	Crain	Restricted Speed Gate normally against RCS.	
SL-SF Ry.	S-431.5	Galena	Restricted Speed Gate normally against SL-SF.	
SSI R.R.	Z-278.1	Tulsa	Stop	Stop
AT&SF-SL-SF-MV R.R.s	Z-278.2	Tulsa	Low Speed between Absolute Signals.	
SL-SF Ry.	A-149.2	Mound Valley	20 between Absolute Signals. Southward train holding main track for meet remain back of "Fouling Point" sign until northward train is entering siding.	
AT&SF Ry.	A-167.2	Coffeyville	Restricted Speed Gate normally against AT&SF.	
Mo. Pac. R.R.	A-168.3	Coffeyville	Stop	Stop
MV R.R.	A-217.5	Nelagony	Restricted Speed Gate normally against MV.	
SL-SF Ry.	A-257.5	Hallett	20 between Absolute Signals.	
AT&SF Ry.	A-271.4	Sunco	20 between Absolute Signals.	15 between Absolute Signals.
CRI&P R.R.	A-341.5	Barnard	Stop	Stop
CRI&P R.R.	A-343.2	Oklahoma City	Stop	Stop
CRI&P R.R.	Yard Track	Oklahoma City	Stop	Stop
SL-SF Ry.	Yard Track	Oklahoma City	Stop	Stop
SL-SF Ry.	400.8	Oswego	Southward movements on siding must open switch to obtain "Proceed" indication on Absolute Signal on main track.	
Mo. Pac. R.R.	409.9	Chetopa	Electric Gate normally against Mo. Pac. If Absolute Signal displays Stop-indication also comply Rule 343. Push button at crossing should permit reverse movements to obtain "Proceed" indication.	
CRI&P R.R.	565.9	McAlester	20 until crossing occupied Restricted Speed approaching Crossing.	

STATE STATUTES

MISSOURI	Whistle must be sounded or bell rung beginning at least 80 rods from crossing and continuing until locomotive shall have crossed any public road or street.
KANSAS	Whistle must be sounded four times (two long and two short blasts) at least 80 rods from the place where the railroad shall cross any public road or street.
OKLAHOMA	Whistle shall be sounded or bell rung at least 80 rods from place where the railroad shall cross any road or street.
TEXAS	Whistle must be sounded and bell rung at least 80 rods from place where the railroad shall cross any public road or street, and the bell shall be kept ringing until locomotive shall have crossed such public road.

OPERATING INSTRUCTIONS FOR WHITE AND RED OSCILLATING HEADLIGHT

WHITE LIGHT

Must be displayed at night and during the day when weather conditions impair visibility. Must be extinguished when the standard white headlight is dimmed or extinguished.

RED LIGHT

Will be displayed by day or by night when train is stopped suddenly under circumstances in which adjacent tracks may be fouled, or when head end protection is required. Must be extinguished when necessity no longer exists. A headlight burning red is a signal for an approaching train on the same or adjacent track to stop before passing such headlight, and be governed by conditions.

DISPLAY OF HEADLIGHTS DOES NOT RELIEVE ENGINE MEN OR TRAINMEN FROM PROTECTING TRAIN IN ACCORDANCE WITH RULE 99.

4 EASTERN SUBDIVISION - ST. LOUIS TO FRANKLIN

Capacity of Other Trains, etc. Crossing and other Facilities	SOUTHWARD		Capacity of Sidings	Station Numbers	Distance from St. Louis	TIME TABLE		Office Call	NORTHWARD		HOURS OF TELEGRAPH SERVICE	
	SECOND CLASS					No. 6 Effective August 16, 1964	SECOND CLASS		Monday Thru Friday	Saturdays, Sundays, Holidays		
	53 Manifest Freight Daily						52 Manifest Freight Daily					
					0.0	PH ST. LOUIS (Union Station)	US			Continuous	Continuous	
					3.9	PH NORTH MARKET ST.						
Dual Control Sw. Yard O-S-T-W-Y	7.00 PM				8.7	PH-R-RY BADEN	K	4.00 M		7.00AM to 3.00PM 4.00PM to 11.59PM	7.00AM to 3.00PM 4.00PM to 11.59PM	
					20.4	PH WEST ALTON						
Dual Control Sw.	7.50 PM				26.9	PH MACHENS		2.30 M				
5-South					27.4	PH GRAY						
20					30.9	PH BLACK WALNUT						
9-North					32.1	PH SIMPSON						
Yard W Connection 20-South	8.14	144			39.2	PH-R ST. CHARLES	CH	2.01		7.30AM to 4.30PM (Saturday Only)	7.30AM to 4.30PM	
					42.5	PH BANGERT						
Y					54.8	PH WELDON		1.01 M				
34					61.0	PH WATTS						
30					64.2	PH MATSON						
23-7					64.6	PH KLONDIKE				Non-telegraph		
10-South					74.0	PH AUGUSTA						
21	9.23	142			74.7	PH DUTZOW						
12-16					85.8	PH MARTHASVILLE	MV	11.20 PM		7.45AM to 4.45PM		
15	10.03	111			101.0	PH TRELOR		10.03				
15-6-10					104.9	PH McKITTRICK						
7-North					111.8	PH RHINELAND	RD			5.30PM to 2.30AM		
18-North					116.0	PH BLUFFTON						
35-52 W	10.51	149			125.1	PH PORTLAND						
27-North					131.2	PH MOKANE	MO	8.39		7.45AM to 4.45PM		
Yard	11.23	43			143.3	PH TEBBETTS						
16	11.44 PM	149			154.5	PH NORTH JEFFERSON	JN	8.01		7.00AM to 4.00PM (Except Sundays)	7.00AM to 4.00PM	
6-North					162.4	PH HARTSBURG		7.21				
25					169.5	PH EARLEY						
					169.5	PH McBAINE						
					169.5	Columbia Subdiv. Jct.						
27					178.4	PH ROCHEPORT						
Yard	12.39 M	115			181.9	PH NEHAUS		6.20				
Yard O-S-T-W-Y	12.55 M				188.3	PH NEW FRANKLIN				6.00AM to 2.00PM 7.00PM to 3.00AM	6.00AM to 2.00PM 7.00PM to 3.00AM	
					189.1	PH-R-RY FRANKLIN	FR	6.01 PM		6.00AM to 2.00PM 7.00PM to 3.00AM	6.00AM to 2.00PM 7.00PM to 3.00AM	
	53							52		1 Hour for Lunch	1 Hour for Lunch	
	5.55							0.59				

Southward trains are superior to northward trains of the same class.

Machens and North Yard are initial and terminal stations for trains No. 52 and No. 53 on combined pages 4 and 5 of the Eastern Subdivision.

MOBERLY SUBDIVISION - STATIONS

STATION NO.	OFFICE CALL	MILES FROM FRANKLIN	CAR CAPACITY	END CON-NECTED	HOURS OF TELEGRAPH SERVICE
Estill	0-102	3.4	28	Both	* 7.45AM to 4.45PM * Monday through Friday
Fayette	0-35	10.1	39	Both	
GM&O Crossing		25.2	Gated Stop		
Higbee	0-79	25.3	40	Both	
Wabash Crossing		34.4	Auto. Stop		
Moberly	0-70	35.0	44	Both	**7.45AM to 4.45PM **Monday through Saturday

COLUMBIA SUBDIVISION - STATIONS

STATION NO.	OFFICE CALL	MILES FROM COLUMBIA SUBDIV. JCT.	CAR CAPACITY	END CON-NECTED	HOURS OF TELEGRAPH SERVICE
Columbia	AB-9	8.5	Yard	Both	**7.45AM to 4.45PM **Monday through Saturday

EASTERN SUBDIVISION - FRANKLIN TO NORTH YARD

Capacity of Other Trains, etc. Crossing and other Facilities	SOUTHWARD		Capacity of Sidings	Station Numbers	Miles from St. Louis	TIME TABLE		Office Call	NORTHWARD		HOURS OF TELEGRAPH SERVICE	
	SECOND CLASS					No. 6 Effective August 16, 1964	SECOND CLASS		Monday Thru Friday	Saturdays, Sundays, Holidays		
	53 Manifest Freight Daily						52 Manifest Freight Daily					
Yard O-S-T-W-Y	1.10 M			180	189.1	PH-R-RY FRANKLIN	FR	4.00 PM		6.00AM to 2.00PM 7.00PM to 3.00AM	6.00AM to 2.00PM 7.00PM to 3.00AM	
Interlocking					191.1	PH Mo. River Bridge				Continuous	Continuous (Except Sundays)	7.45AM to 4.45PM
23-10	1.17			50	192.7	PH BOONVILLE	BY	3.12				
Connection 10-North	1.30			79	197.0	PH LICK		2.58				
25					203.4	PH-R PILOT GROVE	PG			7.00AM to 4.00PM		
	1.47			126	206.3	PH HOFFMAN		2.40				
13					216.3	PH CLIFTON CITY						
8-South	2.13			138	221.1	PH BEAMAN		1.55				
Interlocking Connection 6-North Yard W-Y	2.33				226.3	PH MAHANEY	SA			Continuous	Continuous	
Gated					227.7	PH-R SEDALIA		1.40 PM				
	2.45			140	231.2	PH Mo. Pac. Crossing CAMPBELL		11.30 M				
43-22-T-W Connection Elec. Gate Connection	3.46			248	247.8	PH-R WINDSOR	NR			8.30AM to 5.30PM		
Yard W	4.01			95	273.4	PH NORTH CLINTON		10.05				7.45AM to 4.45PM (Except Sundays)
50-5					267.2	PH CLINTON	C			7.45AM to 4.45PM		
37-18	4.24			73	286.7	PH LADUE		9.15				
23-10	4.28			150	288.2	PH-R MONTROSE	MS			5.30AM to 2.30PM	5.30AM to 2.30PM	
Yard Y					294.5	PH-R APPLETON CITY	AY	8.40		7.45AM to 4.45PM	7.45AM to 4.45PM	
20-3					303.5	PH LINDALE		8.10				
33					303.5	PH ROCKVILLE	RK			8.30PM to 5.30AM		
21-V	5.07			84	309.3	PH HARWOOD		7.10				
Auto. Interlg.					316.7	PH WALKER						
Connection Yard 17	5.23			156	317.1	PH Mo. Pac. Crossing NEVADA	NA	6.55		7.45AM to 4.45PM (Except Sundays)	7.45AM to 4.45PM	
Yard Connection	5.53			87	326.9	PH DEERFIELD		5.53				
Not Gated. Stop Connection. Not Gated. Stop Connection	6.01			98	331.2	PH EVE		5.10				
Yard W					337.4	PH S.L.-S.F. Crossing						
Auto. Interlg.	6.22			40	338.2	PH Mo. Pac. Crossing FORT SCOTT	XR	4.47		8.30AM to 5.30PM (Except Sundays)	8.30AM to 5.30PM	
24	6.24			138	339.1	PH GRIFFITH		4.45				
27					351.1	PH BIATTVILLE						
37-23	6.58			61	358.0	PH HEPLER	PH	4.07		5.30AM to 2.30PM		
Auto. Interlg.					365.0	PH WALNUT						
34	7.24			149	373.2	PH A.T.&S.F. Crossing ST. PAUL	OM	3.40		7.45AM to 4.45PM		
30	7.37			85	380.7	PH SOUTH MOUND		3.27				
Yard O-S-T-W-Y	7.45				384.0	PH CROSS		3.15				
	8.00 M				386.0	PH-R-RY NORTH YARD	NY	3.00 M		Continuous	Continuous	
	53							52		1 Hour for Lunch	1 Hour for Lunch	
	6.50							13.00				

Southward trains are superior to northward trains of the same class.

Machens and North Yard are initial and terminal stations for trains No. 52 and No. 53 on combined pages 4 and 5 of the Eastern Subdivision.

ELDORADO SUBDIVISION - STATIONS

STATION NO.	MILES FROM WALKER	CAR CAPACITY	END CON-NECTED	HOURS OF TELEGRAPH SERVICE
Dederick	F-7	6.8		
Eldorado Springs	F-14	13.9	Yard-Wye	Both * 7.30AM to 4.30PM * Monday through Friday

STATIONS AND TRACKS NOT SHOWN ABOVE

STATION NO.	MILE POST	CAR CAPACITY	END CON-NECTED
North Boonville	191	190.7	21 South
Pleasant Green	209	209.2	16 Both
Greenridge	239	239.2	21 Both
Bryson	244	243.8	30 North
Calhoun	256	255.5	23 Both
Pioneer	287	286.7	3 Mine Spur South
Schell City	298	298.4	30 Both
Ronald	345	345.2	9 Both
Hollister	348	347.7	15 South

10 OKLAHOMA SUBDIVISION - NORTH YARD TO OKLAHOMA CITY

Capacity of Other Tracks, RR Crossing Protection and Other Facilities	SOUTH-WARD		Station Numbers	Distance from North City	TIME TABLE No. 6 Effective August 16, 1964	Office Call	NORTH-WARD		HOURS OF TELEGRAPH SERVICE	
	SECOND CLASS						SECOND CLASS		Monday Thru Friday	Saturdays, Sundays, Holidays
	51 Freight	Daily Ex. Sun.					50 Freight	Daily Ex. Sat.		
Yard O-S-T-W-Y	12.01M		386	136.2	PH-R-RY NORTH YARD..... 0.6	SV	6.30M	Continuous	Continuous	
Yard			387	136.8	PHPARSONS..... 0.7	W				
Gated Connection	12.05			137.3	PH { POOLE S.L.-S.F. Crossing } 11.7		5.30			
10 North-18 Connection Auto. Interfing.	12.32		A-149	149.0	PHMOUND VALLEY..... 0.2		5.05			
12-North	12.52		A-157	157.2	PH { S.L.-S.F. Crossing ANGOLA } 8.0		4.45			
Gated Connection Yard W-Y	1.30		A-168	167.2	PHA.T.&S.F. Crossing 10.0		4.20	* 7.45AM to 4.45PM	(Except Sunday) * 7.45AM to 4.45PM	
Not Gated. Stop Connection Yard	1.35		A-169	168.7	PHPH-R-RY COFFEYVILLE..... 0.6	FY	4.20	* 7.45AM to 4.45PM	(Except Sunday) * 7.45AM to 4.45PM	
25 Auto. Interfing.	2.15		A-171	171.0	PH { EVANS SOUTH COFFEYVILLE } 12.0		3.55			
0 South	2.45		A-183	182.0	PHWANN..... 10.0		3.15	* 8.30AM to 5.30PM	(Except Sunday) * 8.30AM to 5.30PM	
Yard	2.48M		A-194	193.7	PH-R DEWEY "DY" Jct. 19.7	DE	2.45	* 8.30AM to 5.30PM	(Except Sunday) * 8.30AM to 5.30PM	
Remote Control Switch Yard S-W Connection	3.00M		A-198	197.7	PH { BARTLESVILLE "BM" Jct. } 0.5	B	2.25M	2.00PM to 10.00PM 11.45PM to 7.45AM	2.00PM to 10.00PM 11.45PM to 7.45AM	
Yard	3.05M		A-199	198.7	PHSUTTON..... 0.3		2.01			
	4.01		A-212	212.2	PHUTLEY..... 0.3		1.30			
9 Gated Connection	4.20		A-218	217.5	PH { NELAGONY M.V. Crossing } 0.2		1.15			
	4.40		A-226	225.7	PHWYNONA..... 10.0		12.55			
Yard W	5.15		A-236	236.0	PH-RHOMINY..... 13.0	HY	12.30M	* 9.30AM to 2.30PM	(Except Sunday) * 9.30AM to 2.30PM	
	5.28		A-241	240.7	PHMAHAN..... 7.0		11.35M	* 7.45AM to 4.45PM	(Except Sunday) * 7.45AM to 4.45PM	
12-1b	6.01		A-248	248.6	PH-RCLEVELAND..... 8.9	CN	11.15	* 7.45AM to 4.45PM	(Except Sunday) * 7.45AM to 4.45PM	
Auto. Interfing. Connection	6.28		A-256	257.5	PH { HALLETT S.L.-S.F. Crossing } 0.2		10.30			
32 North	6.55		A-260	260.2	PHJENNINGS..... 10.2		10.30			
17-11 Connection	7.20		A-270	270.4	PHYALE..... 0.6	YA	10.05	* 7.45AM to 4.45PM	(Except Sunday) * 7.45AM to 4.45PM	
Auto. Interfing.	7.45		A-271	271.0	PHSUNCO..... 0.4		10.05			
W-Y	7.45		A-279	279.4	PHA.T.&S.F. Gauntlet DEEP ROCK } 0.8		9.45			
Yard Connection 17 South	8.10		A-280	280.2	PH-R-RYCUSHING..... 10.5	CH	9.35	* 7.45AM to 4.45PM	(Except Sunday) * 7.45AM to 4.45PM	
	8.55		A-291	290.6	PHAGRA..... 12.0		9.10			
16 Not Gated. Stop	9.55		A-310	310.3	PHFALLIS..... 28.0		8.25			
			A-339	339.1	PHOWANDA..... 2.4		7.15			
Yard O-S-T-W	11.00M		A-343	342.8	PH { C.R.I.&P. Crossing BARNARD } 1.2		7.00M	* 5.30PM to 2.30AM	* 5.30PM to 2.30AM	
Not Gated. Stop			A-344	343.0	PH-R-RYTURNER..... 0.4	BX	7.00M	* 5.30PM to 2.30AM	* 5.30PM to 2.30AM	
Yard Y	51				PHOKLAHOMA CITY..... 207.7		50	* 1 Hour for Lunch	* 1 Hour for Lunch	
	10.59				Time on Subdivision		11.30			

Southward trains are superior to northward trains of the same class.

STATIONS AND TRACKS NOT SHOWN ABOVE

STATION NO.	MILE POST	CAR CAPACITY	END CONNECTED	STATION NO.	MILE POST	CAR CAPACITY	END CONNECTED
Penfield.....	A-162	A-162.3	8 South	Gano.....	A-278	A-277.6	30 Both
Cox.....	A-167	A-166.8	8 Both	Troy.....	A-297	A-297.2	12 Both
Dewey Stock Yards.....	A-192	A-192.0	9 Both	Carney.....	A-302	A-301.8	11 Both
Manion.....	A-232	A-231.6	6 North	Arenda.....	A-325	A-324.7	15 Both
Mindeman.....	A-249	A-249.3	30 Both	Wichter.....	A-332	A-332.2	51 Both
Norfolk.....	A-274	A-273.9	48 Both	Shellhorn.....	A-336	A-336.0	9 Both

JOPLIN SUBDIVISION - LABETTE TO JOPLIN

Capacity of Other Tracks, RR Crossing Protection and Other Facilities	SOUTH-WARD		Station Numbers	Distance from St. Louis	TIME TABLE No. 6 Effective August 16, 1964	Office Call	NORTH-WARD		HOURS OF TELEGRAPH SERVICE	
	SECOND CLASS						SECOND CLASS		Monday Thru Friday	Saturdays, Sundays, Holidays
	85 Freight	Daily Except Sunday					84 Freight	Daily Except Sunday		
37-37 18 North Y	12.20M		395	394.4	PHLABETTE..... 11.8		6.20M			
Mine Spur Y			S-12	400.2	NETTELS 0.8					
Yard B	1.10		S-10	410.0	WEST MINERAL 2.0	MY	5.50	* 8.30AM to 5.30PM	(Except Sunday) * 8.30AM to 5.30PM	
Connection Not Gated. Stop				412.9	{ COKEDALE Mo. Pac. Crossing } 5.1					
45-30 Connection Gated			S-24	418.0	ABBEY 0.3					
Auto. Interfing.				418.7	NEO Crossing 0.4					
Yard W Connection Gated	2.45		S-25	419.0	SL-SF Crossing 0.3	K	4.45	* 8.00AM to 5.00PM		
Yard Y	4.00		S-35	429.3	COLUMBUS 0.0	CO	4.45	* 8.00AM to 5.00PM		
Gated	4.15		S-38	432.1	KCS Crossing 1.7					
Yard Connection Yard S-T-W Connection	7.30M		S-45	440.7	MILITARY 2.2	RI	4.05	8.00AM to 4.00PM	8.00AM to 4.00PM	
					SL-SF Crossing 0.0					
					GALENA 0.0	AN	3.25	* 7.30AM to 4.30PM		
					JOPLIN.....	JO	3.00M	12.00MN to 8.00AM 10.00AM to 6.00PM	12.00MN to 8.00AM 10.00AM to 6.00PM	
	85				46.3		84	* 1 Hour for Lunch	* 1 Hour for Lunch	
	7.10				Time on Subdivision		3.20			

Southward trains are superior to northward trains of the same class.

STATIONS AND TRACKS NOT SHOWN ABOVE

STATION NO.	MILE POST	CAR CAPACITY	END CONNECTED	STATION NO.	MILE POST	CAR CAPACITY	END CONNECTED
Sherman City.....	S-102.0		Horn.....	S-39	S-433.9	12	South
New Mine Lead.....	S-103.8	Mine Spur	South Bear Mountain.....	S-43	S-437.5	5	Both
Crain.....	S-33	S-427.8	11				

TULSA SUBDIVISION - PROFIT TO CHASE

Capacity of Other Tracks, RR Crossing Protection and Other Facilities	SOUTH-WARD		Station Numbers	Distance from Chase	TIME TABLE No. 6 Effective August 16, 1964	Office Call	NORTH-WARD		HOURS OF TELEGRAPH SERVICE	
	SECOND CLASS						SECOND CLASS		Monday Thru Friday	Saturdays, Sundays, Holidays
	61 Freight	Daily					60 Freight	Daily		
Connection	6.45M		Z-270	54.2	PHPROFIT..... 0.5		6.35M			
Yard S-W-Y	6.50		Z-271	53.7	PHSAND SPRINGS..... 6.0		6.30			
Not Gated. Stop	7.30		Z-278	46.8	PH-R-RYTULSA..... 0.5	KA	6.00	* 3.30AM to 2.30PM	* 5.30AM to 2.30PM	
Interlocking Connection				46.2	SSI Crossing 0.1					
58	8.15		Z-286	39.0	AT&SF-SL-SF-MV Crossings 7.2		5.15			
27-23	8.45		Z-292	32.7	PHALSUMA..... 0.3		5.00	* 7.45AM to 4.45PM		
10-5	9.25		Z-303	21.4	PHBROKEN ARROW..... 11.3	BA	4.35			
11			Z-309	15.8	PHCOWETA..... 1.0					
13	9.50		Z-313	11.7	PHRED BIRD..... 1.1		4.10			
28			Z-324	0.4	PHPORTER..... 11.3					
	10.25M			0.0	PHWYBARK..... 0.4		3.15M			
	61				PHCHASE..... 0.2		60	* 1 Hour for Lunch	* 1 Hour for Lunch	
	3.40				54.2		3.20			
					Time on Subdivision					

Northward trains are superior to southward trains of the same class.

STATIONS AND TRACKS NOT SHOWN ABOVE

STATION NO.	MILE POST	CAR CAPACITY	END CONNECTED	STATION NO.	MILE POST	CAR CAPACITY	END CONNECTED
Fair Ground Spur.....	Z-281	Z-281.0	50 North Lane.....	Z-284	Z-284.0	20	South
Budd.....	Z-283	Z-282.7	7 South Anchor.....	Z-320	Z-319.8	27	North

SPECIAL INSTRUCTIONS

THE UNIFORM CODE OF OPERATING RULES, EFFECTIVE MAY 1, 1950, ARE SUPPLEMENTED AND AMENDED AS FOLLOWS:

Rule 6. Supplement to:

Numerous medicines contain drugs which may produce a condition ranging from drowsiness to an almost complete inability to remain awake, and in some cases periods of mental confusion. Such drugs are in many cold cures, sleeping pills, headache tablets, pain killers, cough mixtures, etc. Employees, especially those working on or around moving trains, machinery, etc., are not to use any of the above preparations while on duty or for a period of at least 12 hours before reporting for duty. Each employe must find out if any medicine taken contains such drugs.

Rule 2. Supplement to:

Watches that have been examined and certified as per Rule 2 must be used by Superintendents, Assistant Superintendents, Trainmasters, Assistant Trainmasters, Road Foreman of Engines, Division Engineers, Assistant Division Engineers, Roadmasters, Assistant Roadmasters, Yardmasters, Train Dispatchers, Conductors, Engineers, Brakemen, Firemen, Hostlers, Yardmen, Switch Tenders, Train Porters, Signal Supervisors, Signal Maintainers, Line Repairers, Water Service Foremen, Bridge and Building, Track and other Maintenance of Way Foremen and any employes in charge of or responsible for obstructing main track with motor cars or other maintenance cars, machinery or equipment. Upon entering service and annually in May, they must provide themselves with Form CT-90 Standard, issued by designated watch inspector on an order from the Superintendent, or in return for Form CT-90 Standard of the immediately preceding period. Watch with Form CT-90 Standard must be submitted to designated watch inspector for inspection as per Rule 2 of the Uniform Code of Operating Rules (or similar Maintenance of Way Rules), except Maintenance of Way Bridge and Building employes, unable to comply monthly must do so as nearly monthly as possible. Form CT-90 Standard must be in employe's possession while on duty.

Rule 5. Supplement to:

Capacity of sidings as shown on schedule pages in timetable is based on 48 feet per car less 160 feet allowed for 3 units diesel engine.

Rule 10(g). Amendment to:

Yellow and Green reflectorized signals as provided by Temporary Speed Restriction Chart, page 130, Uniform Code of Operating Rules, may be used both by day and by night, in lieu of signs by day and signs and lights by night.

Rule 10(h). Supplement to:

First paragraph of this Rule changed to read: Permanent speed restriction signs as prescribed in Special Instructions or General Orders, will be placed a sufficient distance in advance of the point where speed restrictions become effective.

Permanent Speed Restriction Signs in Service:

(1) Yellow Signs, Black Numerals, located as near one (1) mile as conditions will permit in advance of where speed restrictions become effective. Resume Speed Sign (green) where restriction ends.

(2) Reflector Type: Advance Warning Sign (P) located as near one (1) mile as conditions will permit in advance of speed restriction sign. Speed Restriction Sign (Q or R) at point where speed restriction becomes effective. Resume Speed Sign (P or Q) where restriction ends. Passenger trains not exceed speed shown on Speed Restriction Sign.

Freight trains and light engines between Machens and Franklin not exceed speed shown on Speed Restriction Sign; between Franklin and Cross freight trains and light engines reduce to 5 MPH below speed shown on Speed Restriction Sign; and on all other Subdivisions, freight trains and light engines reduce to 10 MPH below speed shown on Speed Restriction Sign; but in no territory will they exceed maximum speed provided for freight trains and light engines.

Rule 10(i).**Unattended Red Flag or Red Light:**

A train or engine finding a red flag or red light on or near the track must stop before passing the flag or light if practicable. If there is no one there to explain, flagman must precede movement and carefully examine track and structures for defects. After flagman has started ahead, train may proceed at restricted speed,

following flagman for at least 20 rail lengths. If it can then be seen that it is safe to proceed, flagman may be picked up but train must proceed at Restricted Speed for at least one mile additional, unless cause for red flag or red light has been found. If it cannot be seen that it is safe for train to proceed, train must follow flagman as far as conditions make it necessary. If the red flag or red light is on the track, it must be moved to the side of track to clear passing train and left to afford protection for a following train.

Rule 12(i). Supplement to:

When hand, flag or lamp signals prescribed by Rule 12 cannot be plainly seen, the use of radio communication is authorized to govern and control movement of a train or engine in lieu of hand, flag or lamp signals.

Rule 12(j). Amendment to:

Last paragraph of Rule 12(i) is amended to read: "When backing or shoving a train, engine or cars, the disappearance from view of employe or light by which signals are given, or failure to hear his voice continually on radio when movement is being controlled by radio instructions, must be construed as a stop signal, unless the movement is otherwise protected."

Rule 12(j). Supplement to:

Yellow fuses may be used in giving hand signals, except must not be used by trainmen or yardmen within interlocking limits.

Rule 14. Supplement to:

In making outgoing terminal brake test, one long and one short sound of the engine whistle or horn will be sounded after a signal has been received to apply brakes.

Rule 14(k). Supplement to:

On two or more tracks, train displaying signals for a following section will comply with requirements applicable to single track instead of Two or More Tracks.

Rule 17(f). Supplement to:

Yard engines will display standard white headlight to the front and rear by day.

Rule 19. Amendment to:

On passenger trains, a single electric marker lamp may be displayed in the center of rear car in lieu of two marker lamps, lighted to show red to rear at all times day and night, except when shows green to rear as provided in Rule 19(a).

Rule 19 and 19(a). Amendment to:

On freight trains two battery powered flashing type marker lamps may be displayed in the places provided on the rear of trains in lieu of standard oil burning marker lamps. By night these lighted lamps will show red to rear and green to front except, outside of ABS territory, when train is clear of main track to be passed by a following train lighted markers must be turned to show green to rear, as provided by Rule 19(a).

Rule 20. Amendment to:

All sections except the last will display two green lights only, by day and by night, in the places provided for that purpose.

Rule 20(a). Amendment to:

Extra trains will display two white lights only, by day and by night, in the places provided for that purpose.

Rule 27 and 221(c). Amendment to:

Second paragraph of Rule 221(c) reading: "When train order office hours are designated in timetable or general orders, light in a color light type train order signal may be extinguished during the hours such office is closed" is cancelled. Where the train order signal is a semaphore type or Nunn type, train order signal, and no light displayed at night, the position of the semaphore arm or disc will govern as prescribed by Rule 27.

Where the train order signal is a color light type signal (either flashing light or non-flashing type) and no light displayed, such Clearance Received Indication.

A train stopped by a train order signal displaying Rule 232 indication or by reason of no light, after communicating with train dispatcher and ascertaining no operator on duty, may proceed without a clearance on permission of train dispatcher and information from him that there is no orders for that train at that other members of crew may obtain this permission but before leaving.

Rule 35. Amendment to:

Flashing Signals, Red Light no longer required.

Rule 83(a). Amendment to:

The train register may be used as evidence of the arrival of an extra train by a train restricted therefor, only when authorized by Train Order, Form V, Supplement To, Example (3).

Rule 93. Supplement to:

At locations listed below, standard Yard Limit Signs cover yard limits where Rule 93 is in effect. Switch Limit Signs (Black letters on white background) located on right hand side of main track as viewed from trains or engines leaving the yard, indicate limit of yard engines operations. Between Yard Limit Signs and Switch Limit Signs, train movements will be governed by rules governing movements outside limits of Yard Limit Sign; yard engine movements will be made only on train order authority or under flag protection. Train Order authority to include either Form G train order or Form S-H train order.

Franklin-Boonville	Yard Limit Sign MP 190.1
	Switch Limit Sign MP 193.7
Nevada	Yard Limit Sign MP 317.4
MP A-163.5 Cox	Switch Limit Sign MP 318.3
Yale-Cushing	Yard Limit Sign MP A-276.0
	Switch Limit Sign MP A-269.5
Owanda-Oklahoma City	Yard Limit Sign MP A-341.6
	Switch Limit Sign MP A-338.9
North McAlester	North Yard Limit Sign MP 564.0
McAlester	North Switch Limit Sign MP 560.2
	South Yard Limit Sign MP 567.0
	South Switch Limit Sign MP 559.8

Rule 99(d). Amendment to:

On passenger trains, the flagman will be permitted to leave the rear of train to perform work as directed by conductor under following conditions:

- (1) When a competent employe who is qualified to protect the train takes his place.
- (2) When train is clear of main track.
- (3) When train is within yard limits, either standing or moving, under conditions where protection is not required against a following train.
- (4) When under the provisions of Protection Order Form Y, rear end protection against following trains is not required.

Rule 99(j). Supplement to:

The following units of equipment do not actuate block signals at all times. Unless otherwise provided, flag protection must be afforded in accordance with Rule 99, including territory covered by the provisions of Rule 99(j):

Single Unit Light Engines	Jackson Tamper
Pile Drivers	Spike Masters
Ballast Regulators	Tie Bed Scarifiers
Track Liners	Sperry Detector Cars
Diesel Electric Locomotive Crane	
and Other Material handling cranes.	

Rule 103. Supplement to:

At crossings where automatic crossing devices are located, when movement approaches slowly or stops before crossing is reached, or makes a reverse movement over crossing, or makes a forward movement after making a reverse movement, or when movement approaches crossing on sidings or auxiliary tracks, or when the approaching movement is one of the units of equipment listed in Rule 99(j) Supplement to, which does not actuate block signals at all times, such crossing must be approached at Restricted Speed, prepared to stop short of crossing, until known that devices are operating for movement over crossing on track being used. If they are not operating, movement over the crossing must be protected by flagman.

Rule 104. Supplement to:

Some hand operated switches Ray equipped with safety type switch stands and when trailing movement made through them points line for route being used and switch target indication changes to indicate route switch then lined for a facing point movement. Only such switches identified by bowl of switch stand painted yellow are designated switches that may be run through when lined against movement, without operating switch. When making trailing movement over such switches, either lined for or against movement, it must be seen and known there is no

conflicting movement on or closely approaching route to be used. This supersedes conflicting portions of Rules 104(5) and 104(13) but does not supersede Southern Division Timetable Special Instructions 18 with reference to crossover switches.

Rule 104(b), Rule 104(c), Item 62 of Instructions for Train Dispatchers, Item 3 of Instructions for Operators. Amendment to: Unless dual control switch has been placed in hand operation per Rule 104(b), Control Operator will not give information to train or engine that will permit movement over dual control switch until indication on control board denotes that switch is over and locked.

Rule 206. Amendment to:

Fifth paragraph amended to read: When diesel engines are composed of multiple units, the number of the operating control unit must be displayed and this number will be the identifying number of the engine, and will be the number of the leading unit, except that on work extras the number of any of the control units may be used in train orders relating to such work extras; numbers on other units may be displayed but such numbers will not be used in train orders.

Rule 209. Amendment to:

Second paragraph is cancelled.

Rule 216(b). Amendment to:

Rule 216(b) amended to read as follows: Restricting orders after cleared or by signal. An operator must not repeat a train order restricting the movement of a train after clearance and train orders have been delivered, nor after engine of a train has passed the train order signal displaying proceed indication, until he has taken up and destroyed all clearances previously issued to the train at that station, and has obtained the signature of the engineer to the order, and, when practicable, also obtain signature of the conductor.

After signature of the engineer and, when practicable, of the conductor, have been obtained, all previous clearances destroyed and train dispatcher notified as prescribed in Rule 216, the operator will repeat the order and transmit the signatures to train dispatcher who will then give "Complete". Clearances will then be issued and OK'd by train dispatcher showing ALL orders delivered to the train at that station.

Rule 221(d). Amendment to:**Operator Signal Supplies:**

- Red Flag
- White Flag
- White Light
- Six (6) Torpedoes
- Six (6) Red Fuses

Rules 230 and 232. Supplement to:**Nunn Type Train Order Signal**

Aspect—Parallel with track, Green Light.
Indication—Proceed, "No Orders".
Name—Clear Train Order Signal.



Aspect—At right angle to track, Red Light.
Indication—Stop, Unless Clearance Received.
Name—Stop Train Order Signal.

Rule 290. Amendment to:

The following Block and Interlocking Signal Aspects will be indications: "Proceed at Low Speed"

- (1) Within ABS—to next signal governing in same direction.
- (2) At interlockings outside ABS—through interlocking limits.
- (3) Where this signal governs movement onto non-signalized track—until entire train is through turnout.



Semaphore arms have been removed from "Lunar" aspects and when semaphore arm is in 45 degree angle with light out, the day indication will be as if "yellow" light was displayed in the semaphore arm in 45 degree angle.

Rule 290 (I). Supplement to:

At interlockings or remote control switches within ABS territory when a train or engine has moved within interlocking or remote control switch limits under the provisions of Rule 290 (I) (Lunar) (the limits in each case being the track between Absolute Signals), unless there is a siding immediately beyond the interlocking or remote control switch limits, or a leaving signal governing movements beyond the limits, in addition to complying with Rule 290, it must not move beyond the limits except as prescribed by Rule 350.

Rule 326. Amendment to:**Rule 326 amended to read as follows:**

326. Imperfectly Displayed Signals or Absence of Lights—The absence of a light, or a white light displayed where a colored or lunar light should be, on a block or interlocking signal must be regarded as the most restrictive indication that can be given by that signal, except that when the position of the semaphore arms are plainly seen, or a colored light is displayed in the top unit, or it is known that a yellow light is displayed in the light-out unit per Rule 285 or a lunar light displayed anywhere on the signal per Rule 290, such indications will govern. When block signal rules have been suspended per Rule 356, the provisions of such rule will govern.

Rule 332. Supplement to:

First and second paragraphs will also apply to R.D.C. (Budd) cars and similar types of equipment.

Rule 340 and 344. Amendment to:

Sperry Detector Cars actually in service testing rails, and the other units of Maintenance of Way equipment listed in Rule 290 (f) Supplement to—that do not actuate block signals at all times, must not, at Automatic Interlockings, move into or through such interlocking limits until Signal Department representatives have actuated interlocking signals so that they display Stop-indication against movements on conflicting routes, and employ in charge of the equipment is so notified; or until flag protection per Rule 99 has been provided on conflicting routes if no signman available. At Manually Controlled Interlockings, must not move into or through interlocking limits on interlocking signal indications until permission of control operator in charge of interlocking has also been secured, and must notify control operator when movement through interlocking has been completed.

Rule 344. Amendment to:

After approach circuit occupied causing signals for movement through interlocking to display "Proceed" if no conflicting movement, if movement through interlocking is not completed within a designated time, at some interlockings, absolute signal will change to display Stop-indication. To regain route, if there is a re-clearing section in advance of absolute signal, it must be occupied. Where push buttons are located on absolute signals, their operation may cause absolute signal to display "Proceed" indication, after losing route, or when making reverse movement through the interlocking after a forward movement. If absolute signal still displays Stop-indication, or if interlocking not so equipped, time release in relay box at crossing must be operated under provisions of Rule 344.

Rule 355. Block Indicators. Supplement to:

Block indicators other than those prescribed by Rule 355 will be designated by letter "B".

Rule 356. Supplement to:

When one or more signals are taken out of service and the territory involved is less than 5 miles, the following form of train order may be issued: "Signal (or signals) at (station) (or MP) is (or are) temporarily out of service. The territory protected by these signals is now protected by signals _____ and _____ between (station) and (station) (or between MP _____ and MP _____)." This order must not be used to cover signals or territory involving spring or remote control switches.

Rule 400. Amendment to:

Pile Drivers, Ballast Regulators, Track Liners, Jackson Tampers, Spike Masters, Tie Bed Scarifiers, Diesel Electric Locomotive Crane and other material handling cranes, and Sperry Detector cars actually in service testing rails will be handled on Track and Time Limits (Rule 402) in territory where movement by Signal Indications (Rules 400-404) are in effect, or move under flag protection. In addition to complying with the last paragraph Rule 375 (10), Control Operators will maintain absolute block and not permit other movements into such block until information received as required by this rule. Sperry Detector cars not testing rails may be moved on signal indications.

Rule 401. Amendment to:

In territory where Movement by Signal Indications (Rule 400-404) are in effect, an extra train originating at a station not an open train order office, may leave such station without a clearance.

Rule 510. Amendment to:

Riding on pilot step on freight or passenger diesel locomotives is prohibited.

Forms of Train Orders:**(a) Form S-E. Supplement to:**

The following form is authorized:
"No 6 Eng 53A wait at B until 930am for Extra 65C South
No 6 take siding at B for Extra 65C South"
When a superior train is directed by Train Order Form S-E (Time Order) to take siding for another train, such instructions, unless annulled by a subsequent train order, are in effect after the time stated in the order has expired and the superior train must approach the designated point at restricted speed, prepared to stop, expecting to find the inferior train on the main track between the siding switches, without flag protection, and must take siding if the inferior train is at the designated point. If the superior train arrives at the designated point after the time stated in the order has expired, and the expected train has not arrived, the superior train may proceed without entering and using the siding only if main track can be seen to be clear to the other end of the siding. This form of train order must not be combined with any other form and may contain only one waiting point.

(b) Form Y. Supplement to:

The following forms are authorized:
(3) "No 53 (or Extra 101 South) may check train register at R against Extra 100 North on Order No 76"
(4) "Extra 100 North register at R on Order No 76"
When example (4) is used, number and date of the order specified will be inserted in column of train register captioned "Classification Signals".

(c) Form X. Supplement to:

The following form is authorized:
"801am until 501pm trains approach (extra, rail, bridge, etc.) gang working between MP _____ Pole _____ and MP _____ Pole _____ (or at Bridge MP _____ Pole _____) prepared to stop and proceed only on hand signal by foreman in charge given with yellow flag"

(d) Form Y. Amendment to:

Form Y protection order may be used to protect rear of passenger trains.

Supplement to MKT Lines "Rules and Instructions for Operators" and "Rules and Instructions for Train Dispatchers."

When train order office is opened, in emergency, at hours other than established by timetable, general order or train order, the operator will use stop signals (red flag or red fuses) in addition to, or in lieu of, train order signal to stop trains, and if view is restricted will use torpedoes to be placed so as to give ample warning, except a non-restricting "wait order" as per Forms of Train Orders S-E and E, addressed to an inferior train, when "Stop Train Order Signal" as per Rule 232 and Supplement to Rule 232 (above) is displayed, may be delivered without train having to score words "or in lieu of" to take care of a condition where, in emergency, such as derailment, train order office had to be opened where there was no train order signal (non-telegraph office or blind siding) and this would be the method to handle train orders for trains at such point, in absence of a train order signal.

OPERATION OF RADIO.

All employees using Railroad Radio Communication must have a copy of and comply with MKT Lines Rules and Instructions Governing Operation of a Railroad Radio Communication System effective November 1, 1952, in addition to complying with Federal issued and posted by the Communications and Signal Department. Radio communications systems are under the jurisdiction of the Federal Communications Commission. The Railroad Company and Violation is a Federal offense for which severe penalties are provided.

Federal Communications Commission Rule 2 reads as follows: "No employee shall knowingly transmit any false distress communication, nor utter any obscene, irrelevant or unidentified communication, nor utter any obscene, indecent or profane language by radio."

Communication via radio must not be utilized by any employee in any manner that would have the effect of supplementing or modifying strict compliance with Operating Rules and Special Instructions.

Radio will not be used in the transmission of train orders direct to a train or engine, except in emergencies. When so used every precaution must be taken to prevent any misunderstanding. Uniform Code of Operating Rules covering train orders transmitted by telephone will be followed.
The use of radio to transmit train orders is prohibited except as follows:

(1) In an emergency, train dispatcher may transmit a train order by use of radio communication direct to an operator, or direct to a conductor or engineer as provided in Rule 206 (b).

(2) In an emergency, train orders may be relayed by radio communication direct to a conductor, an engineer, or another operator, by an operator, as provided in Rule 206 (c).
Employees are prohibited from advising approaching trains as to the position of train order signal, or informing them of the contents of any train orders for their train, or for any other train. Train and engine crews are prohibited from requesting such information by radio.

FIXED AND BASE STATIONS—Operators' Requirements

Railroad employees may, without holding any class of commercial operators license, operate fixed and base stations in Railroad Radio Service, provided the Railroad has adopted and published Railroad General and Operating Rules in a form which has been approved by the Commission. All railroad employees who have occasion to use the radio at a base station are required to pass an examination given by railroad examiners on the applicable Railroad Radio General and Operating Rules. The first such examination must be given prior to the operation of any radio transmitting apparatus by the employees and re-examination shall thereafter be given at intervals not in excess of two years.

STATION OR IDENTIFICATION

A base or mobile station must be identified in each transmission. Identification shall be by assigned call letters unless a different method is specifically authorized by the Commission. Stations in the Railroad Radio Service may be identified in lieu of the use of the assigned call letters, by name of the railroad and the train number, truck number, engine number or fixed wayside station, or, if that is not practicable, by such other number or name as may be specified by the Railroad concerned to identify the fixed or mobile unit. Where identification is made other than by train number, caboose number or engine number, a list of abbreviated name or initial letters of the Railroad may be used where such name or initials are in general usage, such as, the word "Katy".

IMPAIRED CLEARANCES:

Main track bridges and structures having horizontal clearance between points 4 feet and 16 feet above top of rail, less than 7 feet 4 1/2 inches

Subdivision	From (Station)	Mile Post	To (Station)	Mile Post
Eastern	North of Mokane	111.9	North of Sedalia	227.0
	North of Cross	381.5	Cross	381.0
Kansas City	Paola	A-48.1	Cross	A-131.0
Oklahoma	North of Dewey	A-193.1	North of "DY" Jct.	A-194.2
Muskegee	Poolo	387.1	Fondulac St. Muskegee	202.2
	SL-SF-MV Crossing	503.9	Denton	660.8
Kansas City	Staley	655.9	Ray	Q-460.0

All Various All mail cranes when pouches hung
Main track bridges and structures having vertical clearance above top of rail less than 21 feet 6 inches

Subdivision	Mile Post	Kind of Structure
Eastern	93.4	Bridge
Eastern	178.9	Rocheport Tunnel
Eastern	255.3	Overpass
Moberly	O-92.7	Bridge
Columbia	V-171.6	Bridge
Kansas City	A-6.5	Highway overpass, SL-SF joint track
Neosho	B-34.2	Bridge
Muskegee	503.6	Viaduct Court Street (All Tracks)
Muskegee	623.8	Overpass
Muskegee	644.6	Overpass
Tulsa	Z-276.6	Overpass, Union Avenue
Joplin	S-440.7	Train Shed, Joplin Union Station

It is dangerous to stand erect on top of engine, a high load or open top car, or on top of a covered car, also on side of a car or engine while passing through bridges, by buildings, platforms and other structures along side main and other tracks, due to the fact that engines, cars and loads on open top cars are various heights and widths, which impair clearance.

ENGINE WHISTLE OR HORN SIGNALS, INTERLOCKING:

Main track to main track	OO
Main track to siding, or reverse	O
Main track to industry, or transfer track, or reverse	OO
Main track to subdivision, or main track of another railroad, or reverse	OO

MOVEMENT OF TRAINS

1. SUPERIORITY OF TRAINS BY DIRECTION is shown at bottom of schedule pages. (See Rule S-72)

2. GOVERNING TIMETABLE AND RULES:

Between Union Station and North Market Street, St. Louis: Be governed by TRRA rules.

Between North Market Street, St. Louis, and Machens: Be governed by CB&Q R.R. timetable and rules.

North Clinton-Clinton: SL-SF trains and engines may use MKT main track between wye tracks North Clinton and KCC&S connection Clinton, upon receipt of train order authority to occupy main track.

Nevada: MKT trains and engines may use Mo.Pac. tracks, but must obtain permission from Mo.Pac. dispatcher before fouling Mo.Pac. main track and all movements on Mo.Pac. tracks must be made at restricted speed. Mo. Pac. trains and engines may use MKT main track upon receipt of permission from MKT train dispatcher.

Between Union Station and 29th Street, Kansas City: Be governed by KCT Ry. rules.

Between 29th Street, Kansas City and Paola: Be governed by SL-SF Ry. timetable and rules.

Oklahoma Subdiv. between "DY" Jet, and "BE" Jet.: Be governed by AT&SF Ry. timetable and rules.

Between Barnard and Oklahoma City: OC&A trains and engines will be governed by MKT R.R. timetable and rules.

Between Staley and Ray and between Staley and Denton: Muskogee Subdiv. trains will also be governed by Southern Division timetable.

Time shown in small figures on schedule pages is for information only and confers no authority.

3. AUTOMATIC BLOCK SIGNALS:

Subdivision	From (Station)	Mile Post	To (Station)	Mile Post
Eastern	North of Mokane	111.9	North of Sedalia	227.0
	North of Cross	381.5	Cross	381.0
Kansas City	Paola	A-48.1	Cross	A-131.0
Oklahoma	North of Dewey	A-193.1	North of "DY" Jct.	A-194.2
Muskegee	Poolo	387.1	Fondulac St. Muskegee	202.2
	SL-SF-MV Crossing	503.9	Denton	660.8
Kansas City	Staley	655.9	Ray	Q-460.0

Franklin—northward movements entering yard will not pass Signal 1892 until switch lined to enter yard. Southward movements leaving yard will not close main track switch until entire train has passed Signal 1892. Movements from yard to main track at south switch and thence northward on main track move south of Signal 1892 and be governed by its indication.

Chase—northward Signal 4992, south end siding—also protects spring switch at Tulsa Subdiv. Jct.

Muskegee—northward passenger trains remain back to clear southward movements to other station tracks while Absolute Signal at Fondulac Street displays Stop-indication. If it displays "Clear" aspect, may proceed to interlocking at KO&E crossing. If Absolute Signal inoperative move as instructed.

Meyer—northward trains comply with indication of northward Absolute Signal MP 510.2 at north switch, siding.

Checotah and Canadian—southward trains on main track or siding to meet opposing trains or to be passed, remain 600 feet north of leaving Absolute Signal at Checotah and 500 feet north of leaving Absolute Signal at Canadian, until such train has arrived or departed, then will occupy the 600 foot section at Checotah and 500 foot section at Canadian to receive clear Absolute Signal for departure. Southward train in siding passing a southward train on main track will be delayed after moving into the 600 foot section at Checotah and the 500 foot section at Canadian for elapse of change over time for signal governing siding to clear.

Canadian and North McAlester—northward trains on main track or siding to meet opposing trains or to be passed, remain 500 feet south of leaving Absolute Signal until such train has arrived or departed, then will occupy the 500 foot section to receive clear Absolute Signal for departure. Northward train in siding passing a northward train on main track will be delayed after moving into the 500 foot section for elapse of change over time for signal governing siding to clear.

Atoka—northward trains holding main track at meeting point remain back of "Fouling Point" sign until opposing train is entering siding.

RULE 99(j) AUTHORIZED on Eastern Subdiv. between MP 121.9 and MP 227.0, and on Kansas City and Muskogee Subdivisions.

FLOOD INDICATORS at following locations:

MP Location	Affects Signals
384.2	1841 and 1850.
388.5	3871 and 3886.
391.0	3907 and 3924.
407.2	4057 and 4086.
413.6	4131 and 4160.
431.0	4319 and 4344.
440.2	Southward Absolute Signal south end siding Vinita and 4415.
443.6	4433 and 4450.
455.5	4547 and 4562.
460.2	4585 and 4612.
465.0	4639 and 4656.
493.2	4921 and 4950.
518.1	5161 and 5186.
519.4	5161 and 5215.
521.8	5217 and 5236.
612.4	Southward Absolute Signal Atoka and 6140
638.0	6377 and northward Absolute Signal north end siding Durant.

When any of the above signals display Stop-indication or "Stop, Then Proceed at Low Speed" indication, also look out for track washed out or damaged by high water.

SLIDE INDICATORS at following locations:

MP 592.0 and MP 592.1, affecting Signal 5917 and northward Absolute Signal, Burg. When these signals display Stop-indication or "Stop, Then Proceed at Low Speed" indication, also lookout for boulders or earth slides on track.

4. MOVEMENTS BY SIGNAL INDICATION (Rules 400-404):

a. Between Poole and north switch siding, Labette. Control Operator North Yard. Clear signal indication on Signal 3960, south end siding, Labette, authorizes northward movements to proceed on main track to north siding switch, ahead of or against superior trains, but observing indication displayed by Signal 3950. Northward trains restricted for a train at south siding switch, Labette, receiving Stop-indication, or "Approach" indication on Signal 3960 will take siding. Northward trains not restricted at south siding switch, Labette, will be governed by indications displayed by Signals 3960 and 3950. Joplin Subdiv. trains are authorized to run as extra trains, without train orders, as provided by Rules 88(a) and 401.

b. 8:00 A.M. to 1:00 A.M. daily—Between south switch siding, Pryor and north switch siding, Smith. Control Operator Pryor. Between 1:00 A.M. and 8:00 A.M. daily no operator on duty Pryor and signals will be automatic block signals only and trains and engines will operate in this territory by timetable, train orders and ABS Rules; Absolute Signals on siding Smith and Pryor and on house track Pryor will display Stop-indication only; and trains will not meet at Pryor except when instructed to do so by Form S-A train order.

c. Between north switch siding, Chase and KO&G Crossing, Muskogee Yard. Control Operator KO&G Crossing, Tulsa Subdiv. trains are authorized to run as extra trains, without train orders as provided by Rules 88(a) and 401.

d. Between MP 660.3 Roy and McCune. Control Operator Roy.

5. TWO MAIN TRACKS BETWEEN:

Union Station and North Market Street, St. Louis—TRRA tracks. Union Station and 29th Street, Kansas City—RCT Ry. tracks. 29th Street Kansas City and Paola—SL-SF Ry. tracks.

6. AUXILIARY SIGNALS:

a. Muskogee—"Luna" aspect displayed on northward Absolute Signal at Fondulac St., indicates crossover switches north of signal are lined for movement into freight yard.

When Stop-indication displayed on this signal, northward freight movements stop before fouling other depot tracks. After stop is made if seen or known that no opposing main track movement approaching and route is unobstructed, may proceed to crossover switch.

b. Color light signal on roof of passenger station Paola, and on southeast corner of SL-SF-MV Interlocking Station, Muskogee, train order restrictions applied to trains designated, no Train Order Form V will be received covering superior trains or train order authority received to proceed ahead of or against them. Train Order Form N required before operator can display "Yellow" aspect. Color light signals Paola and Muskogee are not Train Order Signals as defined under Rules 230, 231 and 232. Display of "Yellow" aspect does not affect observance of Block or Interlocking Rules.

Paola—governs southward trains. Normal aspect "Dark" and when "Dark" aspect displayed, southward trains will not occupy Kansas City Subdiv. main track south of crossover to puzzle switch, until authorized to do so by "Yellow" aspect.

SL-SF-MV Interlocking Station, Muskogee—governs southward trains. Normal aspect "Dark" and illuminated only when southward Absolute Signal displays "Proceed" indication, or track occupied within the interlocking limits. When "Red" aspect displayed, southward trains stop clear of southward Absolute Signal on signal bridge until "Yellow" aspect displayed.

c. "Calling-on" indication of Train Order Signal, per Rule 221(a), repeated at:

Stringtown—on Signal 6046, south switch siding.

Durant—on Signal 6393, north switch siding and on Signal 6432, south switch siding.

7. TRAINS WILL REPORT FOR CLEARANCE, FORM 118, OTHER THAN REQUIRED BY RULE 83(a) (last paragraph):

Baden instead of Machesn—Trains originating.

Franklin, all trains Eastern Subdivision.

North Yard, instead of Parsons—Originating trains, Nos. 2 and 6 secure clearance, Form 118, from Train Order delivery staff

located directly east of yard office, North Yard, on east side of track used by passenger trains. Conductors of all other trains report North Yard telegraph office for clearance.

Bartlesville—All trains, when Operator on duty.

KO&G Crossing, instead of Muskogee and Muskogee Yard—

SL-SF-MV Crossing, instead of Muskogee and Muskogee Yard

—Southward Muskogee Subdiv. trains.

8. EXCEPTIONS TO RULES 82(a) AND 83(a):

a. Exception to Rule 82(a): Schedules may be assumed without train order authority at other than the initial station on the Subdiv. at the following points:

Franklin—Nos. 52 and 53.

Muskogee—Nos. 1, 2, 3 and 6.

Muskogee Yard—Nos. 41, 42, 52 and 53.

Hominy—Nos. 50 and 51.

b. Exception to Rule 83(a) (last paragraph): Unless Train Order Signal displays "Stop, Unless Clearance Received", regular trains may leave their initial station without clearance, Form 118, at the following points:

Labette—Trains originating.

Chase—Trains originating.

Profit—Trains originating.

9. REGISTER STATIONS: (Designated by full-faced type):

a. North Yard is not a register station for first class trains or passenger extras.

Parsons is register station only for trains originating and terminating.

Paola, all trains, except originating and terminating, by ticket.

Muskogee is register station only for first class trains and passenger extras.

b. Trains will register at other than register stations as follows:

Baden, trains originating or terminating.

Franklin instead of Machesn, northward trains.

Franklin instead of Machesn, southward trains.

Glen Park, trains originating or terminating.

Muskogee Yard, trains originating or terminating.

North McAlester, trains originating or terminating.

North McAlester, trains originating or terminating.

North McAlester, trains originating or terminating.

North McAlester, trains originating or terminating.

North McAlester, trains originating or terminating.

North McAlester, trains originating or terminating.

North McAlester, trains originating or terminating.

North McAlester, trains originating or terminating.

North McAlester, trains originating or terminating.

North McAlester, trains originating or terminating.

North McAlester, trains originating or terminating.

North McAlester, trains originating or terminating.

North McAlester, trains originating or terminating.

North McAlester, trains originating or terminating.

North McAlester, trains originating or terminating.

North McAlester, trains originating or terminating.

North McAlester, trains originating or terminating.

North McAlester, trains originating or terminating.

North McAlester, trains originating or terminating.

North McAlester, trains originating or terminating.

10. STANDARD CLOCKS:

St. Louis	Telegraph Office
Baden	Telegraph Office
Franklin	Telegraph Office
Fl. Scott	Freight Office
North Yard	Yard Office
	Enginemen's Rm.
Kansas City	Telegraph Office
Glen Park	Telegraph Office
Coffeyville	Telegraph Office
Cushing	Telegraph Office
Turner	Yard Office
Joplin	Telegraph Office
Tulsa	Telegraph Office
Muskogee Yard	Yard Office
Muskogee	Ticket Office
McAlester	Telegraph Office
Denison	Telegraph Office
Roy	Yard Office

11. GENERAL ORDER BOOKS:

Baden	Telegraph Office	Enginemen's Rm.
Franklin	Telegraph Office	Enginemen's Rm.
Fl. Scott	Freight Office	Enginemen's Rm.
North Yard	Yard Office	Enginemen's Rm.
	Enginemen's Rm.	Yardmen's Rm.
Parsons	Pgr. Sta. Bsmt.	Enginemen's Rm.
Kansas City	Telegraph Office	Enginemen's Rm.
Glen Park	Telegraph Office	Enginemen's Rm.
Coffeyville	Enginemen's Rm.	Enginemen's Rm.
Bartlesville	Yardmen's Rm.	Enginemen's Rm.
Hominy	Locker Room	Locker Room
Cushing	Telegraph Office	Telegraph Office
Turner	Yard Office	Yard Office
	Enginemen's Rm.	Enginemen's Rm.
Tulsa	Freight Station	Freight Station
Muskogee Yard	Yard Office	Yard Office
Muskogee	Passenger Station	Passenger Station
No. McAlester	Freight Station	Freight Station
Denison	Register Room,	Register Room,
	Enginemen's Rm.	Enginemen's Rm.
Roy	Yard Office	Yard Office
	Enginemen's Rm.	Enginemen's Rm.
	Enginemen's Rm.	Enginemen's Rm.

12. YARDS PROTECTED BY YARD LIMIT SIGNS:

Columbia	Cleveland	One Yard
Moberly	Mindeman	One Yard
New Franklin		One Yard
Franklin	Yale	One Yard
Bonville	Cushing	One Yard
Sedalia		One Yard
Clinton	Owanda	One Yard
Nevada	Oklahoma City	One Yard
Fl. Scott	Labette (Joplin Subdiv. only)	One Yard
Cross	Nettels	One Yard
North Yard	West Mineral	One Yard
Parsons	Cokedale	One Yard
Poole		One Yard
Paola	Columbus	One Yard
	Military	One Yard
	Galena	One Yard
Chanute	Joplin	One Yard
Monarch	Tulsa	One Yard
Humboldt	Alsuma	One Yard
Piqua		One Yard
MP A-163.5	Wybark	One Yard
Coffeyville	Muskogee Yard	One Yard
South Coffeyville	Muskogee	One Yard
Dewey Stock Yard	MP 560.2	One Yard
Dewey	North McAlester	One Yard
"DY" Jet	McAlester	One Yard
	MP 569.8	One Yard
"BE" Jet	Staley	One Yard
Sutton	Denison	One Yard
Hominy	Roy	One Yard

13. FLAG STOPS NOT SHOWN ON SCHEDULE PAGES:

For revenue passengers only unless otherwise provided. Nos. 1 and 2, Vinita to receive for or discharge from Denison and points south that are regular stops, and Kansas City and beyond.

Regular stop will be made by train No. 5 at Stringtown, Tushka and Caneby daily except Sunday and holidays, and by train No. 6 at Oktaha daily except Sunday, to dispatch U.S. Mail.

No. 5 and No. 6, any station to receive or discharge passengers and head end traffic.

No. 2, Vinita for first class mail.

Conductor will ascertain from postal clerk and express messenger-baggage men necessary to comply with above.

14. RESTRICTED SPEED REQUIREMENTS:

a. Barnard—OCA&A movements to MKT main track, if no opposing main track movement, must display a lighted red fuse on MKT main track north of Barnard before opening switch or fouling MKT main track. This does not relieve approaching MKT trains and engines from moving at Restricted Speed.

b. TRAINS WILL HAVE NO TIMETABLE SUPERIORITY AND ALL TRAINS AND ENGINES WILL MOVE AT RESTRICTED SPEED at the following locations:

Paola: Between switch intersecting SL-SF main track at north end (Old Long Track) and crossover from main track to puzzle switch.

Parsons Terminal: Between Cross and Poole.

Cox-Evans: Between MP A-166 and MP A-169.

Barnard-Oklahoma City: Between MP A-341 and MP A-343.9.

Sherman City-Cokedale: Between MP S-402 and MP S-413.

Muskogee Terminal: Between KO&G Interlocking and SL-SF-MV Interlocking.

Denison-Ray Terminal: Between Signal 6605, Denison, and yard limit sign MP D-6621, south of Lamar, Dallas Subdiv.; and on Fort Worth Subdiv. between Denison passenger station yard and yard limit sign MP 663.0 south of Ray.

15. BETWEEN THE FOLLOWING POINTS TRAINS AND ENGINES WILL OPERATE UNDER PROVISIONS OF RULE 93 WITH-OUT CLEARANCE OR TRAIN ORDERS:

Columbia Subdiv. Jet, and Columbia on Columbia Subdiv.

Franklin and Moberly on Moberly Subdiv.

Walker and Eldorado Springs on Eldorado Subdiv.

North McAlester and Bishop on Wilburton Subdiv.

16. FORM Y TRAIN ORDERS AUTHORIZED on all Subdivisions, but are not effective in territory where Movements are by Signal Indications (Rules 400-404) as per Special Instructions 4. When Form Y orders are received before reaching Franklin on Eastern Subdiv.; before reaching Muskogee or Muskogee Yard on Muskogee Subdiv.; or before reaching Hominy on Oklahoma Subdiv.; to be effective beyond these points must specify a wait at a station beyond the point named on each of these Subdivisions.

On Oklahoma, Joplin and Tulsa Subdivisions, regular trains will be notified of following extra trains by train dispatcher who will issue train order to all concerned as follows:

"C&E"

After (time) protect against Extra "_____"

Preceding trains receiving this order will after the specified time, while occupying main track, protect in accordance with Rule 99.

In the absence of this train order, regular scheduled trains on the Subdivisions designated may occupy the main track between Station Whistling Signs (Black letter "S" on white background) protecting against scheduled trains only and following extra trains must approach all stations prepared to stop at the Station Whistling Sign and thereafter proceed only as the way is seen or known to be clear.

17. EXCEPTIONS TO RULE 5. TIMETABLE OR TRAIN ORDER RESTRICTIONS APPLY AT:

Paola—Crossover from main track to puzzle switch.

Moran—West siding.

North Yard—Crossover where station sign located.

Dewey—Storage track No. 1.

Cushing—Second track west of passenger station.

18. NORMAL POSITION OF SWITCHES:

North Yard-Parsons-Poole—No track designated as main track between SL-SF Crossing, Poole, and North Yard Station sign where Kansas City and Eastern Subdivisions main tracks intersect. All tracks are yard (tracks and, except as shown below, switches may be left lined in any position, except crossover switches not specified will be left with both switches lined for crossover or both switches lined against crossover movement. Kansas City Subdiv. passenger trains will move via scale track and "Hound" lead track unless otherwise instructed.

North Yard—East 16 crossover, from East Yard to West Yard, switches lined as needed. Switch at intersection of Neosho Subdiv. main track with lead, North Yard, for the lead.

Parsons—Oklahoma Subdiv. freight trains will use crossover Corning Ave. and track used by Muskogee Subdiv. freight trains to enter or leave North Yard, and will leave both switches of crossover Corning Ave. lined against crossover movement.

Poole—Spring switch at intersection of track used by Muskogee Subdiv. freight trains to enter or leave North Yard, and track used by Muskogee Subdiv. passenger trains to enter and leave passenger station, leave lined for freight trains.

Labette—Intersection of Joplin Subdiv. main track with siding, for siding.

Chase—Spring switch at intersection of Tulsa Subdiv. main track with Muskogee Subdiv. main track, for Muskogee Subdiv. main track.

Tulsa—No track designated as main track between AT&SF - SL-SF - MV crossing and Boulder St., second street west of station. All tracks are yard tracks and switches may be left lined in any position, except crossover switches will be left with both switches lined for crossover or both switches lined against crossover movement.

Dewey—East end of south crossover new yards, into yards, lined for AT&SF connection.

Turner—Main track switches, lined as needed.

Denison—First track east of passenger station designated as main track through Denison and all passenger trains will use this track unless otherwise instructed. Rule 104 and other applicable Uniform Code of Operating Rules govern. No. 2 track will be left clear for meeting trains.

19. CROSSOVERS AND SIDINGS:

Lindale: Lead track from south switch to crossover, and No. 2 track, designated as siding.

North McAlester-McAlester: Crossovers designated as:
No. 1—just south of Stonevall Ave.
No. 2—just south of coal chute.
No. 3—just north of overpass north of CRI&P crossing.

Durant: Siding extends from MP 639.2 to MP 643.1.
Crossovers designated as:

North crossover—north of Main St., intersects main track MP 641.2.

South crossover—south of SL-SF crossing, intersects main track MP 641.5.

(Southward trains go to north crossover for opposing trains only when authorized by train order or otherwise to do so.)

20. RESTRICTIONS IN OPERATION OF LOCOMOTIVES AND CARS:

Maximum depth of water, over top of rail, through which equipment may be handled is as follows, except where greater depths are authorized by special instructions:

Diesel engines 5 inches.
Passenger cars 9 inches.
Freight cars 25 inches.

When trains are operated through water a maximum speed of 5 MPH must not be exceeded.

Cars with gross weight exceeding 105 tons must not be handled on Columbia Subdiv.

Diesel (not more than one unit) heavier than Cooper's rating E-47 must not be operated on Eldorado Subdiv.

Cars with gross weight exceeding 100 tons must not be handled on Eldorado Subdiv. between Dederick and Eldorado Springs.

Diesels (not more than two units) heavier than Cooper's rating E-47 must not be operated on Neosho Subdiv.

21. ABBREVIATIONS:

a. The following signs placed in column provided on schedule pages indicate:

W—Water. PH—Telephone.
O—Fuel for diesel locomotives. R—Radio base station.
T—Turntables. RV—Radio yard station.
S—Track scales. "—"—Regular stop.
Y—Wye. "F"—Flag stop for passengers.

"#"—Stop for meals.

b. Abbreviations in connection with MP locations and station numbers:

A—Kansas City, and Q—Warner Cutoff
Oklahoma Subdivisions R—Wilburton Subdivision
B—Neosho Subdivision S—Joplin Subdivision
F—Eldorado Subdivision V—Columbia Subdivision
O—Moberly Subdivision Z—Tulsa Subdivision

22. PRECAUTIONS TO BE TAKEN TO INSURE SAFE TRAIN OPERATION DURING AND FOLLOWING SEVERE STORMS:

OPERATORS—Notify Train Dispatcher promptly of nature and extent of storm. Call Section Foreman, if not on duty. If so advised by Section Foreman, hold trains until it is known track is safe.

TRAIN AND ENGINEMEN—Bring train under control and proceed through territory affected by storm at a rate of speed that will insure safety; notify Train Dispatcher condition of track. If unable to communicate with Dispatcher or Section Foreman and there is doubt as to safety of movement, take siding and wait until advised track is safe.

TRAIN DISPATCHERS—On receipt of report of storm, notify trains likely to be affected; see that Superintendent, Division Engineer and Roadmaster are notified and that Section Foremen are patrolling track and get all information necessary to protect safe movement of trains as quickly as possible. If necessary, have Operator call Section Foreman.

23. REMOTE CONTROL SWITCHES.

a. Dual Control Switches:

Baden—Entrance to CB&Q R.R. main track — normally controlled from CB&Q Dispatcher's office, Hannibal, Mo.

Machens (MP 26.9) intersection of M-K-T main track and CB&Q main track — Normally controlled from CB&Q Dispatcher's office, Hannibal, Mo.

SL-SF North Jct. (MP 655.9) intersection of M-K-T main track and SL-SF main track — Normally controlled from Ray.

SL-SF South Jct. (MP 656.2) intersection of M-K-T main track and SL-SF main track — Normally controlled from Ray.

MP 656.2—Intersection of M-K-T passenger main track and M-K-T freight main track (Warner cutoff) south of Red River Bridge — Normally controlled from Ray.

b. Other Remote Control Switches:

"DY" Jct. MP A-194.5
KO&G Junction MP 641.03 Durant

24. SPRING SWITCHES:

a. Spring switches: (Designated by letter "S" attached to switch stand.)

Hoffman—South switch, siding.
Beaman—North switch, siding.

North Clinton—South switch, siding.
Nevada—Both switches, siding.

Griffith—Both switches, siding.
Parker—Both switches, siding.

Kincaid—Both switches, siding.
Moran—North switch, west siding.

Kimball—Both switches, siding.
Erle—Both switches, siding.

Poole—Intersection of track used by Muskogee Subdiv. freight trains and track used by Muskogee Subdiv. passenger trains to enter or leave passenger station — normal position for freight trains. Not protected by ABS.

"BE" Jct. MP A-198.2 — MKT-AT&SF Conn. (normal position for AT&SF)

Labette—North switch, siding.
Chetopa—South switch, siding.

Welch—Both switches, siding.
Vinita—South switch, siding.

Adair—Both switches, siding.
Smith—Both switches, siding.

Wagoner—South switch, siding.
Chase—Tulsa Subdiv. Jct. switch. (normal position for Muskogee Subdiv.)

Meyer—South switch, siding.
Checotah—South switch, siding.

Canadian—Both switches, siding.
North McAlester—Both switches, siding.

Kiowa—Both switches, siding.
Burg—Both switches, siding.

Stringtown—South switch, siding.
Atoka—Both switches, siding.

Cook—Both switches, siding.
Caddo—Both switches, siding.

Durant—Both switches, siding.
Olive—Both switches, siding.

25. INSTRUCTIONS AT RAILROAD CROSSINGS:

At railroad crossings listed below, in addition to observing applicable Rules of the Uniform Code of Operating Rules and Timetable Special Instructions "Maximum Speed of Trains Over Railroad Crossings" these additional instructions and information are in effect, and must be observed:

NOTE: Where instructions show movements "time out" at certain automatic interlockings, this means that if an MKT movement in either direction, after receiving a "Proceed" indication, does not enter interlocking limits within the period of time shown, Absolute Signal governing MKT movement will automatically change to display Stop-indication. Where a "re-clearing" circuit is shown in advance of Absolute Signal, occupying this "re-clearing" circuit, if no movement approaching crossing on the other railroad, may cause Absolute Signal that is displaying Stop-indication to be restored to indicate "Proceed".

Where push buttons, other than those in release box at crossing are shown, operation of push button on Absolute Signal displaying Stop-indication, if no movement approaching crossing on the other railroad, may cause Absolute Signal displaying Stop-indication to be restored to indicate "Proceed". Also, if train or engine has moved through interlocking and a reverse movement is required to return to train standing beyond the opposing Absolute Signal, operation of push button on the Absolute Signal displaying Stop-indication in direction of reverse movement may result in this Absolute Signal displaying "Proceed" indication or Rule 290 (Lunar) aspect, provided there is no conflicting movement on the other railroad approaching the crossing.

Missouri River Bridge, MP 191.7, Boonville. (Interlocking) During period interlocking station is closed, or where no operator is on duty at the interlocking, Rule 343 governs. Note: This requires checking to ascertain if drawbridge is in proper position for passage of train or engine, as well as checking position of derris, in addition to other provisions of this rule. No leaving signal governing movement beyond the interlocking limits, northward. Approach signals are automatic block signals. When there is no operator on duty, southward movements have preference over northward movements. Movements do not "time-out". "Lunar" aspects on both absolute signals and may be received with light out on other units.

Mo. Pac. Crossing MP 226.3, Mahaney. (Interlocking) Approach signals are automatic block signals. Only 1292 feet between northward approach Signal 2268 and the northward Absolute Signal for interlocking. "Lunar" aspects on all three main tracks Absolute Signals and may be received with light out on other units.

SL-SF Crossing MP 265.4, North Clinton. (Electric Gate) Normally against SL-SF. Movements over crossing governed by Absolute Signals on main track which normally display Rule 281 aspect both directions with gate across SL-SF (but only one direction can CLEAR if either approach circuit occupied) and by low Absolute Signal in siding which normally displays Rule 292 aspect until movement occupies 300 foot approach circuit in siding, when it displays Rule 285 aspect if no movement on main track and the gate across SL-SF. Northward movements have preference over southward movements and receive "light out over lunar" aspect on northward Absolute Signal with track occupied between switches of siding in approach circuit beyond interlocking. Push buttons on both Absolute Signals for making reverse movements. Northward Absolute Signal also protects spring switch south end North Clinton siding. Approach signals are operative and display aspects per Rules 281, 285 and 291, and are effected by track occupancy, broken rail, open switch or car fouling, as well as by the indication displayed by Absolute Signal. "Light out over lunar" aspect on either Absolute Signal may indicate track occupancy, broken rail, open switch or car fouling or approach circuit occupied beyond the interlocking limits. Unless SL-SF movements break seal and operate emergency release, they cannot unlock gate with MKT movement in approach circuit, or with south siding switch open, unless first operate time release (time release interval on SL-SF 4½ minutes). If Absolute Signal displays Stop-indication, movements over crossing must be preceded by flagman and, before proceeding, the engine and trainmen must know gate is in proper position against SL-SF and no SL-SF movements in vicinity of crossing that have not stopped. Northward movements must check position of spring switch per Rule 104(a).

Mo. Pac. Crossing MP 316.7, Nevada.

(Automatic Interlocking) Approach signals are operative and display aspects per Rules 281, 285 and 291 and are effected by track occupancy, broken rail, open switch or car fouling, as well as by the indications displayed by Absolute Signal. "Lunar" aspects on both Absolute Signals. Movements "time-out" in 8 minutes. "Re-clearing" circuits begin 400 feet north of southward Absolute Signal and 700 feet south of northward Absolute Signal. Northward movements have preference. Southward movements on main track to meet northward movement, should remain north of leaving signals of south siding switch, to prevent giving Stop-indication to northward movement through the interlocking. Southward Absolute Signal north of south siding switch on main track has preference over southward Absolute Signal in siding. No push buttons on Absolute Signals. Push button time release and indicator light in release box at crossing marked MKT. Uniform Code of Operating Rules, Rule 344 and other applicable Rules will govern. When operate time release under provisions of Rule 344, hold it 5 seconds, before releasing. Time release interval at this interlocking is 4 minutes 6 seconds, and must wait this interval after operating release, unless Absolute Signal changes to indicate "Proceed". If signal has not changed to indicate "Proceed" at expiration of time release interval, indicator light illuminated in release box will denote that signals on MoPac RR indicate Stop, but time release must have been operated, and time release interval expired, and indicator light must be illuminated when engine or leading car moves by Absolute Signal, and the other requirements of Rule 344 must be complied with, to permit movement being made through interlocking without providing flag protection per Rule 99 on conflicting routes. 300 foot approach circuit in siding.

Mo. Pac. Crossing MP 339.1, Griffith.

(Automatic Interlocking) Approach signals are operative and display aspects per Rules 281, 285 and 291 and are effected by track occupancy, broken rail, open switch or car fouling, as well as by the indication displayed by Absolute Signal. "Lunar" aspects on both Absolute Signals on main track and also on low Absolute Signal in siding. Movements "time out" in 12 minutes. "Re-clearing" circuit begins 1326 feet north of Absolute Signal and 1035 feet south of Absolute Signal. Push buttons on both Absolute Signals to regain route or make reverse movement. Push button on northward Absolute Signal effective on either main track or siding. Southward movements have preference. Southward movement wishing to go to siding for northward movement already in approach circuit south of interlocking get "Lunar" aspect after change over period of 3½ minutes. Northward main track movements have preference over northward movements in siding, and for movement in siding to receive "Proceed" indication on Absolute Signal in siding under such conditions, necessary they operate push button on main track Absolute Signal and after change over period of 3½ minutes will receive "Proceed" on Absolute Signal in siding. Push button time release and indicator light in release box at crossing marked MKT. Uniform Code of Operating Rules, Rule 344 and other applicable rules will govern. When operate time release under provisions of Rule 344, hold it 5 seconds before releasing. Time release interval at this interlocking is 2 minutes and must wait this interval after operating release, unless Absolute Signal changes to indicate "Proceed". If signal has not changed to indicate "Proceed" at expiration of time release interval, indicator light illuminated in release box will denote signals on MoPac RR indicates STOP, but time release must have been operated, and time release interval expired, and indicator light must be illuminated when engine or leading car moves by Absolute Signal, and the other requirements of Rule 344 must be complied with, to permit movement being made through interlocking without providing flag protection per Rule 99 on conflicting routes. 500 foot approach circuit in siding.

AT&SF Crossing MP 365.0, Walnut.

(Automatic Interlocking) Approach signals operative and display aspects per Rules 281, 285 and 291 and are effected by track occupancy, broken rail, open switch or car fouling, as well as by the indication displayed by Absolute Signal. "Lunar" aspects on both Absolute Signals and "Light out over lunar" aspects displayed on Absolute Signal may indicate track occupied, broken rail, open switch or car fouling between the crossing and approach signal beyond the crossing. Movements do not "time out". Push buttons on both Absolute Signals to make reverse movements. Southward movements have preference over northward movements. Key type time release and indicator light in release box at crossing, MKT and AT&SF time releases and indicator lights are in same release box, but properly marked MKT and AT&SF. Uniform Code of Operating Rule 344 and other applicable Rules will govern. When operate time release

under the provisions of Rule 344, insert switch key in key controller type release marked MKT and turn key in manner similar to opening standard switch lock, and hold it 5 seconds before releasing. Time release interval at this interlocking is 2 minutes, and must wait this interval after operating release, unless Absolute Signal changes to indicate "Proceed". If signal has not changed to indicate "Proceed" at expiration of time release interval, indicator light marked MKT illuminated in release box will denote signals on AT&SF RR indicate Stop, but time release must have been operated, and time release interval expired, and indicator light must be illuminated when engine or leading car moves by Absolute Signal, and the other requirements of Rule 344 must be complied with, to permit movement being made through interlocking without providing flag protection per Rule 99 on conflicting routes. No approach circuit in siding.

Mo. Pac. Crossing on Yard Track, Paola. (Electric Gate) Normally against MKT. Protected only by STOP signs. Two miniature semaphore indicators on top of release box at crossing, one for each direction on Mo. Pac. RR. Horizontal position of miniature semaphore arm indicates Mo. Pac. movement approaching crossing on "Proceed" indication. Vertical position indicates that release box may be opened immediately. Opening release box causes Mo. Pac. Absolute Signals to immediately display Stop-indication. Clock type time release in release box. No indicator light. Time release interval is 3 minutes 6 seconds. Instructions for operating Electric Locked Gate are: Wait for indicator on lock mechanism to clear. When indicator clears, move lever from right hand to left hand position. Move sliding member on end of gate out of lock. Turn gate, if indicator on lock mechanism does not clear when door of lock is opened, operate the time release. To operate time release, turn knob to right as far as it will go and allow to run down. If, after operating time release, the lock indicator still does not clear, the gate may, after protecting against Mo. Pac. trains, be released with switch provided for emergency release of lock. Move emergency switch to DOWN position. When movement over crossing is completed, replace the sliding member of gate in lock, move lever from L hand to R hand position. Close and lock door. Be sure to restore emergency switch to UP position if same has been used. If necessary to use emergency switch, notify the Mo. Pac. operator at Paola. (The emergency release is in separate box below the release box, with seal which must be broken before the two way switch inside can be moved to DOWN position to release gate). Northward approach circuit starts about 60 feet south of crossing and, when occupied, causes Mo. Pac. Absolute Signals to immediately display Stop-indication.

SL-SF Crossing on Yard Track, Paola. (CTC) Protected by Absolute Signals. Trains or engines desiring to move over crossing must, before fouling the crossing, communicate with SL-SF dispatcher for authority to use crossing and for authority to pass Stop-indication of Absolute Signal. After authority secured, derails, which operate in connection with switches, must be operated to clear route. Instructions on sign at crossing govern operation of switches and derails. Telephone at crossing and in SL-SF passenger station.

Mo. Pac. Crossing MP A-434, Paola. (Automatic Interlocking) Approach signals are automatic block signals. "Lunar" aspect on southward Absolute Signal only, which displays aspects per Rules 281, 285, 290 and 292. Northward Absolute Signal displays aspects per Rules 281 and 292 only. Movements do not "time out", nor is there "re-clearing" circuits. No push buttons on Absolute Signals. Push button time release and indicator light located in release box marked MKT and attached to relay case in northwest angle of crossing. Uniform Code of Operating Rules Rule 344 and other applicable Rules will govern. When operate time release under the provisions of Rule 344, hold it 5 seconds before releasing. Time release interval at this interlocking 4 minutes and must wait this interval after operating release, unless signal changes to indicate "Proceed". If signal has not changed to indicate "Proceed" at expiration of time release interval, indicator light illuminated in release box will denote that signals on Mo. Pac. indicate STOP, but time release must have been operated and time release interval expired and indicator light must be illuminated when engine or leading car moves by Absolute Signal, and the other requirements of Rule 344 must be complied with, to permit movement being made through interlocking without providing flag protection as per Rule 99 on conflicting routes. Southward movements Paola should not occupy southward approach circuit until ready to depart from Paola.

Mo. Pac. Crossing MP A-94.8, Moran. (Automatic Interlocking)

Approach signals are automatic block signals. "Lunar" aspects on both Absolute Signals. Movements "time out" in 12 minutes. "Re-clearing" circuit northward begins at Highway 59 crossing, southward begins at south switch of west siding. Push button on both Absolute Signals to regain route or make reverse movement. Northward movements have preference over southward movements. Push button time release in release box at crossing marked MKT, and indicator light. Uniform Code of Operating Rules, Rule 344 and other applicable Rules will govern. When operate time release under the provisions of Rule 344, hold it 5 seconds before releasing. Time release interval at this interlocking 3 minutes and must wait this interval after operating time release, unless Absolute Signal changes to indicate "Proceed". If signal has not changed to indicate "Proceed" at expiration of time release interval, indicator light in release box will denote that signals on Mo. Pac. RR indicate STOP, but time release must have been operated, time release interval expired, and indicator light must be illuminated when engine or leading car moves by Absolute Signal, and the other requirements of Rule 344 must be complied with, to permit movement being made through interlocking without providing protection as per Rule 99 on conflicting routes. No approach circuits in either siding. "Lunar" aspects on Absolute Signals is "Light out over lunar".

AT&SF Crossing MP A-119.9, Erie. (Automatic Interlocking)

Approach signals are automatic block signals. No "Lunar" aspects. Normally, both MKT Absolute Signals are CLEAR both directions, and both AT&SF Absolute Signals indicate STOP. AT&SF crew member must go to AT&SF Absolute Signals and operate switch key in Key controller box to receive CLEAR signal if no MKT movement in MKT approach circuit. Operation of AT&SF time release at crossing by AT&SF causes MKT Absolute Signals to immediately display Stop-indication and after time release interval of 3 minutes 47 seconds, AT&SF may receive "Proceed" indication even if MKT movement in approach circuit. Separate release boxes MKT movement stopped by Stop-indication of MKT Absolute Signal. If signal does not change its indication, member of crew lock, if indicator light in release box locked with MKT switch note that signals on AT&SF conflicting routes is illuminated, this will detain or engine may proceed on hand signal from member of crew routes on AT&SF, hand proceed signal must not be given until standing has been reached with the crew of the train or engine on conflicting route. If indicator light is not illuminated, flag protection per Rule 99 must be provided against movements on conflicting routes before moving through interlocking. The above interlocking is concerned, No directional preference. Push button in siding for purpose outlined above, and for making reverse movement. MKT movements do not "time out", and for making reverse movement low Absolute Signal has preference over movements in siding and causes push button in siding to display RED aspect. Operation of Signal to siding Absolute Signal. Movement out south end of siding "Stop, Then Proceed at Low Speed" indication, will operate push button on signal, in addition to complying with Rule 104(a). Approach circuit in siding about 500 feet.

SL-SF Crossing MP 387.1, Poole, Muskogee Subdivision and MP A-177.3, Poole, Oklahoma Subdivision. (Crossing gate, not electric MKT at any time, regardless of approaching MKT movements. Movement of MKT movements over crossing governed by Absolute Signals. Northward approach signal on Muskogee Subdivision is automatic block signal. Northward approach signal on Oklahoma Subdivision is fixed non-operative signal on Oklahoma as per Rule 285. No southward approach signals always displaying aspect signal. Rule 98 and other applicable Rules of the Uniform Code of Operating Rules, govern.

SL-SF Crossing MP A-149.2, Mound Valley. (Automatic Interlocking) Fixed non-operative approach signals always display aspect siding with no bracket to right of mast to so indicate, but governs main track movements. Movements do not "time out", but governs

directional preference. Clock type time release in release box marked MKT at crossing, also indicator light. Uniform Code of Operating Rules, Rule 344 and other applicable rules will govern. When operate clock type time release under provisions of Rule 344, hold it 5 seconds before releasing. Time release interval at this interlocking 1 minute 30 seconds and must wait this interval after operating release, unless signal changes to indicate "Proceed". If signal has not changed to indicate "Proceed" at expiration of time release interval, indicator light illuminated in release box will denote that signals on SL-SF indicate STOP, but time release must have been operated, and time release interval expired, and indicator light must be illuminated when engine or leading car moves by Absolute Signal, and the other requirements of Rule 344 must be complied with, to permit movements being made through interlocking without providing flag protection per Rule 99 on conflicting routes.

Mo. Pac. Crossing MP A-171.0, South Coffeyville. (Automatic Interlocking) Approach signals operative and display aspects per Rules 281, 285 and 291 and are effected by track occupancy, broken rail, open switch or car fouling, as well as by the indication displayed by Absolute Signal. Southward movements "time out" in 5 minutes. Northward movements do not time out. "Re-clearing" circuit for southward movements begins about 300 feet north of southward Absolute Signal at battery box case. No push buttons on Absolute Signals. No directional preference. Push button type time release and indicator light in release box marked MKT. Uniform Code of Operating Rules, Rule 344 and other applicable Rules will govern. When operate push button time release under provisions of Rule 344, hold it 5 seconds before releasing. Time release interval at this interlocking is 4 minutes 21 seconds, and must wait this interval after operating release, unless signal changes to indicate "Proceed". If signal has not changed to indicate "Proceed" at expiration of time release interval, indicator light illuminated in release box will denote that signals on Mo. Pac. RR indicate STOP, but time release must have been operated, and time release interval expired, and indicator light must be illuminated when engine or leading car moves by Absolute Signal, and the other requirements of Rule 344 must be complied with, to permit movement being made through interlocking without providing flag protection per Rule 99 on conflicting routes.

SL-SF Crossing MP A-257.5, Hallett Tower. (Automatic Interlocking) Approach signals fixed non-operative and always display aspect per Rule 285. Movements do not "time out". No directional preference. Both MKT and SL-SF time releases and indicator lights are in same box located at crossing, but inside outer door of box are separate compartments marked MKT and Frisco. Push button type time release and indicator light in compartment marked MKT. Uniform Code of Operating Rules, Rule 344, and other applicable rules will govern. When operate time release under provisions of Rule 344, hold it 5 seconds before releasing. Time release interval at this interlocking 2 minutes, and must wait this interval after operating release, unless signal changes to indicate "Proceed". If signal has not changed to indicate "Proceed" at expiration of time release interval, indicator light illuminated in MKT compartment of release box will denote that signals on SL-SF RR indicate STOP, but time release must have been operated, and time release interval expired, and indicator light must be illuminated when engine or leading car moves by Absolute Signal, and the other requirements of Rule 344 must be complied with, to permit movement being made through interlocking without providing flag protection per Rule 99 on conflicting routes. No approach circuit in siding.

AT&SF Gauntlet Track MP A-271.4, Sunco. (Automatic Interlocking) Approach signals fixed non-operative and always display aspect per Rule 285. Movements "time out" in 5 minutes. "Re-clearing" circuit begins about 100 feet in advance of both Absolute Signals. No push buttons on Absolute Signals. No directional preference. No release box, time release or indicator light at crossing. The applicable parts of Rule 344 of Uniform Code of Operating Rules and other applicable Rules, and these instructions will govern: When stopped by Stop-indication of the Absolute Signal, first occupy "re-clearing" section in advance of the Absolute Signal. If signal does not clear, and no opposing or AT&SF movements are approaching, move by the Absolute Signal, but stop clear of AT&SF track. (Occupying circuit between the Absolute Signals should cause AT&SF signals to display Stop-indication). If AT&SF Absolute Signal on side of bridge MKT movement is, displaying Stop-indication, flagman will cross bridge and if opposing AT&SF and MKT Absolute Signals are STOP, flagman may give hand "Proceed" signal for movement through the interlocking. If any opposing Absolute Signal does not display Stop-indication, full flag

protection per Rule 99 must be provided on conflicting routes before fouling gauntlet track. When signals are inoperative, MKT train dispatcher will be notified from telephone at north end of bridge.

SL-SF Crossing MP 408.8, Oswego. (Automatic Interlocking)

Approach signals are automatic block signals. "Lunar" aspects on both absolute signals. Movements "time out" in 12 minutes. No "re-clearing" circuits. Push buttons on both Absolute Signals to regain route or make reverse movement. Northward movements have preference over southward movements. Push button type time release and indicator light in release box marked MKT at crossing. Uniform Code of Operating Rules, Rule 344 and other applicable Rules will govern. When operate time release under provisions of Rule 344, hold it 5 seconds before releasing. Time release interval at this interlocking 2 minutes, and must wait this interval after operating release, unless signal changes to indicate "Proceed". If signal has not changed to indicate "Proceed" at expiration of time release interval, indicator light illuminated in release box will denote that signals on SL-SF RR indicate STOP, but time release must have been operated, and time release interval expired, and indicator light must be illuminated when engine or leading car moves by Absolute Signal, and the other requirements of Rule 344 must be complied with, to permit movement being made through interlocking without providing flag protection per Rule 99 on conflicting routes. No approach circuit in siding. Necessary to open switch or to foul main track to secure "Proceed" indication on main track Absolute Signal if no conflicting movements.

Mo. Pac. Crossing MP 409.9, Chetopa. (Electric Gate) Normally against MoPac. Movements over crossing governed by Absolute Signals. Approach signals are automatic block signals. No directional preference. No "Lunar" aspects. Push button on outside of release box for making reverse movement. If MKT Absolute Signal displays Stop-indication, movements over crossing must be preceded by flagman and, before proceeding, the engine and trainmen must know gate is in proper position against Mo. Pac. and no Mo. Pac. movements in vicinity of crossing that have not stopped. This in addition to complying with other applicable Uniform Code of Operating Rules.

SL-SF Crossing MP 438.8, Vinita. (Automatic Interlocking)

Approach signals are automatic block signals. "Lunar" aspect on northward Absolute Signal only. Movements "time out" in 12 minutes. "Re-clearing" circuit for southward movements begin 475 feet north of southward signal, for northward movements begin just south of highway crossing south of northward Absolute Signal. Push buttons on both Absolute Signals to regain route or make reverse movement. Southward movements have preference over northward movements.

No leaving signal governing movements beyond the interlocking limits, northward. Uniform Code of Operating Rules, Rule 344 and other applicable Rules will govern. When operate time release under provisions of Rule 344, hold it 5 seconds before releasing. Time release interval at this interlocking 4 minutes 30 seconds, and must wait this interval after operating release, unless signal changes to indicate "Proceed". If signal has not changed to indicate "Proceed" at expiration of time release interval, indicator light illuminated in release box will denote that signals on SL-SF RR indicate STOP, but time release must have been operated, and time release interval expired, and indicator light must be illuminated when engine or leading car moves by Absolute Signal, and the other requirements of Rule 344 must be complied with, to permit movement being made through interlocking without providing flag protection per Rule 99 on conflicting routes. Push button time release and indicator light in release box marked MKT at crossing. Southward movements leaving train on main track north of south switch Winders and moving through interlocking should receive "Lunar" aspect on northward Absolute Signal to return to train, after operating push button on northward Absolute Signal, if no conflicting movements.

Mo. Pac. Crossing MP 488.2, Wagoner. (Interlocking) Approach signals are automatic block signals. "Lunar" aspect on both Absolute Signals.

CRISP Crossing MP 565.9, McAlester. (Gate, not electric lock) Controlled by Operator, McAlester, and can be placed across MKT at any time, regardless of approaching movements. "Stop, Then Proceed at Low Speed" automatic block signal on each side of crossing; display "Proceed" with gate across CRISP RR. Approach signals are also automatic block signals. Rule 98 and other applicable Rules of the Uniform Code of Operating Rules, govern.

KO&G Crossing MP 640.8, Durant. (Automatic Interlocking) Approach signals are automatic block signals. "Lunar" aspects both Absolute Signals on main track. Movements "time out" in 12 minutes. No "re-clearing" circuits either direction. Push buttons on both main track Absolute Signals to regain route or make reverse movement. Northward movements have preference over southward movements. Push button type time release and indicator light in release boxes at crossing. There are two release boxes, at crossing, one of which marked MKT main track and one marked MKT Siding. The Uniform Code of Operating Rules, Rule 344 and other applicable Rules will govern. When operate time release in the proper box, under the provisions of Rule 344, hold it 5 seconds before releasing. Time release interval at this interlocking is 2 minutes, either on main track or in siding and must wait this interval after operating release, unless signal changes to indicate "Proceed". If signal has not changed to indicate "Proceed" at expiration of time release interval, indicator light illuminated in release box will denote that signals on KO&G RR indicate STOP, but time release must have been operated, and time release interval expired, and indicator light must be illuminated when engine or leading car moves by Absolute Signal, and the other requirements of Rule 344 must be complied with, to permit movement being made through interlocking without providing flag protection as per Rule 99 on conflicting routes. Northward approach circuit in siding starts about 1500 feet south of Absolute Signal, and southward approach in siding starts about 800 feet north of Absolute Signal. Train must be left outside approach circuit on siding, when cut off and move through interlocking, in order that reverse movement in siding back to train may receive "Proceed" signal to move through interlocking.

SL-SF Crossing MP 641.4, Durant. (Automatic Interlocking) Approach signals are automatic block signals. No "Lunar" aspects. Movements do not "time out". No push buttons on Absolute Signals. No directional preference. Push button type time release and indicator light in release box marked MKT at crossing. Uniform Code of Operating Rules, Rule 344 and other applicable Rules will govern. When operating time release under provisions of Rule 344, hold it 5 seconds before releasing. Time release interval at this interlocking 2 minutes 30 seconds, and must wait this interval after operating release, unless signal changes to indicate "Proceed". If signal has not changed to indicate "Proceed" at expiration of time release interval, indicator light illuminated in release box will denote that signals on SL-SF RR indicate STOP, but time release must have been operated, and time release interval expired, and indicator light must be illuminated when engine or leading car moves by Absolute Signal, and the other requirements of Rule 344 must be complied with, to permit movement being made through interlocking without providing flag protection as per Rule 99 on conflicting routes. Approach circuit in siding starts about 500 feet in advance of each Absolute Signal.

SL-SF Crossing MP 655.9-656.2, Staley. (Interlocking) This is not an automatic interlocking, but remotely controlled by control operator located at Ray Yards, Rules 325 to 345 inclusive, except Rule 344, as well as other Rules of the Uniform Code of Operating Rules that are applicable, will govern. Approach signals are automatic block signals. No "Lunar" aspects. Dual controlled switches at the following locations:

Intersection of MKT main track and SL-SF main track north of Red River Bridge, SL-SF North Jct.,

Intersection MKT main track and SL-SF main track south of Red River Bridge, SL-SF South Jct.,

Intersection of MKT passenger main track and MKT freight main track MP 656.2. All three these dual control switches normally controlled from Ray Yard Office, and Operator that point is designated as Control Operator, Rule 104(b) and 104(c) as well as other applicable Rules of the Uniform Code of Operating Rules will govern.

Control Operator, Ray Yard, will normally line the interlocking positioning the three dual control switches and clearing the Absolute Signals for movement through the interlocking.

When train or engine is stopped by Stop-indication of an Absolute Signal, communicate with control operator at Ray Yard office by telephone located at each Absolute Signal, and be governed by his instructions and Rules 340 and 345, and other applicable Rules. Control operator at Ray Yard office, in compliance with Rules 104(b), 104(c), item 62 of Instructions for Train Dispatchers

and item 3 of Instructions for Operators, as amended in Timetable Special Instructions must not only have indication on control board denoting that the first of the three dual control switches involved is over and locked, but he must also have indication on control board that the other two dual control switches are over and locked in proper position for the movement, before giving information to permit movement over any dual control switch and through the interlocking. When control board does not denote that all of the three dual control switches are over and locked in proper position, control operator Ray will instruct train or engine to place any dual control switch or switches not shown on control board to be over and locked, in hand operation as per Rule 104(b) before giving information that will permit movement over dual control switches and through interlocking, under provisions of the applicable Rules.

If after proper effort, it is decided that it is impossible to communicate with Control Operator at Ray Yard office for verbal permission to operate dual control switch, or to pass Absolute Signal indicating STOP, the following instructions will govern:

1. If no movement is evident on conflicting route the nearest of the three dual control switches will be operated by hand by unlatching switch lock, operating dual control selector lever marked "Power" or "Motor" to position marked "Hand", then operate hand lever back and forth until switch points are seen to move with movement of lever, then line switch back and forth once, after which line switch in position for route to be used. Switch must be placed in hand operation and operated back and forth as shown above, regardless of the fact that it may already be properly lined for the route to be used. Engineer must be notified when dual control switch selector lever is in "Hand" position.

2. Wait 5 minutes at switch after placing it in hand operation, protecting movements that may have been approaching.

3. After waiting 5 minutes, examine Absolute Signal or Signals on conflicting route or routes on side of Red River Bridge that the movement is stopped at Absolute Signal, and be sure they are displaying Stop-indication.

4. If the Absolute Signal or Signals displaying Stop-indication, the two remaining dual control switches must be operated by hand in the same manner as outlined in (1), a member of crew crossing Red River Bridge to do this, and they must all be operated by hand lined already for route to be used, or whether or not one of them may not be involved in the movement to be made.

5. After crossing Red River Bridge and operating other dual control switch or switches by hand as above, observation must be made of the Absolute Signals on conflicting routes on that side of Red River Bridge, to be sure they are displaying Stop-indication.

6. If Absolute Signals on that side of Red River Bridge are all displaying Stop-indication, train or engine that has stopped at the operations mentioned, may, after complying with Rule 104(c), proceed through the interlocking at Low Speed on hand signal from member of crew located on far side of bridge from the movement. Before interlocking, note all three dual control switches must have been operated by hand as outlined in (1), must have waited before handling the other two dual control switches as per (1). Stop-indication. Should any Absolute Signal on any conflicting route not be displaying Stop-indication, full flag protection per Rule 99, must be provided on such conflicting route or routes, before moving through the interlocking.

7. Before moving beyond the interlocking limits, Rule 345 must be observed.

8. After movements over dual control switches have been completed, restore switches by hand to the position in which they "Power" or "Motor", notify engineer, and also notify control operator, Ray Yard, from first available point of communication.

Other instructions in effect at Staley interlocking. Movements north of Warner Jct. must remain at Staley interlocking. Movements the northward Absolute Signal for south of battery box south of southward movements receiving "Proceed" for the interlocking, to permit ward Absolute Signal of interlocking. Color light Absolute Signals tracks beyond Staley interlocking limits are located on signal bridge supporting northward Absolute Signals for the interlocking.

Wabash Crossing MP O-34.1, Moherly. (Automatic Interlocking) No approach signals to Absolute Signals. Northward approach circuit starts 1500 feet from Absolute Signal, southward approach starts 369 feet from Absolute Signal. No "Lunar" aspects. Movements do not "time out". No directional preference. No push buttons on Absolute Signals. Knob clock type time release in release box marked MKT at crossing, but no indicator light in release box. Uniform Code of Operating Rules, Rule 344 and other applicable Rules will govern. When operate time release under the provisions of Rule 344, turn knob to Zero, hold 5 seconds, and release knob, allowing pointer on dial to return to normal position. Time release interval at this interlocking 3 minutes and must wait this interval after operating release, unless signal changes to indicate "Proceed". If signal has not changed to indicate "Proceed" at expiration of time release interval, it must be determined by actual observation that signals on Wabash RR indicate STOP, since there is no indicator light in release box to indicate this. Time release must have been operated, and time release interval have expired, and it must be known all signals on Wabash RR indicate STOP both directions on both tracks, and the other requirements of Rule 344 must be complied with, to permit movement being made through interlocking without providing flag protection per Rule 99 on conflicting routes. If has been necessary to operate time release, or move through interlocking on hand signals under provisions of Rule 344, trainmen will notify Wabash dispatcher.

AT&SF Crossing MP B-26.8, North of Chanute. (Electric Gate) Normally against MKT. No approach or Absolute Signals on MKT. Only STOP signs each side of crossing. Approach circuit about 75 feet each side of crossing, occupancy of which causes AT&SF signals to display Stop-indication. Instructions for operating gate are: **General Instructions:** engine and cars must be stopped and not moved past white marker posts located 75 feet each side of crossing until gate is unlocked and opened. This to prevent giving STOP signal to approaching AT&SF train. **To unlock gate:** Turn handle on lock to the R until edge of handle is even with white line on indicator case. When signals on AT&SF go to STOP position, arm indicator should clear. When arm indicator clears, turn handle on lock to the R as far as it will go. This will unlock gate. If arm indicator does not clear when lock handle is moved to white line, this indicates that AT&SF train is approaching crossing and gate cannot be unlocked until AT&SF train has completed movement over crossing or until hand release has been operated. **To operate hand release:** Hand release must not be operated until it is ascertained that no AT&SF train is approaching crossing. Hand release may be operated when AT&SF switching or other movements have stopped before reaching their home signal. Turn knob on release to the R as far as it will go (figure O) and hold in this position until indicator lamp lights, and let go of knob. After release has operated until pointer is in red spot on dial, indicator should clear. Movement of lock handle should be made while pointer on release is in red spot by moving to R as far as it will go and unlock

gate. To lock gate: After movement over crossing completed, gate must be closed and end of gate arm placed in proper position in mechanism case and locked in position by turning lock handle to the L as far as it will go. Necessary that lock handle be placed in proper position to permit mechanism case door to be locked. **Emergency operation:** If, after hand release has been operated twice and arm indicator fails to clear, train will move onto the 75 foot track section fouling the MKT track circuit but not fouling crossing, hand release operated again, then if indicator fails to clear, seal on cover of lock will be broken, cover removed and armature of lock raised to permit lock handle to be moved to the R and gate unlocked. If member of crew finds home signals on AT&SF at STOP in both directions, gate may be opened and train signalled to proceed over crossing. If home signal on AT&SF does not indicate STOP, flagman must protect against train movement in that direction on AT&SF tracks. After movement over crossing completed, gate must be properly locked and both AT&SF and MKT dispatchers notified. Note—indicator lamp placed on top of release box. A clock type time release in MKT release box at crossing which is to be operated as shown in instructions. Time release interval is 3 minutes 30 seconds. Indicator light on release box is illuminated when handle on lock turned to R as per instructions and AT&SF signals go to STOP, but still must operate time release as per above instructions. This indicator light will not illuminate unless AT&SF signals display Stop-indication.

SL-SF Crossing MP S-418.7, Columbus. (Automatic Interlocking) Approach signals fixed non-operative and always display aspect per Rule 285. No "Lunar" aspects on Absolute Signals. Movements do not "time out". No push buttons on Absolute Signals. No directional preference. Push button type time release and indicator light in release box at crossing marked MKT. Uniform Code of Operating Rules, Rule 344 and other applicable Rules will govern. When operate time release under provisions of Rule 344, hold it 5 seconds before releasing. Time release interval at this interlocking 5 minutes 30 seconds, and must wait this interval after operating release, unless signal changes to indicate "Proceed". If signal has not changed to indicate "Proceed" at expiration of time release interval, indicator light illuminated in release box will denote that signals on SL-SF RR indicate STOP, but time release must have been operated, and time release interval expired, and indicator light must be illuminated when engine or leading car moves by Absolute Signal, and the other requirements of Rule 344 must be complied with, to permit movement being made through interlocking without providing flag protection per Rule 99 on conflicting routes.

AT&SF—SL-SF—MV Crossing MP Z-278.2, Tulsa. (Interlocking) Interlocking Rules, except Rule 344, and other applicable Rules of the Uniform Code of Operating Rules, govern. Approach signals are fixed non-operative, and always display aspect per Rule 285. "Lunar" aspects on both absolute signals.

RULES REGARDING HANDLING OF PLACARDED CARS

Cars placarded "Explosives" shall, when length of train permits, be placed not nearer than the 16th car from both engine or occupied caboose; otherwise, near middle of train; except in train made up in "blocks" or classifications, be placed near middle of the "block" or classification in which moving, but not nearer than 6th car from both engine or occupied caboose; in train performing pickup or setoff service shall be not nearer than 2nd car from both engine or occupied caboose, except as provided in NOTE below.

Except in train consisting entirely of placarded loaded tank cars and as otherwise provided below, placarded loaded tank cars shall, when length of train permits, be placed not nearer than the 6th car from engine, occupied caboose or passenger car; when length of train will not permit, or when handled in freight train operated in "blocks" or classifications, not nearer than the 2nd car from engine, occupied caboose or passenger car.

NOTE: In freight or mixed trains, cars placarded "Explosives" or "Poison Gas" or both or placarded "Flammable Poison Gas" when accompanied by cars carrying guards or gas handling crews, shall be next to and ahead of the car occupied by the guards or gas handling crews accompanying such car; except that when such car is equipped with a lighted heater or stove it shall be the fourth car behind a car or cars requiring "Explosives" placards.

Cars placarded "Explosives" shall not be handled next to any car placarded "Dangerous", "Dangerous Radio-Active Material", "Poison Gas" or "Flammable Poison Gas" or car containing poison liquids Class A. Placarded loaded tank cars must also not be handled next to any car placarded "Explosives", "Poison Gas" or "Flammable Poison Gas". Cars placarded "Poison Gas", "Flammable Poison Gas" or containing poison liquid Class A must also not be handled next to cars placarded "Explosives" or "Dangerous".

Cars placarded "Explosives" or loaded tank cars placarded "Dangerous", "Poison Gas" or "Flammable Poison Gas" must not be handled next to engine or occupied caboose (except as provided in NOTE above) except loaded tank cars placarded "Dangerous" when train consists only of placarded loaded tank cars (loaded tank cars placarded "Poison Gas" or "Flammable Poison Gas" must not be handled next to engine or occupied caboose); next to occupied passenger or combination car except as provided in NOTE above; loaded tank cars placarded "Poison Gas" or "Poison Gas" will not be handled next to engine or occupied passenger or combination car other than cars occupied by gas handlers and au-

thorized personnel accompanying shipment; wooden underframe cars; loaded flat cars (except cars carrying trailers or containers placarded "Explosives" may be coupled to each other); loaded tank cars placarded "Dangerous" or "Poison Gas" or "Flammable Poison Gas" may be handled next to specially equipped cars in trailer-on-flat-car service or flat cars loaded with automobiles, trucks or trailer bodies which are secured by means of a device designed and permanently installed for that purpose and of a type generally accepted for handling in interchange between railroads; (flat cars equipped with permanently attached ends of rigid construction shall be considered as motor cars; motor cars, top car when any of lading protrudes beyond car ends or when lading extending above car ends is liable to shift, so as to protrude beyond car ends; car, trailers or truck bodies on flat car with automatic refrigeration or heating apparatus in operation; car, trailers or truck bodies with open flame apparatus in service or with internal combustion engine in operation; cars, trailers or trucks with internal combustion engine in operation; stoves or lanterns; (except in case of loaded tank cars placarded "Dangerous", "Poison Gas" or "Flammable Poison Gas", when car is occupied by gas handlers or authorized personnel accompanying shipment; cars loaded with live animals or fowl, occupied by an attendant.

Cars containing explosives, Class A; poison gases or liquids, Class A or flammable poison gas and tank cars placarded "Dangerous" shall not be transported in a passenger train, nor next to occupied caboose or cars carrying passengers in mixed trains except as otherwise provided above.

Cars containing "Dangerous Radio-Active Material" must not be handled next to cars placarded "Explosives" or next to carload shipments of undeveloped film.

When handling car placarded "Explosives" in terminals, yards, side tracks or sidings, such car shall be separated from engine by at least one non-placarded car.

At all terminals or other places where trains are made up by crews other than road crews accompanying their outboards, numbered notice Form 1164, showing the location in train of every car placarded "Explosives" shall be developed in mixed trains except as otherwise provided above. At points where train or engine crews are changed, the notice shall be transferred from crew to crew.

SPECIAL SAFETY CODE FOR EMPLOYEES IN TRAIN, ENGINE, AND YARD SERVICE

1. Safety is of first importance in the discharge of duty.
2. Avoid all risks. Watch for unsafe conditions and correct and report them.
3. Look both ways before crossing any track. Avoid crossing track in front of movement after signal is given to move. Do not stand or walk on track when avoidable.
4. Step over rails, frogs, switch guard rails, interlocking machinery or connections and not on them. Do not sit on rails or ties or take refuge under car.
5. Look out for approaching movements and alight outside of rails when getting off engine or cars.
6. When alighting from or boarding rear end of freight train, use rear platform of caboose.
7. When boarding or alighting from a locomotive, caboose, or car, face in, as on a ladder. Observe footing and clearances before alighting from moving or standing engine or car. Keep firm grip on handhold until foot is firmly placed on ground or other support when engine or car is standing.
8. Keep away from side or end while riding top of car, except for time required to operate brake or perform other duty there.
9. Do not ride on facing end of leading car or trailing end of rear car when possible to avoid it.
10. When riding side or top of car, keep close watch for unsafe clearances.
11. Before going under or between standing cars or engines, first see or know they will not be moved. Otherwise obtain suitable protection. No signal should be given to move engine or cars when anyone is under or between.
12. One man will be permitted to ride the leading footboard of switch engine on short switch moves. He will board the footboard from a position outside of the rails, remaining in sight of engineer or fireman. He will alight from the footboard before coupling into other equipment. Enginemen will not permit their engine to couple into other equipment while a man is riding the leading footboard.
13. Employees will not attempt to board oncoming footboards when the movement is of such speed to be unsafe, or when engine is moving over frogs, crossovers, turnouts, or where a safe footing on the ground or footboards is in doubt.
14. Firm grip and safe foothold are essential to safety when on sill-step, side ladder, end platform, or in transferring or changing position.
15. When alighting from moving equipment extreme care should be exercised. Avoid getting off in an awkward manner that will result in strains or sprains.
16. When engineman sees or knows that ground man is about to get on or off, he will regulate speed down to point of assured safety. Consider the footing, visibility and other conditions.
17. In setting or releasing brakes, be alert to the hazard of slipping or losing hold, sudden lurch, stop or start of car, brake club breaking or slipping, brake chains kinking or overlapping, also grabbing or kicking of brake. (Study the peculiarities and proper handling of different types of brakes.) Pressure on brake should

- be exerted toward body of car. Do not hold brake tension by hand—use the dog and ratchet.
18. Leave cars in clear and tied down to avoid possibility of fouling other tracks or man on side of car. Do not leave cars standing on tracks too near street or highway crossing, preferably 75 feet away from the crossing.
 19. Be prepared constantly for sudden start or stop and for the shock of brake or slack action.
 20. Use cut-lever to uncouple cars. If lever is inoperative, tie the movement down before crossing to opposite side.
 21. It is prohibited to use foot or hand to adjust drawbar, knuckle or lock pin while car or locomotive is in motion or when another car is approaching within a car length.
 22. Angle cocks will be closed before uncoupling air hose when there is pressure in train line. When setting brakes by turning angle cock, keep firm grip on hose.
 23. Do not place hands, feet, or any part of body between inside end of car and lumber, pipe, or other lading likely to shift. Keep clear of unsecured drop end doors. Do not use gate of gondola for handhold.
 24. Slack cuts apart half car length before going between couplers to make adjustments of knuckles or for other purposes.
 25. Do not attempt to cross track close in front of moving engine or car.
 26. Wear safe shoes and other apparel, and use suitable clear goggles when needful to protect against sand, cinders, or other eye hazards.
 27. Keep feet in clear of the path of counterweights on ground throw switch levers. Do not handle switch stand lever when switch is being run through.
 28. A habit of too much idle conversation across cab or caboose may contribute to serious accident.
 29. Keep the mind on the work and have a clear and mutual understanding of the moves to be made.

DIESEL LOCOMOTIVE SAFETY RULES

30. Enginemen and others will use hard rubber or nonmetallic cased flashlights in and around Diesel locomotives.
31. Never place hands or face near main generator or any high voltage equipment while it is working under load.
32. Do not smoke or have open flame in engine room.
33. Rings and wrist watches will not be worn while working around electrical equipment.
34. Fuses will not be pulled while under load.
35. High voltage cabinet will not be opened while motor is running, other than idling.
36. Stepping out of side doors of moving Diesel units to elevated platform or other side elevation is prohibited.
37. At any time an engine is overheated or shut down for mechanical defect, no handhold cover plates should be removed until sufficient time has elapsed to permit engine to cool down sufficiently to prevent possibility of an explosion (minimum one

RAILROAD COMPANY MEDICAL STAFF

Dr. Roland S. Kieffer, Medical Director, St. Louis, Mo.

	Office	Phone Number	Residence	Exchange
Boonville, Mo.	Dr. T. C. Beckett	TU 2-6278	TU 2-2442	
Denison, Tex.	Dr. W. D. Blessingame	HO 5-5005	HO 5-6366	
Kansas City, Mo.	Dr. Graham Joseph Owens 152 West Mezzanine Union Station	VI 2-2813	EN 2-8160	WE 1-9500
McAlester, Okla.	Dr. George M. Brown, Jr.	GA 3-4080	GA 3-4442	
Muskogee, Okla.	Dr. G. W. Tracy 104 North 16th St.	MU 2-0210	MU 7-4707	MU 7-6356
Okla. City, Okla.	Dr. Glen F. Wade Pasteur Medical Bldg. 1111 North Lee	CE 5-5940		CE 2-8861
Parsons, Kansas	Dr. Evert C. Beaty	GA 1-0600	GA 1-6457	
St. Louis, Mo.	Dr. R. S. Kieffer 100 North Euclid	FO 1-6632		PR 1-6080
St. Louis, Mo.	Dr. Norman A. James 8321 North Broadway (For examinations only.)	EV 3-1112		
St. Louis, Mo.	Dr. Warren A. Bowersox 100 North Euclid	CL 7-3500	VO 3-5514	PR 1-6080

CLASSIFICATION OF ENGINES

CLASS	UNITS	UNITS NUMBERED	Equipped	
			For MU Control	Geared For Maximum Speed
D-1	25	51 A-C to 63 A-C incl.	Yes	85
D-2	47	1 to 11 incl., 13, 15, 17, 18 20 to 32 incl., 34, 43, 44 12, 14, 16, 19, 33, 36, 38 to 42 incl., 45, 46, 47, 1203, 1205	Yes	65
D-3	12	78 A-C to 81 A-C incl., 78 B-D-E-F	No	65
D-4	62	64 A to H, 65 A to H, 66 A-C to 77 A-C incl., 75 B-D-E-F, 82 A-C to 90 A-C incl.	Yes	77
D-5	33	91 to 123 incl.	Yes	65
D-6	38	124 to 161 incl.	Yes	65
Total	217			

Diesel Units Equipped With Boiler

51 A-C to 63 A-C incl.
78 A-B-C-D-E-F
79 A-C
80 A, 81 A

Diesel Units With Steam Pipe But No Boiler or Steam Conduit

64 A to H, 65 A to H, 66 A-C to 77 A-C incl.
75 B-D-E-F, 82 A-C to 90 A-C incl.

COOPER'S RATING OF MKT UNITS

D-1	E-45
D-2	E-46
D-3	E-46
D-4	E-42
D-5	E-47
D-6	E-45

AVOID DAMAGE SWITCH CUSTOMERS CARS CAREFULLY

JUDGING SPEED

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

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

IMPACT FORCE AT VARIOUS STRIKING SPEEDS

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

TABLE OF SPEEDS

(Minutes and seconds per mile, in terms of miles per hour.)

Time Per Mile		Miles Per Hour	Time Per Mile		Miles Per Hour	Time Per Mile		Miles Per Hour
Min.	Sec.		Min.	Sec.		Min.	Sec.	
..	45	80.0	1	08	52.9	1	46	34.0
..	46	78.3	1	10	51.4	1	48	33.3
..	47	76.6	1	12	50.0	1	50	32.7
..	48	75.0	1	14	48.6	1	52	32.1
..	49	73.5	1	16	47.4	1	54	31.6
..	50	72.0	1	18	46.1	1	56	31.0
..	51	70.5	1	20	45.0	1	58	30.5
..	52	69.2	1	22	43.9	2	..	30.0
..	53	67.9	1	24	42.9	2	05	28.8
..	54	66.6	1	26	41.9	2	10	27.7
..	55	65.5	1	28	40.9	2	15	26.7
..	56	64.2	1	30	40.0	2	30	24.0
..	57	63.2	1	32	39.1	2	45	21.8
..	58	62.1	1	34	38.3	3	..	20.0
..	59	61.0	1	36	37.5	3	30	17.1
1	..	60.0	1	38	36.8	4	..	15.0
1	02	58.0	1	40	36.0	4	30	13.3
1	04	56.2	1	42	35.3	5	..	12.0
1	06	54.5	1	44	34.6	6	..	10.0

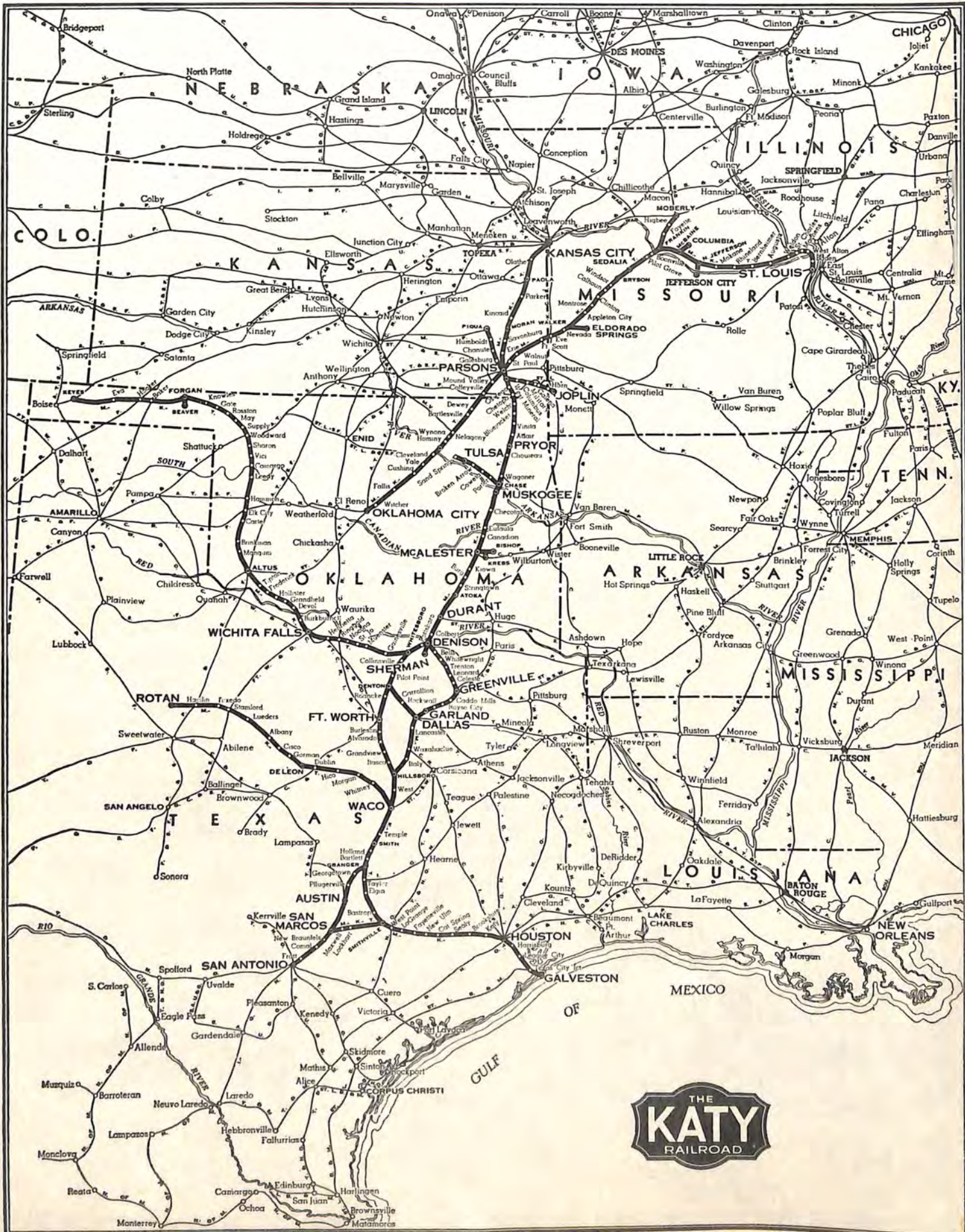
SPEED CARD

To Find Coupling Speed of 40 Foot and 50 Foot Car

Sight vertical end of car body on fixed point and note the number of seconds it takes car to pass. Speed in miles per hour is shown opposite.	40 Foot Car		50 Foot Car	
	Sec.	Miles Per Hour	Sec.	Miles Per Hour
1	28	25	2	14
2	14	17.5	3	9.3
3	9.3	11.6	4	7
4	7	8.7	5	5.6
5	5.6	7	6	4.7
6	4.7	5.9	7	4
7	4	5	8	3.5
8	3.5	4.4	9	3.1
9	3.1	3.9	10	2.8
10	2.8	3.5	11	2.5
11	2.5	3.1	12	2.3
12	2.3	2.9	13	2.15
13	2.15	2.7	14	2
14	2	2.5		

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

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



THE
KATY
RAILROAD