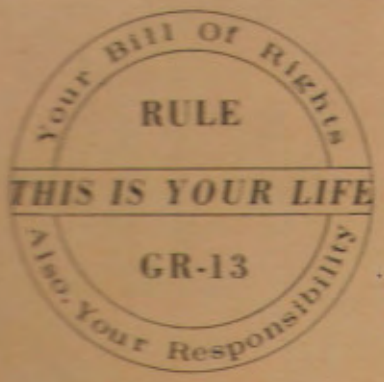


EMPLOYEES MUST NOT:

(a). Ride on close-clearance side or on end of equipment moving adjacent to platform, building, or close-clearance structure, or stand between moving equipment and adjacent platform, building, or close-clearance structure.

(b). Mount or ride the end footboard of a moving engine.

(c). Ride, step or stand on cut lever, coupler or center sill.

(d). Ride in or place arms or legs in cars with lading that may shift, except when necessary to load or unload material in cars moving no faster than 5 MPH.

(e). Ride or walk on tank car running board near dome when movement may cause contents to splash.

(f). Ride on or in freight cars or on the outside of engines while passing under tipples, shakers, conveyors, or other overhead loading or unloading devices.

(g). Step on track in front of approaching car or engine to open or close angle cock, adjust drawbar or knuckle, apply handbrake or mount equipment.

(h). Mount moving flat cars.

(i). Adjust drawbar with foot.

(j). Operate handbrake with foot.

(k). Go between moving cars or engines to couple air hoses or to adjust drawbars or knuckles.

(l). Step between standing cars for any purpose until they have arranged with other members of their crew for protection against coupling to or movement of those cars.

(m). Adjust drawbars or knuckles on standing equipment until the equipment has been separated at least 20 feet.

(n). Step on rails, guard rails, switches or frogs.

(o). Attempt to move cars with push pole or similar device between cars or between engine and car.

(p). Cross from side to side between coupled cars except over end or brake platforms.

(q). Dismount engines or cabooses unless facing the steps.

(r). Walk around the end of a standing car nearer than 10 feet from the end of the car.

SOUTHERN

THE RAILWAY SYSTEM THAT GIVES A GREEN LIGHT TO INNOVATIONS

WESTERN LINES

KENTUCKY DIVISION

TIMETABLE NO.

5

Effective 12:01 A.M., Eastern Standard Time
SUNDAY, SEPTEMBER 4, 1983

FOR THE GOVERNMENT OF EMPLOYEES ONLY

T. E. GURLEY.....General Manager
C. B. BAILIFF .....Superintendent
R. A. PIPPIN .....Assistant Superintendent
R. L. BENHAM .....Assistant Superintendent

CINCINNATI AND DANVILLE

SOUTHBOUND FIRST CLASS			Capacity of Tracks in Cars		Station Nos.	Miles From Cincinnati	TIMETABLE NO. 5 Effective SEPTEMBER 4, 1983 STATIONS	Track Diagram See Page 23	NORTHBOUND FIRST CLASS		
143 Daily	229 Daily	151 Daily	Other Tracks	Siding					230 Daily	144 Daily	116 Daily
P.M. 4 00	A.M. 8 30	A.M. 4 00	Yard		A 0	0.0	Lv. X CINCINNATI NP		A.M. 10 30	P.M. 10 15	A.M. 12 01
			Yard		A 3	3.0	3.0 XWO LUDLOW P				
					A 7	9.8	6.8 W ERLANGER DP				
			Lead		A 10	12.5	2.7 RICE				
			3			22.0	9.5 BRACHT				
						24.5	2.5 ADAMS				
						32.0	7.5 REID				
			30		A 35	38.1	6.1 WILLIAMSTOWN				
			6		A 40	43.0	4.9 MASON				
						47.0	4.0 BLANCHET				
						50.4	3.4 ROHAN				
			12		A 54	56.6	6.2 SADIEVILLE				
			3		A 60	62.2	5.6 ROGERS GAP				
						65.4	3.2 DELAPLAIN				
			Yard		A 67	69.4	4.0 GEORGETOWN P				
						72.2	2.8 AKERS				
			3		A 74	77.4	5.2 GREENDALE				
						79.6	2.2 FAYETTE				
			Yard		A 79	81.7	2.1 WBO LEXINGTON NCP				
						83.2	1.5 ROSEMONT				
			Lead		A 83	85.6	2.4 BISHOP				
			Lead		A 91	93.0	7.4 NICHOLASVILLE				
						95.8	2.8 JESSAMINE				
			20		A 96	98.1	2.3 WILMORE				
						102.6	4.5 HIGH BRIDGE				
			56		A102	105.0	2.4 BROWN				
			15		A106	109.0	4.0 W BURGIN P				
						110.7	1.7 FAULKNER				
						113.3	2.6 Y S. J. TOWER				
7 00 P.M.	11 15 A.M.	7 00 A.M.	Yard		A114	116.6	3.3 XWYOB DANVILLE NP Ar. Lv.		7 45 A.M.	6 00 P.M.	8 00 P.M.
Daily 143	Daily 229	Daily 151							Daily 230	Daily 144	Daily 116

SOUTHBOUND FIRST CLASS			Capacity of Tracks in Cars		Station Nos.	Miles From Cincinnati	TIMETABLE NO. 5 Effective SEPTEMBER 4, 1983 STATIONS	Track Diagram See Page 23	NORTHBOUND FIRST CLASS			
143 Daily	229 Daily	151 Daily	Other Tracks	Siding					230 Daily	116 Daily	144 Daily	
P.M.	A.M.	A.M.					Lv. Ar.		A.M.	P.M.	P.M.	
7 00	11 30	7 00	Yard		A114	116.6	XWYOB.. DANVILLE NP		7 30	5 55	6 00	
						118.3	1.7 SOUTH DANVILLE					
			114		A118	120.8	2.5 JUNCTION CITY P					
						123.3	2.5 BOWEN					
						130.1	6.8 PALM					
						132.6	2.5 GENEVA					
						134.8	2.2 SOUTH FORK					
			45		A136	139.2	4.4 KINGS MOUNTAIN					
			7		A139	142.2	3.0 WAYNESBURG					
						148.6	6.4 GRADISON					
						154.7	6.1 NORWOOD					
			Yard		A158	160.9	WB 6.2 SOMERSET P					
						161.9	1.0 WOODS					
						166.3	4.4 GROVE					
			72		A165	167.4	1.1 BURNSIDE P					
			80		A167	169.8	2.4 TATEVILLE					
						177.5	7.7 K. D. TOWER					
			20		A179	181.5	4.0 CUMBERLAND FALLS					
			13		A187	190.6	9.1 WHITLEY					
			Yard		A190	192.4	WB 1.8 STEARNS P					
						194.8	2.4 REVILO					
						202.5	7.7 RATLIFF					
			Yard		A207	209.5	WYOB 7.0 ONEIDA P					
			4			211.5	2.0 PEMBERTON					
			85		NR0	215.1	3.6 HELENWOOD					
						215.3	0.2 PHILLIPS					
			30		A219	221.9	6.6 ROBBINS P					
			10		A223	225.8	3.9 GLEN MARY					
			60		A229	231.4	5.6 SUNBRIGHT					
			26		A238	241.6	10.2 LANCING P					
						244.3	2.7 C. W. TOWER					
						248.9	4.6 COLEMAN					
			14		A248	251.2	2.3 CAMP AUSTIN					
						252.7	1.5 NORTH OAKDALE					
11 00	2 45	11 30	Yard		A251	254.4	XWO 1.7 OAKDALE NP		3 15	12 45	1 45	
P.M.	P.M.	A.M.					Ar. Lv.		A.M.	P.M.	P.M.	
Daily 143	Daily 229	Daily 151							Daily 230	Daily 116	Daily 144	

CHATTANOOGA AND OAKDALE

SOUTHBOUND FIRST CLASS			Capacity of Tracks in Cars		Station Nos.	Miles From Cincinnati	TIMETABLE NO. 5 Effective SEPTEMBER 4, 1983 STATIONS	Track Diagram See Page 23	NORTHBOUND FIRST CLASS			
143 Daily	229 Daily	151 Daily	Other Tracks	Sidings					230 Daily	116 Daily	144 Daily	
P.M.	P.M.	A.M.					Lv. Ar.		A.M.	P.M.	P.M.	
11 00	2 50	11 30	Yard		A251	254.4	XWO . . . OAKDALE . . . . . NP		3 15	12 45	1 45	
							0.4					
						254.8	. . . . . TUNNEL 25					
							0.7					
						255.5	. . . . . TUNNEL 26					
							2.8					
	3 05		Yard		50D	258.3	. . . . . HARRIMAN JCT . . . . P		3 05			
							2.2					
			Yard		A258	260.5	Y . . . . . EMORY GAP . . . . . P					
							0.9					
						261.4	. . . . . E. G. TOWER					
							6.3					
			Yard	137	A265	267.7	. . . . . ROCKWOOD . . . . . P					
							8.4					
			6	182	A273	276.1	. . . . . RODDY					
							7.2					
			42	182	A280	283.3	. . . . . SPRING CITY					
							10.3					
			9	300	A291	293.6	. . . . . EVENSVILLE					
							6.5					
			116	136	A297	300.1	. . . . . DAYTON . . . . . P					
							9.6					
			25	182	A307	309.7	. . . . . SALE CREEK					
							7.4					
			7		A314	317.1	. . . . . RATHBURN					
							3.9					
			12		A318	321.0	. . . . . DAISY					
							4.5					
						325.5	. . . . . CAVE SPRINGS					
							3.2					
			10		A326	328.7	. . . . . HIXSON . . . . . P					
							2.5					
			68		A328	331.2	Y . . . . TENBRIDGE . . . . . P					
							0.5					
					A331	331.7	. . . . . BOYCE . . . . . P					
							0.7					
						332.4	Y . . . . CITICO JCT					
							2.2					
3 30	4 45	1 30	Yard		240A	334.6	WXOB. deBUTTS YD . . . . . NP		1 15	10 00	11 15	
							3.4					
			Yard		240A	338.0	WYXO. CHATTANOOGA . . . NP					
A.M.	P.M.	P.M.					Ar. Lv.		A.M.	A.M.	A.M.	
Daily 143	Daily 229	Daily 151					Tennessee Division Timetable and Special Instructions govern between Tenbridge and deButts Yard.		Daily 230	Daily 116	Daily 144	

ONEIDA AND DEVONIA

SOUTHBOUND			Capacity of Tracks in Cars	Station Nos.	Miles From Oneida	TIMETABLE NO. 5 Effective SEPTEMBER 4, 1983 STATIONS	Track Diagram See Page 23	NORTHBOUND		
						Lv. Ar.				
			Yard	A207	0.0	XYWB. . . ONEIDA. . . NCP				
						1.5				
			17		1.5	. . . . . TUNNEL HILL. . . . P				
						2.7				
			92	TE 5	4.2	X . . . . .STANLEY. . . . . P				
						4.8				
			39	TE 9	9.0	X . . . . NEWTOWN . . . . . P				
						1.2				
					10.2	. . . . RIVER JUNCTION				
						2.7				
			18 *	TE 13	12.9	. . . . . .WINONA . . . . . P				
						8.1				
			32	TE 22	21.0	X . . . . NORMA. . . . . P				
						1.0				
			35	TE 23	22.0	.MONTGOMERY JCT. . . P				
						2.0				
			37	. . . . .	24.0	. . . . . LACO				
						2.4				
			27	TE 27	26.4	. . . SMOKEY JUNCTION . . P				
						6.6				
			50	TE 33	33.0	XY. . . BEECH FORK. . . . P				
						1.0				
			48	TE 34	34.0	. . . . . .SWISHER. . . . . P				
						4.4				
			105	TE 40	38.4	. . . . . ROSE DALE . . . . P				
						1.6				
			100	. . . . .	40.0	. . . .MORCO JUNCTION				
						1.5				
			175	TE 41	41.5	X . . . . DEVONIA . . . . . P				
						Ar. Lv.				

HELENWOOD AND STERLING

SOUTHBOUND			Capacity of Tracks in Cars	Station Nos.	Miles From Cincinnati	TIMETABLE NO. 5 Effective SEPTEMBER 4, 1983 STATIONS	Track Diagram See Page 23	NORTHBOUND		
						Lv. Ar.				
				NR 0	215.3	. . . . HELENWOOD.				
						3.3				
			28	NR 1	0.0	. . . . . NEW RIVER				
						0.5				
			70	NR 2	0.5	. . . . HIGHWAY JCT.				
						3.0				
			10	NR 3	3.5	. . . . . PEMBERTON.				
						3.6				
			16	NR 7	7.1	. . . . . HUNTER.				
						2.0				
			10	NR 8	9.1	. . . . . SLICK ROCK				
						1.9				
			80	NR10	11.0	. . . . . STERLING.				
					Miles From New River	Ar. Lv.				

HARRIMAN AND CROSSVILLE SIDING

SOUTHBOUND SECOND CLASS			Capacity of Tracks in Cars		Miles from Nashville	Station Nos.	TIMETABLE NO. 5 Effective SEPTEMBER 4, 1983 STATIONS	Track Diagram See Page 23	NORTHBOUND THIRD CLASS		
		37 Ex. Sat.	Other Tracks	Siding					38 Ex. Sat.		
		P.M.					Ar. Lv.		P.M.		
			11		165.8	51D	XYOB . HARRIMAN . . . NCP				
							2.3				
		4 15	Yard		163.5	A258	XYO . . EMORY GAP . . . . . P		8 15		
							6.6				
		4 30	5	42	156.9	A265	X . . . . . ROCKWOOD		7 59		
							7.5				
				55	149.4	150H	. . . . . DAYSVILLE				
							3.4				
			10		146.0	146H	. . . . . OZONE				
							4.4				
		5 15	56		141.6	142H	XY . . CRAB ORCHARD		7 21		
							6.6				
			16	40	135.0	135H	. . . . . DORTON				
							4.2				
		6 00[38]	Yard		130.8	131H	X . . . . CROSSVILLE . . . . . P		7 00[37]		
							0.7				
				40	130.1		X . . . CROSSVILLE SDG				
		P.M.					Lv. Ar.		P.M.		
		Ex. Sat. 37					NOTE: Regular trains on this subdivision will not protect against following extra trains unless instructed to do so by train order.		Ex. Sat. 38		

CONSULT BULLETIN BOOKS (Rule GR-10)

ALL REGULAR NORTHBOUND Trains are superior to trains of the same class in the opposite direction in accordance with Rule S-72.

1. ADDITIONAL INITIAL AND CLEARANCE CARD STATIONS (Rules 4 and 83(c))

A train must receive a clearance card before leaving their initial its terminal.

Trains No. 38 and 37 will leave Emory Gap and Crossville without clearance card.

2. BULLETIN BOOKS (Rules GR-10, 856, 1011 and 1076)

Berry Yard - Ready Room	Danville (Yard Office)
Gest Street Ready Room, "DI" Tower	(Engine House)
Gest St. Yard Enginemen	Somerset
& Yard Trainmen's Locker Room	Oneida
Ludlow (Ready Room)	Oakdale (Yard Office)
Erlanger	Emory Gap
Lexington	deButts Yard (Yard Office)
	(Engine House)

3. TRAIN REGISTERS (Rules 83, 83(a), 83(b))

Danville (Western Division	Emory Gap
trains only)	(Crossville Branch
Oneida (Tennessee Railroad	Trains only)
trains only)	Crossville
Oakdale (Tennesse Division	deButts Yard (Yard Office)
trains only)	Lexington - (Western
	Divsion Trains only)

4. STANDARD CLOCKS (Rule 3)

Gest St.Ready Room DI Tower	Lexington
Ludlow Ready Room	Somerset
Danville	deButts Yard
Oneida	Oakdale
	Emory Gap

Crews reporting for duty at locations where there are no standard clocks must compare time with dispatcher at beginning of tour of duty.

5. RAILROAD CROSSING AT GRADE

a. Interlocked — (Rules 98, 300(a) thru 318, 505 thru 671)

Junction City, Ky., M.P. 120.8 (Note 1).....SBD
Idlewild, Cincinnati, Oh. (Note 2).....CR
Bond Hill, Cincinnati, Oh. (Note 3).....Chessie

b. Not Interlocked — (Rule 98)

Ivorydale, Cincinnati, Oh. (Note 4).....CR
Loop Track and West Lead, Cincinnati, Oh. (Note 4).....Chessie

Note 1: Movements using the automatic interlocking for Southern and SBD grade crossing, Junction City, Ky., will be governed as follows:

(a) Signals will normally be in "STOP" position and will clear automatically if Southern dispatcher has lined CTC equipment and no SBD train has approach cleared on conflicting line.

(b) Should Southern signals be in "STOP" position and no immediate conflicting movement is evident, contact the dispatcher. If dispatcher cannot clear the signal a member of the crew must operate the emergency time release push button, marked "CLEAR." Emergency push button and indicator lights are housed in box marked "SOU" located on instrument case at crossing. When left indicator light is lighted, no SBD signal is clear, when not lighted, SBD train has approach cleared on conflicting line. Light over push button indicates button functioning properly. If after waiting six (6) minutes Southern signal does not clear, copy train order S-(2) on Form 19-R from dispatcher in accordance with Rule 504. If signals on conflicting lines indicate "STOP," burning fusees must be placed on the conflicting lines on each side of the crossing. If signals on conflicting lines do "NOT" indicate "STOP," proper flag protection against trains moving at maximum authorized speed on conflicting lines must be provided, before fouling the interlocker. Rules 671 and 99. Button marked "CANCEL" in same box must be pushed to cancel signal if movement is not immediately made.

b. Not Interlocked — (Rule 98) (Cont'd)

(c) For sole purpose of obtaining a "RESTRICTED PROCEED" signal on No. 1 track southbound to return to train when picking up or setting out at Junction City northbound, and part of train is left south of interlocking, the dispatcher must line up CTC equipment for southbound movement, train or engine must occupy No. 1 main track not more than 1,000 feet from signal bridge and a member of the crew must operate push button marked "CLEAR" in box located on east leg of southbound signal bridge. Indicator lights in this box work same as explained for emergency release box on instrument case at crossing. If signal does not change to "RESTRICTED PROCEED," procedure for passing signal in "STOP" position as outlined in (b) must be followed. Button marked "CANCEL" in same box must be pushed to cancel signal if movement is not immediately made.

(d) When stopping in vicinity of interlocker tha engine must not be cut away from the train, while the train is within the interlocking limits, except in case of emergency.

(e) Trains departing from the interlocking limits will release the plant automatically when they are clear of the opposing signal.

Note 2: Idlewild (CR) — At Idlewild, push buttons are installed in boxes located in the vicinity of the signals governing movements across the CR crossing and Dana Avanue. If a train or engine is delayed in the approach to these signals, the signal will change to Stop. A member of the crew will then operate the push button nearest the signal and if conditions warrant, the signal will clear after an alloted time.

Note 3: Movements over interlocking plant at Bond Hill are governed by Chessie rules, timetable, and special instructions. All crews using the interlocking plant at Bond Hill must report movement clear of plant after passing the control signals to Berry Yard.

Note 4: All trains and movements must stop and not proceed until there are no conflicting movements evident.

6. JUNCTIONS

a. Interlocked — (Rules 98, 300(a) thru 318, 505 thru 671)

Cincinnati - Red Bank, Valley, Rendcomb Jct., Oasis (Note 1).....CR
Cincinnati - Hopple St.-Loop Track Connector (Note 2).....Chessie
Cincinnati - Clare Yard (Note 3).....N&W
"SJ" Tower.....Western Div.
Harriman Junction.....Tennessee Div.
Citico Junction.....Tennessee Div.
Boyce.....Tennessee Div.

b. Not Interlocked — (Rule 98)

Cincinnati (Note 4).....CR
Cincinnati (Note 5).....Chessie
Walton.....SBD
Lexington.....Lawrenceburg Branch SBD (L&N-C&O)
Junction City.....SBD
Stearns.....K&T Ry.
Oneida.....Tenn. Ry.
Helenwood.....New River RR
Emory Gap.....Crossville Branch
Harriman.....Tennessee Div.

Note 1: Interlocking at Red Bank, Valley, Rendcomb Jct., and Oasis are under jurisdiction of Conrail and controlled by Conrail Dispatcher at West Sharon, Ohio. Conrail rules, timetable and special instructions govern.

Note 2: Interlocking with Chessie System at Hopple Street and at foot of loop - west lead track at Gest Street Yard is controlled by Chessie. Movements governed over interlockings by Chessie System rules, timetable and special instructions.

Note 3: Clare interlocking under jurisdiction of the N&W and controlled by N&W dispatcher at Portsmouth, Ohio, with N&W rules, timetable and special instructions governing.

Note 4: All movements must stop short of junction switch with CR-N&W located at Smith Street and Mehring Way. All movements must not proceed until it is ascertained that there are no conflicting movements and permission to occupy tracks to Oasis is obtained from CR operator at West Sharon. (Phone is located on a pole at Central Avenue, on south side of track, phone number - 563-5322.)

6. JUNCTIONS (Cont'd)

b. Not Interlocked — (Rule 98) (Cont'd)

Note 5: Junction with Chessie System industrial lead is located at foot of loop at "8th" Street viaduct. Junction is protected by "Semaphore type" signs. When semaphore is in horizontal position, Southern movements may proceed. When semaphore arm is in vertical position Southern movement must stop. After contacting Gest Street Yardmaster for instructions, movement must not proceed until semaphore arm is restored to horizontal position and route is properly lined and way is seen to be clear.

7. DRAWBRIDGES

a. Interlocked — (Rules 98, 300(a) thru 318, 505 thru 671)

Tennessee River Bridge . . . . . M.P. 331.4

8. TWO OR MORE TRACKS
(Rules 5, S-89(c), 98, D-151 thru D-155, 251, 300(a) thru 318, 505 thru 671)

Two tracks extend between:
Cincinnati (M.P. 0.0), and Rice (M.P.12.5)
Bracht (M.P.22.0), and Reid (M.P.32.0)
Mason (M.P.43.0), and Rohan (M.P.50.4)
Rogers Gap (M.P.62.2), and Akers (M.P.72.2)
Greendale (M.P.77.4), and Bishop (M.P.85.6)
Jessamine (M.P.95.8), and Brown (M.P.105.0)
Faulkner (M.P.110.7), and Bowen (M.P.123.3)
Palm (M.P.130.1), and South Fork (M.P.134.8)
Kings Mountain (M.P.139.2), and Woods (M.P.161.9)
Grove (M.P.166.3), and Tateville (M.P.169.8)
K.D. Tower (M.P.177.5), and Cumberland Falls (M.P.181.5)
Whitley (M.P.190.6), and Phillips (M.P.215.3)
Robbins (M.P.221.9), and C. W. Tower (M.P.244.3)
Coleman (M.P.248.9), and North End Tunnel 25 (M.P.254.8)
South End Tunnel 26 (M.P.255.5), and E. G. Tower (M.P.261.4)
Daisy (M.P.321.0), and Cave Springs (M.P.325.5)
Hixson (M.P.328.7) and Pierce (M.P.333.3)

Within CTC and Remote Control territory, between Cincinnati (M.P. 0.0) and Tenbridge (M.P. 331.2), the two main tracks, where double track extends, are identified as No. 1 on the East side and No. 2 on the West side.

9. AUTOMATIC BLOCK
(Rules 300(a) thru 318 and 505 thru 521)

Automatic block signals are effective between:
Gest Street, Cincinnati (M.P. 0.0) and C.T. Tower (M.P. 337.4).

10. TRAIN MOVEMENTS
(Rules 5 and 82 thru 671)

a. CENTRALIZED TRAFFIC CONTROL SYSTEM (CTC)
Rules 300(a) thru 318 and 530 thru 560

Centralized traffic control system effective between:
Ludlow (M.P. 3.0) and Tenbridge (M.P. 331.2)

b. REMOTE CONTROL TERRITORY
(Rules 530 thru 560)

Remote control is effective between (double track territory):
Gest Street, Cincinnati (M.P. 0.0), and Ludlow (M.P. 3.0)
Tenbridge (M.P. 331.2), and C.T. Tower (M.P. 337.4)
The two main tracks are signaled for traffic in either direction and trains and engines will move on either track in either direction by block signals according to Rules 530 thru 560.

Interlocked Switches are Controlled as Follows:

Location	M. P.	By Operator
8th Street	1.9	Gest Street
Intermodal	2.0	Gest Street
Ludlow	3.0	Gest Street
Tenbridge	331.2	deButts
Boyce	331.7	deButts
Pierce	333.3	deButts
Webb	334.6	deButts
Pratt	336.2	deButts
East End Avenue	337.0	CT Tower

c. OTHER TRAIN MOVEMENTS

DIVISION WIDE

Engineers will notify members of their crew as to which track their train will travel on double track segments.

When relieved on line of road for any reason, waybills must be left in possession of relief crew or on the lead locomotive or caboose. Advise the Chief Dispatcher where waybills are left.

For car(s) set out on line of road account tonnage reduction or bad order, the Chief Dispatcher will advise where to leave the waybill(s).

Any time cars are picked up on line of road, waybills must be picked up with cars or be in the hands of the conductor in advance of picking up. The only exception is if a train picks up cars and knows in advance at which station he is to receive waybills and insures he has waybills before passing designated station.

Cars will not be carried into final terminal without waybills.

All occupants of cabooses **are to be seated** at points where slack normally runs in or out, and **at all times** when speed of train is TEN (10) MILES PER HOUR or less, except as follows:
1. Getting off caboose or preparing to get off.
2. Boarding caboose.
3. Crossing from one side of caboose to the other to observe train.
4. Receiving train orders at train order office.
5. Protecting shove move.
6. Complying with applicable rules.

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

Where it is known that a road crossing will be blocked over **five (5)** minutes, the Conductor and/or Engineer **will** arrange to have a crew member in place to cut train, if necessary, to avoid delays to the public.

When a train can be stopped short of crossing to avoid blocking it, arrange to do so. If there is an emergency that prevents the crossings from being cut, the conductor on the train will immediately notify the Chief Dispatcher, by the quickest available means of communication, telling him why the crossing cannot be cut, and approximately how much longer it will be blocked.

Inbound crews must extinguish all lights, and turn off radio on caboose(s) upon arrival at terminals. Additionally, to prevent freezing of toilets, during period of cold weather, fire should be left burning in stove. Defective equipment on inbound cabooses must be reported to the appropriate terminal officer upon arrival at terminal.

Cabooses and locomotives at outlying points are to be locked when not in use. Locomotives or cabooses on an outlying local or work train which cannot be locked, must be reported to the Chief Dispatcher's office.

To insure against wheel damage from sliding, crew members must ascertain that the brakes are released on both trucks before moving a car.

No car or engine is to be run over a track when the rail is covered by dirt or debris and the top of the rail is not visible. If there is any doubt, do not use the track and notify proper authority so the condition can be corrected.

High and wide cars from interchange points **must** be inspected, and train moving high and wide cars **must** have copy of high and wide clearance file before moving cars. Cranes must have boom trailing even if detached. (See Rule 109(j)).

At each location where a freight car is placed in a train and a person designated under 49 CFR215.11 is not on duty for the purpose of inspecting freight cars, the freight car shall, as a minimum, be inspected for the imminently hazardous conditions listed below that are likely to cause an accident or casualty before the train arrives at its destination. These conditions are readily discoverable by a train crew in the course of a customary inspection.
1. Carbody.
   a) Leaning or listing to side.
   b) Sagging downward.
   c) Positioned improperly on truck.
   d) Object dragging below.
   e) Object extending from side.
   f) Door insecurely latched.
   g) Broken or missing safety appliance.
   h) Lading leaking from a placarded hazardous material car.
2. Secure coupling.
3. Overheated wheel or journal.
4. Broken or extensively cracked wheel.
5. Brake that fails to release.
6. Any other apparent safety hazard likely to cause an accident or casualty before the train arrives at its destination.

10. TRAIN MOVEMENTS (Cont'd)

c. OTHER TRAIN MOVEMENTS (Cont'd)

DIVISION WIDE (Cont'd)

When hand brakes are used to secure cars, they must be applied, and/or released, while cars are standing still. The above also governs when hand brakes are detected applied on moving equipment.

The above does not apply when hand brakes are used to control the speed of cars.

Staff type hand brakes are not to be operated while car is moving.

Ratchet type hand brakes on low side gons, flat cars and TTX cars are not to be operated while car is moving.

Conductors riding the head end **will ride the controlling unit** unless otherwise instructed.

Cabooses will be handled on rear of trains only, except where specifically authorized.

When using radio communication to make non-continuous switching moves, shove moves, set-outs, pick-ups, or couplings:

After switches and derails connected with movement are properly lined, the employee directing the move will communicate this information to the engineer. The engineer **must not move** until he has received communication that switches and derails are properly lined and he has **acknowledged** that information. Additionally, in compliance with Rule 7(b), the engineer **must not move** until he is given a direction of move and distance seen or known to be clear.

CINCINNATI

Southbound trains, except radio trains, with more than 5,000 tons will not depart Milepost 5.0 unless assisted by pusher, without express approval of Chief Dispatcher.

ERLANGER

Stevenson Road crossing at Erlanger, Kentucky, M.P. 9.9, must not be blocked unnecessarily by trains and engines that activate the crossing signals and gates, then do not immediately occupy the crossing.

These signals and gates are so arranged that they will not be activated by a southbound movement until the dispatcher lines up for southbound traffic at Erlanger.

All southbound trains or engines, which must stop at Erlanger, will advise the dispatcher when they are actually ready to move by the signal at Erlanger, then any movement over the crossing must be made as promptly as possible and the crossing cleared.

In the event that unexpected delay occurs before starting the movement over the crossing, or during the movement, the dispatcher must be notified immediately.

Every effort must be made by all concerned to ensure that this crossing is kept open for highway traffic.

Before any train or engines make a reverse move over Stevenson Road Crossing, M.P. 9.9, Erlanger, Kentucky, the movement must be protected by a flagman.

Trains making set offs at Erlanger and/or Rice must set off at Erlanger if there is enough track space for the set off at Erlanger.

Leave a list of the cars set off in the bill box at Erlanger Depot, noting the time and date of the set off, along with the conductor's name and train number.

NICHOLASVILLE

Freight trains setting off, placing, or pulling cars at Malone and Hyde (M.P. 90.5) must not block Baker Lane grade crossing (M.P. 90.0).

JUNCTION CITY

Conductors handling cars to be interchanged at Junction City, Ky., must secure a copy of Form 10273, Interchange Time Verification. This form must be completed very carefully to reflect the correct interchange time and date. One copy of the Form 10273 must be left for the Southern Railway Agent in the Southern Railway waybill box at Junction City. The other copy must be left with the waybills for the SBD Agent in the SBD waybill box. The waybills and Form 10273 **must** be left in the appropriate box; it will not be acceptable to throw these items off on the move.

WOODS

Woods Crossing, M.P. 162.0, must not be blocked excessively. A train or yard crew leaving cars on the East or West spur track or trains left on main line must be left short of the crossing circuits or protected as required by Rule 101(c).

ELIHU

Permanent markers indicating bad footing have been installed on west side of Main Track, Elihu, Kentucky, between M.P. 163.4 and M.P. 163.5. **Do not** walk in this area.

GREENWOOD

The following instructions must be followed when switching Greenwood Land and Mining Co., M.P. 179.0

1. Pull loads with light engines only. Do not hold onto any cars when working this industry.
2. It should be ascertained before coupling that there are a minimum of fifteen (15) hand brakes applied on the north end of this track.
3. After coupling air, the train line should be properly charged.
4. Hand brakes should be released only in a south to north direction, pulling slack out at intervals to make sure cars are coupled.

The following procedure will be used in loading the unit coal train at Greenwood, Kentucky, M.P. 179.0:

1. Pull empties into loading track.
2. Place caboose on north end of train and run around train.
3. Couple up and pull rear car up to loading tipple and make a proper brake test.
4. Cut out one unit. Use only two units to load train.
5. Tie up eight (8) or more handbrakes, as necessary, on the south end of the train.
6. Load one-half to two-thirds of train with handbrakes set on south end of train. Then set up eight (8) or more handbrake on north end of train, as necessary, and release handbrakes on south end of train.
7. The following times should be kept by the conductor and reported to the Chief Dispatcher:
   (a) Arrival time.
   (b) Time spotted.
   (c) Time began loading.
   (d) Time loading completed.
   (e) Time departed.
   (f) Net tons of coal loaded.

LANCING

The main road crossing at Lancing, M.P. 241.2, must not be blocked excessively.

In the event an emergency stop is made, train and engine crews must open this crossing as quickly as safety will permit, and will advise the dispatcher immediately of the situation.

OAKDALE

State Route 29A, M.P. 254.6, Oakdale, Tenn. must not be blocked excessively. A train or yard crew leaving cars on the freight lead or main lines or trains stopping short of the crossing must stop at least 100 feet from the crossing in order for gates to time out and restore to normal position.

Southbound trains meeting Northbound trains at Oakdale must stop at least 100 feet from the crossing and remain stopped until the northbound train passes and the gates have raised and vehicular traffic backed up by the passage of the northbound train has cleared the crossing. The crossing must be protected as provided in Rules 101(c), and 101(d).

EMORY GAP

All southbound trains that have to stop at EG Tower must stop short of main road crossing if the train will not fit between EG Tower and the crossing. No crew will block the crossing for more than ten (10) minutes. The only exception to this would, of course, be an emergency brake application or similar circumstances beyond the crew's control.

TENNESSEE RIVER BRIDGE

When a train or engine receives a stop signal at either end of the Tennessee River Bridge, M.P. 331.4, the cause for which is not known, the deButts operator will be immediately contacted, and if conditions permit, he may orally authorize that train or engine to proceed. After being authorized to proceed such trains or engines must be preceded by a flagman, who will determine whether or not the draw span and the mitered rail ends are in proper position for passage. Flagman will remain at the first end of draw span and observe mitered rail ends until the leading truck of an engine or car has passed the protecting signal. After this movement, flagman will proceed to the other end of draw span and examine the mitered rail ends to determine that they are properly matched. Such trains or engines may then proceed in accordance with Rule 534. Trains or engines authorized to proceed in this manner will not exceed restricted speed until the rear of the train has cleared the bridge.

POINTS WHERE RUNNING SWITCHES ARE AUTHORIZED (Rule 103(b))

The following points on the Kentucky Division are authorized locations where running switches can be made:

First District - Natico lead at Northern Kentucky Industrial Park.

Danville Yard - North end of east and west yards and at the south end of Tracks Nos. 3, 4, 5, 6, 7 and 8 in the east yard.

c. OTHER TRAIN MOVEMENTS (Cont'd)

Second Dist. - Somerset, Ky. - General Electric
Somerset, Ky. - Cumberland Chair
Somerset, Ky. - Southern States
Science Hill, Ky. - West Side
Burnside, Ky. - Charcoal Plant
Greenwood, Ky. - With cab in runaround track

Tenn. Railway - Newton, Tennessee siding.

d. ADDITIONAL YARD LIMITS (RULE 93)

Main tracks No. 1 and 2 between old DV Tower, M.P. 116.4 and South Danville, M.P. 118.4 are designated as "Yard Tracks". Provisions of Rule 105 will apply. ALL TRAINS using the above tracks between points designated will move at Yard Speed.

Train and yard movements between Gest Street Yard and junction switch at Smith St. and Mehering Way will be governed by Rule 93 and with permission of Yardmaster, Gest Street Yard. Movements between Smith St. and Oasis will be governed by Rule 93 with permission of CR operator, West Sharon.

All train and yard movements between Red Bank and Clare Yard will be governed by Rule 93.

All train and yard movements between Clare, Idlewild and Ivorydale will be governed by Rule 93.

e. JOINT TRACKAGE

Tracks are used jointly by trains and engines of the Kentucky Division, other divisions, and foreign lines, in accordance with their timetable, rules and regulations as shown below:

- **Between Tenbridge (M.P. 331.2) and deButts Yard (M.P. .0), Tennessee Division.**
- **Harriman Yard (M.P. 50.8D), Tennessee Division.**
- **Between deButts Yard (M.P. 335.0) and East End Ave. (M.P. 337.0), Crescent Division.**
- **Between Smith St. (Riverfront Track - Cincinnati, Ohio) and Oasis - N&W - CR.**
- **Between Oasis and Red Bank - CR.**
- **Between Clare (M.P. C-2.0) and Ancor (M.P. 13.7) . . . . N&W**
- **Gest St. Yard and Sharonville - SBD, CR**

Tracks are used jointly by other divisions or foreign lines in accordance with Kentucky Division timetable, rules and regulations, as shown below:

- **Between Harriman Jct. (M.P. 51.3D) and Oakdale (M.P. 254.4), Tennessee Division.**
- **Between S.J. Tower (M.P. 113.3) and Danville (M.P. 116.6), Western Division.**
- **Between Gest St. Yard (M.P. 0.0) and Ludlow (M.P. 3.5), CR, NW, DTI, SBD.**
- **Between Gest St. Yard (M.P. 0.0) and Smith St. (Riverfront track), SBD, CR, DTI, and N&W.**
- **Lexington Yard - Western Division**

f. OTHER RESTRICTIONS & SPECIAL INSTRUCTIONS (Rule GR-8)

HOURS OF SERVICE LAW

Provisions of the Federal Hours of Service Law will be complied with completely:

Two (2) hours prior to the Hours of Service Law catching a crew member of a train operating on line of road on the Kentucky Division, the Conductor of that train will notify the Chief Dispatcher of the exact time and the crew member, or members, affected by the Hours of Service Law.

When a crew is relieved on line of road for the Hours of Service Law, the conductor **must know** that all train orders and instructions affecting his train, along with waybills, are delivered to the relieving crew or designated employee left in charge of train.

The conductor of a crew taking charge of a train where crew has been relieved for the Hours of Service Law **will** compare all train orders and instructions with the train dispatcher before authority will be given to move the engines and/or train.

FLAGGING DISTANCES (Rule 99)

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

RAIL SECURITY SERVICE

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

RULE N

Road and yard conductors will notify the Chief Dispatcher immediately by radio or telephone communication whenever an injury, on-the-job illness, derailment or any accident resulting in damage occurs. Form 22 will be submitted as soon as possible thereafter to the Chief Dispatcher.

In the event of a Grade Crossing Accident, the Conductor will: (a) Complete all of Form 22-G except the shaded areas, (b) Forward the form in the prescribed manner to the Chief Dispatcher.

When submitting Form 22 for personal injuries involving **equipment,** be sure and indicate car or engine initial and number, and type of car or engine, such as box, gondola, SD-45, etc.

The Chief Dispatcher's microwave telephone numbers are Somerset 7-422-2101 or 7-422-2111. His Bell telephone number is Area Code (606) 678-5551 for collect calls.

11. SPRING SWITCHES (Rules 104(e), 104(f), 312(c), 314(c) and 517)

Location	Normal Position
Clare Yard, Westward pullout switch	Movement on pullout track
Idlewild Junction Switch	For westbound movement
Idlewild Crossover Switches west of Dana Ave.	For eastbound movement
Idlewild Switch leading from westbound track to CR	For westbound movement

12. ENTRANCE SWITCH TO SIDINGS (Rules S-89, S-89(a), S-89(c) and 105)

Unless otherwise provided, enter at first switch of first siding.

13. SPEED RESTRICTIONS (Rules 109 thru 109(i) and 1012)

a. MAXIMUM SPEEDS

Where not otherwise restricted, the following maximum speed of trains is authorized:

BETWEEN CINCINNATI AND CHATTANOOGA

All trains (EXCEPT Entire TTX or Passenger equipment)	50 MPH
Except: M.P. 2.7 (Ohio River Bridge)	20 MPH
M.P. 8.0 to M.P. 10.0 (N.B. trains having more than 60 cars)	25 MPH
All Industry Tracks Industrial Park, Rice Ky.	5 MPH
M.P. 103.0 (High Bridge)	40 MPH
M.P. 116.4 to M.P. 118.4	Yard Speed
Yard Tracks - Danville Yard	10 MPH
M.P. 116.5 to M.P. 117.4	20 MPH
M.P. 118.4 to M.P. 119.4	30 MPH
M.P. 120.8 (L&N Crossing)	45 MPH
M.P. 121.0 (Train 172)	25 MPH
M.P. 147.0 to M.P. 149.0 (All trains having more than 50 cars, except trains handling either TTX equipment or passenger equipment entirely	40 MPH
M.P. 166.8 (Cumberland River Bridge)	55 MPH
M.P. 204.0 (All N.B.freight trains, except No. 230)	45 MPH
M.P. 217.7 (New River Bridge)	40 MPH
M.P. 254.0 to M.P. 254.8 (No. 25 Tunnel — No. 2 Track Only)	20 MPH
Siding at Evensville (M.P. 292.3 to 295.1)	40 MPH
Siding at Dayton	10 MPH
Daisy (M.P. 321.0) to Cave Springs (M.P. 325.5) Track 2 only	25 MPH
M.P. 331.3 (Tennessee River Bridge)	35 MPH

BETWEEN HARRIMAN AND CROSSVILLE

All Trains	25 MPH
Except: M.P. 150.4 to Rockwood (N.B. Trains)	20 MPH
M.P. 153.3H (Through Tunnel)	15 MPH

BETWEEN ONEIDA AND DEVONIA

All Trains	20 MPH
Branch Lines and Sidings	10 MPH

13. SPEED RESTRICTIONS (Cont'd)

BETWEEN HELENWOOD AND STERLING

All Trains:

Between Helenwood and New River	25 MPH
Between New River and Sterling	10 MPH

CINCINNATI TERMINAL

All Yard Tracks	10 MPH
Gest St. Yard to Oasis	10 MPH
Junction Switch Smith & Mehering Way (Riverfront Running Track)	.5 MPH
Rendcomb Jct. and Red Bank	10 MPH
Red Bank and Clare Yard	20 MPH
Clare and Ivorydale	20 MPH
Interlocking Plant, Clare Yard	10 MPH

b. OTHER SPEED AND MISCELLANEOUS RESTRICTIONS

Trains must not exceed fifteen (15) MPH in all sidings unless otherwise provided.

Rail-Highway trains consisting **entirely** of TTX (TOFC, COFC, Tri-level, Bi-level) or passenger equipment may operate at maximum authorized Rail-Highway or passenger train speeds not to exceed sixty (60) MPH. Rail-Highway trains will be designated by unique train numbers in Series 207 through 239 and 707 through 739.

Trains handling flat cars loaded with creosoted poles must not exceed forty-five (45) MPH.

Trains must not exceed speed of forty (40) MPH when handling loaded or empty FOREIGN open top ore hopper cars and ore jennies shorter than 36 feet over strikers.

All System Maintenance of Way air dump cars are restricted to maximum speed of forty (40) MPH.

Trains handling empty bulkhead flats, UP 259000 to UP 259309 and UP 215000 to UP 215399 series, must not exceed speed of fifty (50) MPH.

The following Southern Pacific flat cars are restricted to 40 MPH when moving empty:

508007	508146	508180	508265	508327	508354
508074	508149	508231	508287	508329	508373
508081	508162	508245	508320	508335	508383
508082	508177	508264	508324	508343	508391

Trains handling single transformer loads with net weight exceeding 200,000 lbs. will not exceed forty-five (45) MPH.

Before leaving initial terminal, determine if your train has any flat cars loaded with creosoted poles or other cars that restrict the speed of your train.

AMTRAK locomotives numbered 500-649 are SDP-40 type locomotives and must not exceed thirty-five (35) MPH on curves and fifty (50) MPH maximum. There are no special speed restrictions on AMTRAK locomotives numbered 200-499.

Steam locomotives are restricted to speeds of:

No. 630 and No. 722	45 MPH
No. 4501	50 MPH
No. 750 and No. 2716, No. 611, and No. 765	60 MPH

Kanawha type steam locomotive No. 2716 is equipped with awnings and windshields which must be retracted when passing any equipment on adjacent tracks at all locations.

SPEED RESTRICTIONS WHEN HANDLING CARS CONTAINING HAZARDOUS MATERIALS

All trains handling loaded tank cars must not exceed forty-five (45) MPH on jointed rail.

All trains handling shipments of (1) nuclear reactor fuel elements, irradiated; (2) radioactive waste materials (in casks); (3) radioactive material shipping containers (casks) must not exceed speed of thirty-five (35) MPH. When trains handling these shipments meet, pass, or are passed by another train, one train must be standing while the other train moves past at a speed not faster than thirty-five (35) MPH.

Trains handling LP gas must not exceed 45 MPH.

c. CHECKING LOCOMOTIVE SPEED INDICATOR

Engineers will check speed indicator of controlling unit for accuracy. If any inaccuracy is detected, appropriate adjustment of speed will be made to comply with provisions of Rule 109.

Each speed indicator should be sealed. Engineers taking charge of locomotives will report to proper authority any unsealed speed indicator.

Tampering with or making adjustments to speed indicators or speed recorders by engine and train crews is **prohibited.** No one except qualified personnel from the Mechanical Department is authorized to make adjustments.

Padlock hasps on magnetic tape speed recorders on locomotives are not to be broken under any circumstances.

Engineers will not leave a terminal with speed indicator on the lead or control unit inoperative except when authorized by Division Superintendent. When the speed indicator on the control unit fails on line of road, the Engineer will immediately notify the Dispatcher by first available means of communication.

Engineers arriving at terminals will report to the terminal officer or yardmaster, and General Foreman, or foreman on duty the number of any unit in consist with speed indicator not functioning.

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

First District	Northbound	- M.P. 108	to M.P. 107
First District	Southbound	- M.P. 21	to M.P. 22
Second District	Northbound	- M.P. 249	to M.P. 248
Second District	Northbound	- M.P. 238	to M.P. 237
Second District	Northbound	- M.P. 218	to M.P. 217
Second District	Northbound	- M.P. 204	to M.P. 203
Second District	Southbound	- M.P. 138	to M.P. 139
Second District	Southbound	- M.P. 203	to M.P. 204
Second District	Southbound	- M.P. 217	to M.P. 218
Second District	Southbound	- M.P. 129	to M.P. 130
Second District	Southbound	- M.P. 147	to M.P. 148
Second District	Southbound	- M.P. 148	to M.P. 149
Third District	Northbound	- M.P. 326	to M.P. 325
Third District	Southbound	- M.P. 263	to M.P. 264
Third District	Northbound	- M.P. 327	to M.P. 326
Third District	Northbound	- M.P. 328	to M.P. 327
Third District	Southbound	- M.P. 257	to M.P. 258
Third District	Southbound	- M.P. 270	to M.P. 271
Tennessee Rwy.	Southbound	- M.P. TE13	to M.P. TE14
Tennessee Rwy.	Northbound	- M.P. TE36	to M.P. TE35

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

TABLE FOR DETERMINING TRAIN SPEEDS

Sec. per Mile	Miles per Hour	Sec. per Mile	Miles per Hour	Sec. per Mile	Miles per Hour	Sec. per Mile	Miles per Hour
45	80.0	61	59.0	84	42.9	116	31.0
46	78.3	62	58.1	86	41.9	118	30.6
47	76.6	63	57.1	88	40.9	120	30.0
48	75.0	64	56.2	90	40.0	122	29.5
49	73.5	65	55.4	92	39.1	124	29.0
50	72.0	66	54.5	94	38.3	126	28.6
51	70.6	67	53.7	96	37.5	128	28.1
52	69.2	68	52.9	98	36.7	130	27.7
53	67.9	69	52.2	100	36.0	132	27.3
54	66.7	70	51.4	102	35.2	134	26.8
55	65.5	72	50.0	104	34.6	136	26.5
56	64.3	74	48.6	106	34.0	145	24.8
57	63.2	76	47.4	108	33.3	150	24.0
58	62.1	78	46.2	110	32.7	180	20.0
59	61.0	80	45.0	112	32.1	240	15.0
60	60.0	82	43.9	114	31.6	360	10.0
						720	5.0

d. SPEED RESTRICTIONS THROUGH TURNOUTS

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

Maximum speed through turnouts listed below govern all trains. When moving on Rule 304 (Diverging Route Clear), a train must approach these turnouts not exceeding the speed authorized for that turnout.

Location	Milepost	Maximum Speed in MPH
Erlanger, Ky.	9.8	40
Rice, Ky.	12.5	40
Bracht, Ky.	22.0	40
Adams, Ky.	24.5	40
Reid, Ky.	32.0	40
Mason, Ky.	43.0	40
Blanchet, Ky.	46.8	40
Rohan, Ky.	50.4	40
Rogers Gap, Ky.	62.2	40
Delaplain, Ky.	65.4	40
Georgetown, Ky.	69.6	40
Akers, Ky.	72.2	40
Greendale, Ky.	77.4	40
Fayette, Ky.	79.6	40
Rosemont, Ky.	83.2	40
Bishop, Ky.	85.6	40
Jessamine, Ky.	95.8	40
Wilmore, Ky.	98.3	40
High Bridge, Ky.	102.5	40
Brown, Ky.	105.0	40

d. SPEED RESTRICTIONS THROUGH TURNOUTS (Cont'd)

Location	Milepost	Maximum Speed in MPH
Faulkner, Ky.	110.7	40
S. J. Tower, Ky.	113.3	40
S. J. Tower, Ky.	113.3 (West.Div.turnout)	40
South Danville, Ky.	118.3	40
Junction City, Ky.	120.8	40
Bowen, Ky.	123.3	40
Palm, Ky.	130.1	40
Geneva, Ky.	132.6	40
South Fork, Ky.	134.8	40
Kings Mountain, Ky.	139.2	40
Waynesburg, Ky.	142.2	40
Gradison, Ky.	148.6	40
Norwood, Ky.	154.7	40
Woods, Ky.	161.9	40
Grove, Ky.	166.3	40
Tateville, Ky.	169.8	40
KD Tower, Ky.	177.5	40
Cumberland Falls, Ky.	181.5	40
Whitley, Ky.	190.6	40
Revilo, Ky.	194.8	40
Ratliff, Tenn.	202.5	40
Pemberton, Tenn.	211.4	40
Phillips, Tenn.	215.3	40
Robbins, Tenn.	221.9	40
Glen Mary, Tenn.	225.8	40
Sunbright, Tenn.	231.4	40
Lancing, Tenn.	241.6	40
C. W. Tower, Tenn.	244.3	40
Coleman, Tenn.	248.9	40
Camp Austin, Tenn.	251.2	40
Tunnel 25 (No.1 track)	254.8	25
Tunnel 25 (No.2 track)	254.8	20
Tunnel 26	255.5	40
E.G. Tower, Tenn.	261.4	40
Evensville, Tenn.	292.3	40
Evensville, Tenn.	295.1	40
Daisy, Tenn.	321.0	40
Cave Springs, Tenn.	325.5	15
Hixson, Tenn.	328.7	40
Tenbridge, Tenn.	331.2	25
Boyce, Tenn.	331.7	25

e. SPEED RESTRICTIONS OVER STREET CROSSINGS

All trains reduce speed over crossings listed with engines.

Rockwood (M.P. 266.7 to M.P. 267.8) ..... 25 MPH
Spring City (M.P. 283.1 to M.P. 283.4) ..... 45 MPH
Dayton (M.P. 297.5 to M.P. 300.6) ..... 45 MPH
Soddy-Daisy (M.P. 319.1 to M.P. 323.3) ..... 40 MPH
Clare Yard to Berry Yard - (all crossings between Woodburn Ave. and Paxton Rd., inclusive) ..... 15 MPH

f. SPEED RESTRICTIONS ON CURVES

Between M.P.	and M.P.	MPH
Ludlow and Erlanger		
3.0	to 8.0	25
Erlanger and Williamstown		
18.8	19.2	55
Williamstown and Lexington		
38.6	38.9	55
40.0	45.6	50
51.5	51.8	55
54.9	55.2	50
55.2	56.9	45
Lexington and So. Danville		
81.5	82.0	40
101.6	103.9	40
106.1	106.5	55
113.3	116.2	55
116.2	118.3	30
So.Danville & Kings Mountain		
118.3	119.4	30
130.1	130.5	55
134.3	135.2	50
135.2	136.0	45
136.0	138.2	50
138.2	139.2	55
Kings Mountain & Somerset		
139.2	142.2	55
152.4	160.0	50
160.0	160.5	45
160.5	160.9	50
Somerset & Cumberland Falls		
160.9	161.9	50
163.2	163.7	45
165.2	166.2	55
166.2	169.0	45
169.0	179.6	55
179.6	180.0	35
180.0	181.1	40
Cumberland Falls & Phillips		
181.1	185.2	55
187.3	187.6	45
192.3	193.3	50
193.3	195.1	45
203.4	205.2	55
205.2	206.0	50
206.0	206.4	45
207.8	208.3	50
209.7	210.2	50
Phillips and Robbins		
215.4	217.7	55

f. SPEED RESTRICTIONS ON CURVES

Between M.P.	and M.P.	MPH
Robbins and Lancing		
222.0	222.6	45
222.6	223.6	40
223.6	229.3	45
229.3	229.5	40
229.5	235.2	45
235.2	241.5	40
Lancing and C.W. Tower (No. 1 Track)		
241.5	244.3	25
(No. 2 Track)		
241.5	244.3	40
C. W. Tower and Oakdale		
244.3	246.3	45
246.3	248.2	55
251.0	252.1	40
252.1	254.5	45
Oakdale and Roddy		
254.5	254.8	25
254.8	255.2	40
255.2	257.8	50
257.8	259.4	40
259.4	262.9	45
262.9	266.4	55
268.6	270.3	45
273.7	274.0	50
274.0	274.7	55
Roddy and Evensville		
277.9	278.6	55
278.6	278.9	50
284.2	292.2	50
Evensville and Daisy		
299.5	300.5	55
304.2	304.9	45
305.3	306.0	50
310.9	311.3	50
311.3	313.9	55
316.0	317.0	50
317.0	318.6	55
Daisy and Citico Jct. (No. 1 Track)		
322.5	322.7	45
322.7	323.7	40
323.7	325.5	45
(No. 2 Track)		
321.0	325.5	25
(Both Tracks)		
325.5	327.4	40
327.4	328.5	45
331.0	332.5	35
332.5	334.5	40

Between M.P.	and M.P.	MPH
Crossville and Harriman		
145.2-H	145.7-H	15
154.0-H	154.3-H	20
154.3-H	154.8-H	15
154.8-H	156.4-H	20
163.5-H	164.8-H	15
164.8-H	165.5-H	20
165.5-H	166.0-H	15
Oneida and Devonia		
TE- 0.0	TE- 4.5	15
TE- 5.8	TE- 5.9	10
TE- 6.3	TE- 6.5	15
TE- 7.3	TE- 7.5	15
TE- 7.5	TE- 7.6	10
TE- 7.6	TE- 9.9	15
TE-10.6	TE-11.2	15
TE-11.2	TE-11.9	10
TE-11.9	TE-12.2	15
TE-15.5	TE-15.7	15
TE-15.7	TE-16.0	10
TE-16.0	TE-17.1	15
TE-17.1	TE-17.3	10
TE-17.8	TE-18.0	15
TE-18.4	TE-18.5	15
TE-19.3	TE-20.7	15
TE-23.1	TE-23.3	10
TE-23.3	TE-25.0	15
TE-25.7	TE-26.5	15
TE-27.0	TE-27.4	15
TE-28.5	TE-29.2	15
TE-29.2	TE-29.4	10
TE-29.4	TE-29.6	15
TE-30.7	TE-30.9	10
TE-30.9	TE-31.1	15
TE-31.1	TE-31.3	10
TE-31.5	TE-31.9	15
TE-31.9	TE-32.0	10
TE-32.0	TE-33.5	15
TE-34.5	TE-34.7	10
TE-34.7	TE-35.2	15
TE-35.7	TE-36.1	15
TE-36.1	TE-36.6	10
TE-36.6	TE-36.9	15
TE-37.3	TE-37.4	10
TE-37.4	TE-38.1	15
TE-38.8	TE-39.6	15
TE-39.6	TE-39.7	10
TE-41.0	TE-41.1	10
TE-41.1	TE-41.8	15

14. DIESEL UNIT RATING IN TONS OF 2,000 POUNDS

	SD40 SD45 U33C	B30-7A B36-7 GP40X GP49 GP50 SD35	B23-7 GP30 GP35 GP38 U23B	SD7,SD9 GP18 MP15Dc SW1500
Southbound				
Cincinnati-Erlanger	2350	2100	1600	1150
Erlanger-Danville	5550	4950	3700	2700
Danville-Stearns	3050	2750	2050	1500
Stearns-Lancing	2800	2500	1900	1400
Lancing-Harriman Jct.	4800	4250	3200	2400
Harriman Jct.-Emory Gap	3850	3400	2550	1900
Emory Gap-deButts	4650	4100	3100	2300
Harriman-Daysville	*	900*	700	500*
Daysville-Crossville	*	2000*	1500	1100*
Oneida-Devonia	*	3100*	2300	1700*
Northbound				
deButts-Oakdale	4750	4250	3200	2350
Oakdale-Helenwood	2350	2100	1550	1150
Helenwood-Danville	3050	2700	2050	1500
Danville-Cincinnati	5300	4700	3550	2600
Crossville-Crab Orchard	*	2300*	1750	1300*
Crab Orchard-Harriman	*	1850*	1400	1000*
Devonia-Newtown	*	3100*	2300	1700*
Newtown-Oneida	*	950*	700	500*

* - 6-axle units restricted over these lines.

14. DIESEL UNIT RATINGS IN TONS OF 2,000 POUNDS(Cont'd)

These ratings are for single units and will be increased in proportion to the number of units in multiple service. If a unit fails, tonnage will be reduced in proportion to the number of units inoperative and an allowance of 150 tons made for each inoperative unit handled.

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

Foreign line GP40's have same tonnage rating as B23-7.

In making computations, less tha 1,000 pounds will be dropped. 1,000 pounds will be counted a ton.

When 1,000 H.P. yard switchers are used in road service, the rating will be 300 tons less per unit than the rating given for SW1500 switchers.

Road switchers having 1750 horse power (GP18) will handle 15% more tonnage than shown above.

Freight trains, except radio trains, must not exceed 150 cars unless authorized by Chief Dispatcher.

SOUTHERN RAILWAY SYSTEM
LOCOMOTIVE SERIES TABLE

0067-0083	SW1500	2300-2347	SW1500	3500-3521	B30-7A
0171-0196	GP18	2348-2435	MP15DC	3805-3814	U33C
0201	SD7	2525-2643	GP30	3815-3820	B36-7
0202-0207	Sd9	2645-2715	GP35	3900-3969	U23B
0210-0214	GP35	2717-2822	GP38	3970-4023	B23-7
0215-0224	SD35	2823-2878	GP38AC	4600-4605	GP49
0914-0944	Slug	2879-2886	GP38	5000-5256	GP38-2
1002-1012	SW1	3000-3099	SD35	6138-6147	FP7
1102-1132	SW7	3100-3169	SD45	7000-7002	GP40X
1133-1143	SW9	3170-3200	SD40	7003-7092	GP50
1733	SW1500	3201-3328	SD40-2		

15. LOAD LIMITS AND EQUIPMENT RESTRICTIONS
a. LOCOMOTIVES — Instructions and Restrictions

Engines may be operated coupled unless otherwise noted:

Not more than three 6-axle SD35, SD40, SD45, U33C or three 4-axle GP40X, GP49, GP50, B36-7, or any combination of these locomotives coupled may be operated under power including dynamic braking on head end of trains (except on designated trains).

Not more than four 4-axle GP30, GP35, GP38, U23B, B23-7, or any combination of these locomotives coupled may be operated under power including dynamic braking on head end of trains (except on designated trains).

Not more than four 4-axle GP18 locomotives coupled may be operated under power on head end of trains.

GP type locomotives must always be in the lead when operating in a consist with SD type locomotives.

SW1500 type units, series 67 through 83, 1733, and 2300 through 2347, inclusive, and MP15DC type units, series 2348 through 2435, inclusive, will be handled as follows:

(a) SW-1500 and EMD MP15DC's must not exceed fifty (50) MPH in lieu of restrictions imposed by Operating Rule 109(f).

(b) MP15DC type units, series 2348 through 2435, inclusive, are not equipped with traction motor shunting and, therefore, must not be operated under power in the eighth notch at speeds above twenty (20) MPH.

(c) Must be used as lead when operated in road service in multiple, due to not being equipped with dynamic brakes.

(d) Must have an operable speed indicator to be used in lead.

(e) SW1500 and MP15DC units cannot be pushed by more than twelve (12) powered axles (except GP40X, GP49, GP50, B30-7A, B36-7; eight (8) axles), nor towed immediately behind a consist that can develop a dynamic braking force exceeding 140,000 lbs. The standard dynamic brake develops 10,000 lbs. per axle and the GP40X, GP49, GP50 and B30-7A locomotives which are equipped with the high capacity dynamic brakes develop 13,500 lbs. per axle.

The emergency feature of Conrail, PC and NYC locomotives is so designed that power or engine speed will not be reduced from an emergency application of the brakes from any source other than the brake handle itself. Also, on C&O/B&O and N&W locomotives, when an emergency brake application occurs from any source other than the brake itself, the locomotives may not reduce power or engine speed for approximately 20 seconds.

USE OF DYNAMIC BRAKE

The dynamic brake is the first priority brake for controlling train speed. It must be applied a sufficient distance in advance to insure slowing to the desired speed safely.

The dynamic brake amperage must be increased gradually allowing slack to bunch safely against the engine.

When entering switches, crossovers, or turnouts restricted to 25 MPH or less, the dynamic brake must not exceed 400 AMPS until the lead half of the train is through the switch, crossover or turnout. If the train air brake is applied, a running release must not be made until half the train is through the switch, crossover or turnout.

The dynamic brake must not be released in severe undulating (rip-rap) terrain or on a heavy descending grade. It can be released with train on level grade or at bottom of grade with the engine on ascending grade. When releasing the dynamic brake, time must be allowed for slack to adjust before applying power.

If necessary, train air brake may also be used with dynamic brake applied. After each air brake application, the independent brake handle must be depressed frequently and held at least 4 seconds for each unit in the consist and until brake pipe exhaust ceases. When releasing train air brakes, the dynamic brake must be kept fully applied with maximum amperage, until air brakes have released throughout the train.

If train air brake applies in emergency with slack bunched while in dynamic braking, the locomotive brake should be applied enough to keep slack bunched, prevent runout on the head end and prevent engine wheels from sliding.

When making a planned stop, the dynamic brake amperage will be reduced to 400 amps or less before applying the train air brake. After making the initial train air brake application, the dynamic brake amperage must not exceed 400 amps while the train is stopping.

CRESTING GRADE

As the locomotive consist crests the summit, the throttle must be reduced to maintain a safe level of forces in those couplers at the crest of the grade. Further throttle reductions may be made to keep the speed constant and amperage at a safe level.

After the train is balanced and after the throttle has been reduced to idle, on heavy grades, apply the dynamic brake gradually, and increase amperage to a level that will generate enough retarding force to control the train at a constant speed. The speed should not be allowed to increase until two-thirds of the train is over the crest. An increase in speed of 1/2 (one-half) mile per hour indicates the train is balanced and dynamic braking is required to keep the speed constant.

USE OF LOCOMOTIVE BRAKE

The locomotive independent brake may be used only in switching, handling a light engine and starting a train on descending grade. The locomotive independent brake is not to be applied in train operation except in case of emergency.

The locomotive brake may be allowed to apply to a safe level from an automatic brake application when there are more locomotives than cars in the train or in very short trains when slowing or stopping. The locomotive brake is to be bailed off during an automatic brake application on other type trains. The independent brake valve must be held in the bailed or release position four seconds for each locomotive in the consist after each automatic brake pipe application and at frequent intervals during braking to fully release the brakes on the locomotives in other than radio operated trains.

Under no circumstances will the locomotive independent brake and dynamic brake be used together. When the dynamic and train brake (automatic brake pipe reduction) are combined, the independent brake valve must be bailed and held in this position four seconds for each unit in the consist after each automatic brake application and at frequent intervals during braking. (This procedure will release the locomotive brakes if the dynamic brake release interlocks do not function and if there are units in the consist not equipped with dynamic brakes).

When an emergency brake application occurs while the train is moving, the locomotive brake should be bailed if the slack is stretched at the time of the emergency application to prevent jackknifing the train. If the slack is bunched at the time of the emergency application, the locomotive brake should be applied to a safe level that will prevent locomotive wheels from sliding and to keep the slack bunched, preventing run out on the head end of the train.

USE OF TRAIN AIR BRAKE

The dynamic brake is the first priority brake for controlling train speed. The train air brake is to be used when the dynamic brake is not available or in an emergency. The train air brake can also be used with the dynamic brake when additional braking is required.

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

a. LOCOMOTIVES — Instructions and Restrictions (Cont'd)

USE OF TRAIN AIR BRAKE (Cont'd)

To slow the train when dynamic brake is not available, the initial brake pipe reduction of 5 to 8 p.s.i. should be made while working power, keeping the locomotive brake released. After the air brakes have taken effect throughout the train, throttle setting should be reduced gradually, keeping the train stretched. Additional reductions of 2 to 3 p.s.i. may be made to further reduce speed. These reductions should total at least 10 p.s.i. to insure that the train brakes fully release

After placing the automatic brake valve in release position, gradually reduce throttle to keep in-train forces at safe levels while train brakes are releasing.

To stop when dynamic brake is not available, use the same procedure as for slowing. Additional brake applications of 2 to 3 p.s.i. should be made to complete the stop, keeping the locomotive brake released. Just before stopping, place the throttle in idle.

If train air brake applies in emergency while the train is stretched, the independent brake must be bailed to keep the locomotive brake released and let the train remain stretched, preventing jackknifing.

When air brakes are aplied to a consist of more than 100 cars and dynamic brake is not operating or not available, the train must be stopped before releasing train air brake (does not apply when cresting or descending heavy grades or to radio trains, or to Rail-Highway trains.)

When air brakes are applied to a consist of more than 125 cars with the dynamic brake operating, the train must be stopped before releasing train air brakes (does not apply when cresting or descending heavy grades or to radio trains, or to Rail-Highway trains).

FREIGHT TRAIN AIR BRAKE RUNNING RELEASES

After air brake is applied, running release must not be made until the last brake pipe application has become effective on the rear car of the train. To insure a complete release, a total reduction of 10 p.s.i. or more should be made.

A running release must not be made with any slack bunched unless maximum dynamic brake amperage is in use.

Running release must not be made after emergency application. After emergency application the automatic brake valve must be placed in emergency position until the train stops.

Running release may be made as follows if the reduction is less then 15 p.s.i.:

No. Cars	Dynamic Brake Operating	Lowest Allowable Speed for Release
Over 125	With or Without	STOP
101 - 125	With	35 MPH
101 - 125	Without	STOP
75 - 100	With or Without	30 MPH
0 - 74	---(no restrictions)---	

Above table does not apply when cresting or descending heavy grades, to radio trains or to rail highway trains.

Engineers on passenger, through freight and local runs which originate and terminate at points where engine house forces are maintained, will:

(a) Fill out one Form 1059 for controlling unit in consist and an additional 1059 report on each unit having reportable defects.

(b) Place Form 1059, revised Locomotive Inspection Report, in designated holder on the operating unit.

Engineers on runs tying up at outlying points and engineers in yard service at points where engine house forces are not maintained will inspect locomotives at such points and will at time such inspection is made:

(a) Fill out Form 1059, revised Locomotive Inspection Report, for each unit or units of the consist and mail promptly to the Master Mechanic.

(b) Fill out Form 1044, Inspection Made Report, for each unit or units of the consist and place in designated holder on each unit. Remove and destroy old Form 1044.

STARTING AND SHUTTING DOWN ENGINES

Unless relieved by another crew, or instructions are received to the contrary, all locomotives will be shut down when temperature is not expected to go below 40 degrees, at the end of run or tour of duty at designated engine terminals.

Terminal Officers or their representatives will instruct you to leave the locomotives running if the next crew will use these locomotives within 30 minutes, or if it is known that a condition exists that is detrimental to shutting the locomotives down.

Following procedure will be used to shut down individual locomotives:

1. Place isolation switch in START position.
2. Push STOP button until engine stops. **DO NOT STOP ENGINES WITH THROTTLE STOP.**
3. Turn off fuel pump switch, control switch, generator field switch, all light switches, and radio breaker.

At outlying points, **WHEN OUTSIDE TEMPERATURE IS NOT EXPECTED TO GO BELOW 40°,** and when engine will be idle one hour or more, engine is to be shut down unless otherwise instructed by Chief Dispatcher's Office.

If it is known that engine has weak batteries or any other condition which would prevent restarting once shut down, Chief Dispatcher's office must be notified. When necessary to start engine, the following procedure must be followed:

1. Check engine for oil and water.
2. Check air box drains. The air box drains are located underneath the locomotives at the governor end of the diesel engine. On all models purchased since the GP18's there is a common drain. It is located at the end of the fuel tank in the middle. All other EMD models (GP18 and switch engines) have a drain on each side of the locomotive. Both sides must be checked. If water is found leaking out air box drains, **DO NOT CRANK.**
3. Before cranking engine:
   (a) Be sure fuel pump is **not** running.
   (b) Open all cylinder test cocks.
   (c) Turn engine over three revolutions by using the start button. If water is observed exhausting out of a cylinder test cock continuously, the engine should **not** be started.
   (d) Close test cocks **tight.**
4. Turn on fuel pump and prime engine with fuel until fuel is observed in the engine mounted sight glass.
5. Crank engine. On all of the locomotives that have starter motors for cranking, observe the instructions at the starter button location. The starter motors should only be engaged for twenty (20) seconds maximum and allowed to cool down for two (2) minutes. Presently, the following locomotives are equipped with starter motors:

   2823 - 2878 5000 - 5256 3100-3328
   7000 - 7092 4600-4605

6. After engine is running, retighten all cylinder test cocks that can be heard exhausting. The low water alarm and low oil buttons should be checked while and after cranking to be sure they have not kicked out. Batteries can be run down trying to crank engines if these buttons are tripped.
7. Test cock wrenches can be obtained from Mechanical Department.

THESE INSTRUCTIONS APPLY WHEN TEMPERATURE IS NOT EXPECTED TO GO BELOW 40°. IF PREDICTED LOW IS UNDER 40°, ENGINES WILL BE LEFT IDLING. IN CASE OF QUESTION, CONTACT CHIEF DISPATCHER'S OFFICE BEFORE SHUTTING DOWN ENGINES.

When locomotive consists are run light, idle trailing units.

When locomotives are moved in tow, they should be idled unless conditions warrant shutting them down.

When a train (other than Rail Highway) is operated with less than 50% of tonnage for the units on the train, then one trailing unit should be idled.

When taking locomotives in a consist off line, the lead locomotive will remain on line unless mechanical difficulties require otherwise.

PUSHER SERVICE

When performing pusher service, the following procedure will be used by the pusher engine:

1. Couple engines to the rear of the train or cut to be shoved. Place automatic brake valve in handle off position. Cut the double-heading cock out on the pusher engines, allowing the trainline air to be controlled by the lead engine.
2. Couple the trainline air hoses and open both angle cocks.
63. If a caboose is ahead of the pusher engines, it must be unoccupied while shoving.
4. When pusher service is no longer required, the movement must STOP.
5. Close both angle cocks.
6. Cut in the double-heading cock on the pusher engines, test independent brake and separate from the train.
7. No more than 12 powered axles (except GP40X, GP49, GP50, B36-7, B30-7A - 8 axles) may be operated by pusher engine consist.

Good communications must be established during such a move.

When Conrail, PC, NYC and C&O/B&O engines are operated as the controlling unit, they are not to be used as a "pusher" locomotive, under any circumstances.

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

PROCEDURE FOR STANDARD TRAIN BRAKE TEST

1. Charge the train to required pressure.
2. After receiving proper signal, make a continuous **15 pound** equalizing reservoir pressure reduction.
3. After brake pipe discharge ceases, cut out the pressure maintaining feature (if so equipped), cut out brake pipe cutoff valve on 26-L equipment, wait 45 seconds, and then time the brake pipe leakage for one minute which must not exceed 5 PSI per minute.
4. Reduce the equalizing reservoir pressure below the brake pipe pressure not exceeding 3 PSI. Cut in brake pipe cutoff valve on 26-L equipment. Make a full service application. When the brake pipe exhaust ceases, cut out the brake pipe cutoff valve on 26-L equipment.
5. When signal for release is received, place the automatic brake valve handle in "release" or "run" position and cut in the brake pipe cutoff valve on 26-L equipment, cut in maintaining feature on other equipment if so equipped.

PROCEDURE FOR RADIO TRAIN BRAKE TEST

1. Charge the train to required pressure.
2. After receiving proper signal, push the automatic brake service application button on the air brake console and make a minimum reduction. After a time delay of approximately three seconds, continue the reduction on equalizing reservoir gauge to 15 pounds.
3. After brake pipe exhaust ceases, turn the feed valve switch on the console to the out position. Turn the M.U. switch to Isolate position. Cut out automatic brake valve on control locomotive, wait 45 seconds and then check brake pipe leakage for one minute which must not exceed 5 p.s.i. per minute.
4. Reduce the equalizing reservoir pressure below the brake pipe pressure not exceeding 3 p.s.i. using the automatic application push button on the air brake console. Cut in the automatic brake valve on the control locomotive and make a full service application using the automatic application button on the air brake console. When the brake pipe exhaust ceases, cut out the automatic brake valve on the control locomotive.
5. When signal for release is received, place M.U. switch on radio console in M.U. position. Cut in automatic brake valve on control locomotive, push automatic brake release button on the air brake console. After being notified that pressure is rising on the rear car, the feed valve on the radio console will be cut in. Push the automatic brake release button on the air brake console.

CHANGING OPERATING ENDS OF LOCOMOTIVES

The following procedure must be followed when changing operating ends of locomotive consists. **These instructions apply to all type road locomotives equipped with 26-L brake.**

Locomotives Being Cut Out:

1. Move automatic brake valve handle to service position and make a 20 pound reduction.
2. After brake pipe exhaust stops, place cutoff valve in CUT OUT position.
3. Place automatic brake valve in HANDLE OFF position and place pin in handle.
4. Apply independent brake valve handle to full application.
5. Place MU valve in the desired TRAIL position.
6. Place independent brake handle in fully released position.
7. Place selector lever in OFF position. (AAR control stands do not have a selector).
8. Place reverse lever in NEUTRAL and lock. (AAR standard control stands have instructions posted in the cab to remove reverse lever. Where so posted, reverse lever must be removed).
9. Place control and fuel pump switch, engine run switch and generator field switch in OFF position.

Locomotives Being Cut In:

1. Place the engine run switch, and control and fuel pump switch, in ON position.
2. Leave reverse lever in NEUTRAL position. (Where reverse lever has been removed on AAR standard control stands, reverse lever must be replaced and left in NEUTRAL position.)
3. Make certain throttle lever is in IDLE, selector lever is in OFF (AAR control stands do not have a selector).
4. Apply independent brake valve handle to FULL application.
5. Place MU valve in LEAD position.
6. Remove pin from automatic brake valve handle and place in "Release" or "Running" position.
7. Place cutoff valve in FRGT position.
8. Place generator field switch in ON position.

ENGINE HORNS

Prior to leaving on-duty point it must be determined that the horn on the lead unit is working properly. If this horn is inoperative, or becomes inoperative during tour of duty, the Chief Dispatcher must be notified.

Under no condition will the horns be cut out on either end of the controlling unit.

ENGINE RADIOS

Trains, other than outlying assignments, must have operable radio on the control unit before departing initial terminal. Radio failures between terminals or at outlying points must be reported to Chief Dispatcher.

TOWED OR INOPERATIVE ENGINES

When towing Engines 1002 through 1143, which have either the No. 6 or No. 14 EL type locomotive brake, the locomotive should be shut down and the main reservoirs drained below 25 PSI. The independent and automatic brake valves must be placed in running position. The brake pipe cut-out cock for the automatic brake valve must be cut out and the dead engine feature must be cut in. The dead engine feature is located near the distributing valve between the main reservoir and brake pipe.

Diesel yard engines in tow will be handled only in local freight service not to exceed thirty (30) MPH, except SW-1500 and MP 15DC type locomotives, series 67 through 83, 1733, and 2300 through 2435 inclusive, may be towed up to a speed not exceeding fifty (50) MPH.

When towing engines on the head end, all hoses must be connected.

The maximum number of units that may be handled in tow on the head end of a train by size and type are as follows:

*3 - SD35, SD40, SD45, or U33C units.
*4 - GP30, GP35, GP38, GP40X, GP49, GP50, U23B, B23-7, B30-7A, or B36-7 units.
1 - GP18, SD7, or SD9 unit.

NOTE: Do not mix GP18, SD7, or SD9 series locomotives with any other type locomotive being towed, and these series of locomotives must not be put on the line for service when being towed.

* - **Exception:** On designated trains.

LOCOMOTIVES SET OFF OR PICKED UP

Engineers setting off diesel units on line of road must see that control and fuel pump switch is left in "ON" position when units are to idle due to weather conditions.

Likewise, when diesel units are picked up as trailing units on line of road, engineers must see that control and fuel pump switch is left in "OFF" position.

If necessary to set off or leave an engine on line of road on other than a track designated for tying up or setting off engines, permission must first be obtained from the chief dispatcher and the engine left coupled to a car with an effective hand brake applied on engine and on the car coupled to engine.

In setting hand brake on SD35 locomotives, set up brake as tight as possible, then cut out engine brake at the truck. Finish applying hand brake, then cut brake back in at the truck. With the engine brake applied, hand brake cannot be applied tight enough to hold engine when air leaks off.

HIGH VOLTAGE CABINETS

Locomotive high voltage cabinets are kept locked and are not to be opened except by an officer or in emergency situations and only then after complying with the following precautions:

1. A locomotive must be isolated and shut down before attempting to extinguish a fire in the high voltage cabinet.
2. A locomotive must be isolated before opening the high voltage cabinet to gain access to traction motor cut-out switches.

Under **no** circumstances should anyone pull the ground relay knife switch on any locomotive. If this switch is pulled, there is no ground relay protection on the locomotive, not only creating a hazardous condition for personnel, but also the possibility of extensive damage to main generator, alternator, high voltage cabinet or traction motors.

BACK-UP MOVEMENTS

Trains are not to be backed up account inability to start. If the train cannot be started after taking slack, other arrangements are to be made.

Consideration prior to back-up movement must be given to tonnage, train length, position of heavy and light cars, grade conditions, track curvature, turnouts, locomotive type and number in the consist.

1. No more than 12 powered axles (except GP40X, GP49, GP50, B36-7, B30-7A - 8 axles) should be used to make a back-up movement where track and train conditions indicate a high risk for jackknifing, rail turnover, or pushing cars off the outside of sharp curves.
2. Train air brakes are to be fully released before applying power.
3. Amperage should be limited to a safe level throughout the movement.

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

RADIO TRAINS

When moving Locotrol Radio Equipped Master Units from the initial engine terminal to the train or from the train to the final engine terminal, the Locotrol Radio Equipment will not be turned on unless coupled to the Radio Controlled Units and Radio Receiver Car.

When radio trains are to be left unattended, the radio control units are to be set up so they can be handled by a yard engine, the feed valve cut out and the units isolated. The radio equipment on the master controlling units must be shut down and brakes further applied using the conventional automatic brake valve. In addition, a sufficient number of hand brakes must be applied.

CAUTION: When Radio Train malfunctions occur, notify Chief Dispatcher.

When continuity is lost and cannot be regained, the train will be stopped and the Radio Controlled units will be switched to the head end of the train and operated as a conventional train.

If switching cannot be performed at place where continuity is lost and it is necessary to move train to first available switching point, train must not exceed speed of 15 MPH until all locomotives are on the head end of the train.

Anytime a radio train in empty unit coal train service is being operated with the remote controlled equipment on the head end, and the equipment on the radio car is turned on, the locotrol equipment on the lead locomotive must be turned on and continuity must be maintained at all times, and the following three (3) conditions **must** be observed:

1. A 27-point trainline jumper cable **must never** be connected between the head end units and the remote controlled equipment.
2. The feed valve on the radio car **must** be cut out on the console of the lead unit.
3. The MU switch on the console of the lead unit **must** be in the **IDLE** position.

When radio trains are **stopped to change crews,** the following procedure for insuring a continuous trainline must be observed.

The procedure is:

1. Make full service brake application.
2. Center reverser.
3. Apply engine brake with push button.
4. Cut out feed valve switch in console.
5. Place isolation switch in "isolate" position.
6. Feed valve should indicate "out."

To release brakes:

7. Place isolation switch in "MU" position.
8. Push automatic release button.
9. When pressure rises on rear of train, turn feed valve to "on."
10. Push automatic release button.
11. Push independent (engine brake) release button.

Trains towing radio receiver cars will keep the receiver car next to their engine(s) when picking up on line of road.

SELECT-A-POWER FUEL SAVER OPERATING INSTRUCTIONS

The fuel saving device reduces the throttle to No. 1 position on trailing units when full power is not needed for maintaining maximum authorized speed.

The fuel saver switch on each unit in the consist must be in the "Run" position for proper operation. (This switch is located on the fuel saver device).

To Isolate Units:

(1) Push the "Subtract Button" each time a trailing unit is to be taken off line.
(2) The power change yellow light will indicate the command is being executed.
(3) Each unit taken off line will extinguish a red status light on the fuel saver which indicates the number of units on line.

To Restore Units on Line:

(1) Push the "Add Power Button" each time a trailing unit is to be placed on line.
(2) The power change yellow light will indicate the command is being executed.
(3) Each unit placed on line will light a red status light on the fuel saver which indicates the number of units on line.

Malfunction Indication:

A flashing red train line fault light indicates a defective train line circuit. (A generator field switch in the up position on a trailing unit will give a train line fault indication). If train line fault indication still exists after generator field switches have been placed in OFF position, all fuel saver devices are to be isolated.

The Select-A-Power Fuel Saver is nullified when the dynamic brake is used or throttle is placed in idle. Dynamic brakes on trailing unit are not nullified when these units are in the fuel saving mode.

b. DIESEL UNIT AND CAR RESTRICTIONS

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

GROSS WEIGHT IN POUNDS

Between	UNIT		LOADED CAR	
	4-4	6-6	(4-wheel Truck)	(6-wheel Truck)
Cincinnati & Chattanooga	245,000 (b)268,000	(b)414,000	220,000 (a)286,000	(b)315,000
Crossville & Harriman	245,000 (b)268,000	Not Authorized	220,000 (a)(c)286,000	(b)(c)315,000
Oneida & Devonia Barnes Stub Branch Morco Branch	245,000 (b)268,000	Not Authorized	220,000 (a)286,000	(b)315,000
Helenwood & Sterling	245,000 (b)268,000	Not Authorized	220,000 (a)(d)286,000	(b)(d)315,000
N. Chattanooga Spur M.P. M-.0 to M.P. M-.4	245,000 (b)268,000	Not Authorized	220,000 (a)286,000	(b)315,000

(a) Loaded 4-wheel truck cars weighing in excess of 220,000 lbs., but not more than maximum weight shown for the line may be handled provided their coupled length, truck centers and axle spacing are not less than the following:

(1) Coupled Length ..... 37'-9"
(2) Truck Centers ..... 25'-3"
(3) Axle Spacing ..... 5'-8"

(b) Must not be operated over structures on side or industry tracks unless authorized.

(c) Speed must be limited to 10 MPH over structures at Milepost locations 147.4-H, 152.6-H, 154.3-H and 156.2-H.

(d) Speed must be limited to 10 MPH over all structures.

c. LOADING OF 100-TON CARS

For on-line movement only, the following listed 100-ton cars are authorized to be loaded to 286,000 lbs. gross weight. Other 100-ton cars moving on-line and all off-line movements exceeding 263,000 lbs. gross weight must be authorized by Assistant Vice President-Transportation, Atlanta.

(Revised 10-82)

SERIES	TYPE
	CG
11500 — 11514	8 ft. BHD Bulkhead Flat
11600 — 11649	10 ft. Bulkhead Flat (90 ton)
	SOU
347 — 352	Tank
1000 — 1749	8 ft. Side Gondola (aluminum)
4999 — 4999	Tank (airjet)
6215 — 6364	Covered Hopper (90-ton aluminum)
6365 — 6964	Covered Hopper
6980 — 6999	Covered Hopper (90-ton)
7925 — 7999	Covered Hopper
8075 — 8999	Covered Hopper (aluminum)
9560 — 9599	12 ft. Door Box
9600 — 9614	12 ft. Door Box (90-ton)
9640 — 9739	16 ft. Door Box (hogshead)
16000 — 16399	16 ft. Door Box
17450 — 17499	16 ft. Door Box (CUF)
32975 — 32999	10 ft. Door Box
42452 — 42469	20 ft. or larger Door Box (hycube)
42470 — 42804	20 ft. or larger Door Box (hycube)
42848 — 42945	20 ft. or larger Door Box (hycube)
43000 — 43049	15 ft. Door Box
43050 — 43135	16 ft. Door Box
43148 — 43185	16 ft. Door Box
43186 — 43293	16 ft. Door Box (hycube)
43400 — 43495	16 ft. Door Box (hycube)
50097 — 50097	Flat (well car)
50900 — 50904	Under 6 ft. BHD Bulkhead Flat
50905 — 50906	Flat
62300 — 62399	Gondola, Covered Coil
62740 — 62764	4 ft. 6 in. Side Gondola (CUF)

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

LOADING OF 100-TON CARS (Cont'd)

SERIES	TYPE
	SOU
62896 — 62955	4 ft. 6 in. Side Gondola (w/cov.& cradles)
62962 — 62986	4 ft. 6 in. Side Gondola (CUF)
63000 — 63199	3 ft. 3 in. Side Gondola
75000 — 76599	Hopper
76600 — 78399	Hopper (four compartment)
78400 — 79299	Hopper
79300 — 79339	Hopper (Auto Unload)
79425 — 79999	Hopper (Auto Unload)
85000 — 85499	Covered Hopper
88000 — 88999	Covered Hopper
90100 — 90403	Covered Hopper (airslide)
90850 — 90999	Covered Hopper
91000 — 91599	Covered Hopper (centerflow)
91800 — 92399	Covered Hopper
96000 — 99699	Covered Hopper
100300 —102099	Hopper (aggregate)
103300 —103999	Hopper (aggregate)
105000 —105249	Hopper (limestone)
109950 —109999	Hopper (limestone)
114000 —114549	11 ft. BHD Bulkhead Flat (lumber)
114850 —114899	10 ft. BHD Bulkhead Flat
114925 —114949	10 ft. BHD Bulkhead Flat
115500 —115599	10 ft. BHD Bulkhead Flat (90-ton)
115600 —115699	10 ft. BHD Bulkhead Flat
115793 —115797	8 ft. BHD Bulkhead Flat
116100 —116199	10 ft. BHD Bulkhead Flat (CUF)
133000 —134749	Hopper (woodchip)
139725 —139999	Gondola rotary dump (woodchip)
350000 —352661	Hopper
360000 —360999	Hopper
390000 —390499	Hopper (Auto Unload)
526525 —526674	10 ft. Door Box
551200 —551357	16 ft. Door Box (CUF)
556000 —556199	10 ft. Door Box (EOC)
565000 —565074	10 ft. Door Box (CUF)
565200 —565599	10 ft. Door Box (EOC)
569000 —569124	10 ft. Door Box (CUF, w/bulkheads)
586000 —586249	16 ft. Door Box (EOC, Bulkheads)
587000 —587049	16 ft. Door Box (EOC)
991931 —991949	Work Equipment (Air Dump)
991976 —991983	Work Equipment (50 cy. Air Dump)
994100 —994349	Work Equipment (Ballast)
995000 —995007	Tank (Non-Revenue)

d. DERRICKS

For the purpose of these restrictions, derricks are divided into groups as follows:

Group 1. Derricks SOU 903002, 12, 13, 14, 16 and 26 (250 ton derricks).
Group 2. Derricks SOU 903010, 11, 15, 17, 18, 19, 20, 23, 24, 25 and 29 (150 ton derricks).
Group 3. Derricks SOU 903005, 06, 07 and 08 (150 ton derricks).
Group 4. Derrick SOU 903001 (150 ton derrick).

(a) General Restrictions:

1. Derricks must not be operated coupled to engine or cars weighing more than 90,000 lbs.
2. For line of road movement, a derrick must be handled on head end of train with the required leading spacer car next to the engine.
3. Derricks must not be operated over structures on industrial tracks except with specific authority.
4. Derrick speed shall not exceed the smallest of the following:
   a. Authorized freight train speed.
   b. Group 1 Derricks, 45 MPH; all other derricks, 25 MPH.
   c. Speed, if any, given in special restrictions below for line or structure over which derrick is being handled.

CINCINNATI TO CHATTANOOGA
NORTH CHATTANOOGA SPUR M.P. M-0.0 to M.P. M-4.0

No Special Restrictions.

HARRIMAN TO CROSSVILLE

Group 1 derricks must not be handled.

Groups 2 and 3 derricks may be handled with speed restricted to 10 MPH over structures at M.P. locations 147.4-H, 152.6-H, 154.3-H and 156.2-H.

ONEIDA TO DEVONIA
BARNS STUB BRANCH
MARCO BRANCH

Groups 1, 2 and 3 derricks may be handled at a speed not to exceed 15 MPH.

HELENWOOD AND STERLING

Group 1 derricks must not be handled.

Groups 2 and 3 derricks may be handled at a speed not to exceed 10 MPH.

e. LOCOMOTIVE CRANES

SOU 992312 and 992307 may be operated on all main and passing tracks on entire division at a speed not exceeding 25 MPH.

f. JORDAN SPREADERS

Jordan Spreaders, JS-6 and JS-7 (SOU 992600 AND SOU 992598), must be handled next ahead of caboose or on rear of trains at a speed not exceeding 40 MPH. These cars must be handled with "B" end trailing, so that side spreaders hinged, near the "A" end of the car are in trailing position.

g. SCALE TEST CARS

Scale test cars will be handled only on authority of the Chief Dispatcher in accordance with Rule 109(i), and in local freight trains where practicable. SOU 992550, SOU 992551 and SOU 992552 have long wheelbase and are not restricted as to speed or position in train. All other scale test cars must stand next ahead of caboose or on rear of train, must not be coupled to any car over 50 ft. long, and must not exceed 25 MPH.

h. AIR DUMP CARS

ALL System Maintenance of Way air dump cars are restricted to maximum speed of forty (40) MPH. The following cars must be handled only in local freight or work trains:

SOU 991951 through SOU 991965.

Other System air dump cars may be handled in through trains that are permitted to handle open-top equipment.

I. DEPRESSED CENTER AND MULTI-WHEELED EQUIPMENT

All depressed center flat cars equipped with six-wheel trucks if empty, or loaded with a net weight of 100,000 lbs. or less, must be handled in the rear 25% of the train.

Transformers, rotors, circuit breakers, or similar electrical equipment with net weight exceeding 200,000 lbs., loaded on well, depressed or flat car must be handled on or near the head end of trains - except on locals. When these loads are designated to move on locals or high-wide specials, they will be positioned as instructed by Control Center.

Loads in any equipment with waybill carrying "high value" sticker and/or transformers, rotors, circuit breakers, or similar electrical equipment loaded on well, depressed or flat cars will not be **humped** or permitted to roll free. Instead, they will be shoved to a coupling with motive power attached. All cars will be coupled in the same manner to a cut in which such equipment is standing.

J. EXCESSIVE DIMENSION EQUIPMENT

Freight cars stenciled "C," "E" and "F," and unstenciled general service equipment having dimensions within Plate "B" may be handled on all main tracks and sidings of the Kentucky Division except past rock cut at M.P. TE-41.35, (Tennessee Railroad).

Fully enclosed auto rack cars (exceeding Plate "F" but not exceeding 19'0" above top of rail) may be handled on all main tracks and sidings of the Kentucky Division EXCEPT through the tunnel at M.P. 153.45-H (Harriman-Crossville), past rock cut at M.P. TE-41.35 (Tennessee Railroad), and under Cherokee Blvd. overhead bridge on Chattanooga traction track at M.P. V-1.1.

Other cars exceeding 17'0" which may be stenciled "F+" or "Exceeds Plate F" cannot be defined because of varying dimensions and cannot be specifically restricted. The route for movement of these "F+" or "Exceeds Plate F" cars must be cleared by Chief Dispatcher.

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

k. EXCESSIVE CURVATURE

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

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

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

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

I. OTHER EQUIPMENT RESTRICTIONS

Trailing tonnage behind any empty automobile rack car or empty or part-load 85-ft. long or longer flat car is restricted to a maximum of 5,000 tons.

The number of empty automobile rack cars and empty or part-load 85-ft. long or longer flat cars is restricted to forty (40) in any train.

Any train not in accordance with the above will be operated at a maximum speed of 25 MPH.

NOTE: Part-load flat cars are those loaded with empty trailers or containers or those loaded with only one loaded trailer or container, i.e., these restrictions do not apply to a flat car loaded with more than one trailer or container, one of which is loaded. The above restrictions do not apply to radio trains, 229, 231, 230 and 144.

An engine equipped with snowplows (deflectors) must not couple to the diaphragm end of a passenger-type car; a freight car must be used as spacer. Does not apply to the Research Car R-2 (SOU P-0025).

LP gas will be handled on rear of local freight trains **only**, except when specifically designated otherwise.

When coupling to a loaded placarded tank car, do not stand closer than 15 feet from the tank car dome. The contents of the car may splash from the dome during and immediately after coupling.

Tank cars observed leaking should be reported to the Chief Dispatcher at once.

An industry must be notified before a leaking tank is spotted on its track for unloading.

Train and yard crews are not to pull or switch with covered or open top hoppers where hopper doors are left open.

All top hatches and bottom outlets are to be closed by the customer prior to pulling car. This applies to open top hoppers, as well as covered hoppers.

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

Plastic material is frequently used to cover grain being handled in open-top hoppers. After unloading, such cars must not be moved until all of the plastic covering and attachments have been removed from the cars.

Cars equipped with plug type doors will not be moved from industrial tracks or out of yards with doors open. **Doors must be closed and latched before being moved.**

Be sure that end doors are closed and secured on all enclosed tri-level cars before they are moved.

The "Best Friend of Charleston" loaded on its own equipment cars **will not be humped** and will be carefully handled on line of road. Cars containing the "Best Friend" will be shoved to a coupling and other cars will not be dropped to a coupling with this equipment.

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

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

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

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

In order to protect passenger trains against loads of pulpwood with excessive dimensions in consist of trains being met or passed, the following instructions will apply:

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

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

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

Before switching partially loaded woodrack cars, be sure load is balanced.

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

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

Crews must not pull or switch with cars with bands attached unless bands are secured or removed.

The R-1 Car **will not be** operated over the following tracks:

All Yard Tracks, located at:

Rockwood, Tennessee
Stearns, Kentucky
Somerset, Kentucky
Lexington, Kentucky

All Side Tracks, located at:

Tennessee Central
Tennessee Railroad
New River Railroad

Any side track or industrial track between Cincinnati and Chattanooga will require inspection by the Maintenance of Way Department prior to the placement of R-1 car on any of these tracks.

16. PASSENGER TRAIN NOTES

NONE.

17. OFFICERS - PHYSICIANS - WATCH INSPECTORS

a. DIVISION OFFICERS

J. L. Eckler, Superintendent of Terminals ..... Cincinnati, Ohio
R. G. Plunkett, Asst. Superintendent, Terminals .. Cincinnati, Ohio
W. T. Davis, Terminal Trainmaster ..... Cincinnati, Ohio
T. F. Sherlin, Terminal Trainmaster ..... Cincinnati, Ohio
R. F. Munsey, Terminal Trainmaster ..... Cincinnati, Ohio
R. E. Trivett, Terminal Trainmaster ..... Cincinnati, Ohio
C. E. Hall, Terminal Trainmaster ..... Cincinnati, Ohio
W. W. Zurmehly, Terminal Trainmaster ..... Cincinnati, Ohio
G. R. Durham, General Yardmaster ..... Cincinnati, Ohio
F. W. Grove, Jr., Trainmaster ..... Lexington, Ky.
H. M. Newgent, Jr., Superintendent of Terminals .... Danville, Ky.
B. G. Monday, Terminal Trainmaster ..... Danville, Ky.
R. L. Siders, Terminal Trainmaster ..... Danville, Ky.
W. L. Jones, General Yardmaster ..... Danville, Ky.
J. D. McQueary, Assistant Trainmaster ..... Danville, Ky.
J. E. Thompson, Road Foreman of Engines ..... Danville, Ky.
, Road Foreman of Engines ..... Danville, Ky.
T. J. Lamkin, Chief Dispatcher ..... Somerset, Ky.
J. T. Smith, Trainmaster ..... Somerset, Ky.
, Assistant Trainmaster ..... Somerset, Ky.
J. W. Farmer, Division Engineer ..... Somerset, Ky.
D. C. McKibben, Assistant Division Engineer ..... Somerset, Ky.
J. R. Smith, Superintendent, Safety ..... Somerset, Ky.
J. H. Martin, Trainmaster ..... Oneida, Tenn.
A. Fowler, Trainmaster ..... Oakdale, Tenn.
M. K. Wright, Road Foreman of Engines ..... Oakdale, Tenn.
, Road Foreman of Engines ..... Chattanooga, Tenn.
J. S. Anderson, Gen. Rd. Foreman of Engs .... Chattanooga, Tenn.
J. I. Vardaman, Gen. Rd. Foreman of Engs ..... Birmingham, Ala.
I. R. Mauney, Syst. Gen. Rd. Foreman of Engs ..... Atlanta, Ga.
R. E. Deutsch, Gen.Rd. Foreman of Engs.,System .... Atlanta, Ga.
F. N. Duke, Road Foreman of Engines, System ..... Atlanta, Ga.
, Road Foreman of Engines, System ..... Atlanta, Ga.
V. N. Coutler, Superintendent, Rules ..... Atlanta, Ga.

17. OFFICERS - PHYSICIANS - WATCH INSPECTORS (Cont'd)

b. PHYSICIANS' DIRECTORY

H. B. Heywood, III, ORTHO ..... Chattanooga, Tenn.
Edgar D. Akin, GS ..... Chattanooga, Tenn.
R. E. Mabe, INT ..... Chattanooga, Tenn.
R. G. Vieth, NEURO ..... Chattanooga, Tenn.
B. W. Caughran, ORTHO ..... Chattanooga, Tenn.
W. H. Price, ORTHO ..... Chattanooga, Tenn.
M. R. Seal, OPH ..... Chattanooga, Tenn.
I. M. Long, OPH ..... Chattanooga, Tenn.
G. Z. Seiters, ORTHO ..... Chattanooga, Tenn.
C. H. Alper, OTO ..... Chattanooga, Tenn.
H. A. Stone, SURG ..... Chattanooga, Tenn.
N. H. Swann, INT ..... Chattanooga, Tenn.
T. Asbury, OPH ..... Cincinnati, Ohio
C. O. Carothers, ORTHO ..... Cincinnati, Ohio
D. H. Jansen, OPH ..... Cincinnati, Ohio
Jerrold Levin, OPH ..... Cincinnati, Ohio
R. A. Matuska, SURG ..... Cincinnati, Ohio
Edmond Niesen, INT ..... Cincinnati, Ohio
R. Richter, ORTHO ..... Cincinnati, Ohio
C. M. Smith, OPH ..... Cincinnati, Ohio
D. R. Thomas, INT ..... Cincinnati, Ohio
H. E. Wedig, FP ..... Cincinnati, Ohio
E. Woliver, GS ..... Cincinnati, Ohio
R. Zodikoff, INT ..... Cincinnati, Ohio
Howard L. Ravenscraft, FP ..... Covington, Ky.
R. K. Johnson, ORTHO ..... Crestview Hills, Ky.
D. E. Marker, ORTHO ..... Crestview Hills, Ky.
R. Q. Bailey, GP ..... Danville, Ky.
S. H. Reid, GP ..... Danville, Ky.
C. W. Sisk, GP ..... Danville, Ky.
Wm. P. Baas, OPH ..... Danville, Ky.
C. K. Mahaffey, RAD ..... Danville, Ky.
F. Scroggin, GP ..... Dry Ridge, Ky.
E. C. Cunningham, GP ..... Harriman, Tenn.
T. D. Ballard, GP ..... Lexington, Ky.
William Offutt, IV, OPH ..... Lexington, Ky.
K. R. Thompson, Jr., ORTHO ..... Lexington, Ky.
J. O. VanMeter, GP ..... Lexington, Ky.
G. L. Kline, GP ..... Oneida, Tenn.
B. Coffey, GP ..... Oneida, Tenn.
T. A. Fuller, INT ..... Rockwood, Tenn.
C. H. Dabbs, SURG ..... Rockwood, Tenn.
J. R. Biggs, Jr., RAD ..... Somerset, Ky.
V. F. Frye, SURG ..... Somerset, Ky.
S. W. Rose, OPH ..... Somerst, Ky.
R. H. Weddle, GS ..... Somerset, Ky.
H. A. Perry, GP ..... Whitley City, Ky.

KEY TO PHYSICIANS' DIRECTORY

CARDIO — Cardiology (heart)
DERM — Dermatology (skin)
DENT SURG — Dental Surgery
EENT — Eye, Ear, Nose, Throat
FP — Family Practice
GP — General Practice
GS — General Surgery
GYN — Gynecology
INT — Internal Medicine
NEURO — Neurosurgery
OM — Occupational Medicine
OPH — Ophthalmology (eye)
ORS — Orthopedic Surgeon
ORTHO — Orthopedics (bone)
OTO — Otolaryngology (ear)
PATH — Pathology (laboratory)
PSY — Psychiatry
PS — Plastic Surgeon
RAD — Radiology (X-ray)
SURG — Surgery
URO — Urology (kidneys & bladder)

c. WATCH INSPECTORS

Montgomery Jewelers ..... Cincinnati, Ohio
Dodd Jewelers ..... Cincinnati, Ohio
E. T. Herzog ..... Covington, Ky.
Gooch Jewelers ..... Ludlow, Ky.
Samuel M. Cochran ..... Lexington, Ky.
Heritage Jewelers ..... Fort Mitchell, Ky.
Lawson's Jewelry ..... Danville, Ky.
Barker's Jewelry Co. ..... Somerset, Ky.
Bryant's Jewelry ..... Whitley City, Ky.
Rone-Regency Jewelers (Brainerd Village) ..... Chattanooga, Tenn.
Bryant's Jewelry ..... Oneida, Tenn.

STANDARD WATCHES

Standard railroad watches of makes and models listed below are approved for purposes of Rule 2:

POCKET WATCHES:

ELGIN
16 size 21 Jewel B.W. Raymond

HAMILTON
16 size 23 Jewel #950
16 size 21 Jewel #992

BULOVA
Quartz 91 A02-4W
92 A18-9Y

WRIST WATCHES

4BALL
TRAINMASTER #1604B

BULOVA
ACCUTRON Quartz (SMQ)
Railroad Model Series 242
ACCUTRON Railroad Model
ACCUTRON Ladies Quartz
Models 91270 and 92274

ELGIN
21 Jewel B.W. Raymond Chronometer

HAMILTON
Electric R.R. Special #50
Electric R.R. Special #51
Electric R.R. Special #52
Electric - 910917 - White
RODANIA
Quartz Watch - Model 9361, Ref. 3488.20

SEIKO
Quartz CM 101M
Quartz Ladies Model UX015M
*Quartz Model PD143M
**Quartz Model PD144M

* Replaces Model FY625M, previously HA163M
** Replaces Model FY626 and FY626M, previously HA164M.

ALL watches must be in good condition and run within a variation of 30 seconds per week.

1. Clean Bulova Accutron watches every four (4) years. Clean all other APPROVED watches every two (2) years.
2. RENEW the battery in ALL electric watches ANNUALLY.

18. ASSIGNMENTS OF AGENTS AND OPERATORS

STATION	WEEKDAYS	SAT. & SUN.
Gest Street	Continuous	Continuous
Erlanger	8:00am to 5:00pm	Sat. Same Sun. Closed
Lexington	7:00am to 11:00pm	Same
Burgin	7:00am to 4:00pm	Closed
Danville	Continuous	Continuous
Somerset	7:00am to 4:00pm	Sat. Same Sun. Closed
Oneida	7:00am to 4:00pm	Sat. Sun. Sun. Closed
Oakdale	Continuous	Continuous
Emory Gap	7:00am to 4:00pm	Sat. Same Sun. 10:00am 6:00pm
deButts Yard	Continuous	Continuous
Crossville,Tn	8:00am to 5:00pm	Sat. Same Sun. Closed

19. BUSINESS TRACKS AND STATIONS NOT SHOWN IN STATION COLUMNS

Name	M.P. Location	Station No.	Approx. Car Cap.	Open End
Union Light	8.8	A 11	6	North
Camco	13.4	A 11	15	South
Devon, Ky.	13.5	A 11	8	South
Richwood	16.8	A 14	8	South
Walton	20.6	A 18	28	South
Crittendon	27.5	A 25	21	South
Sherman	30.8	A 28	7	South
Dry Ridge	34.3	A 32	20	Both
Corinth	48.7	A 46	16	South

19. BUSINESS TRACKS AND STATIONS NOT SHOWN IN STATION COLUMNS

Name	M.P. Location	Station No.	Approx. Car Cap.	Open End
Southern States	69.8	A 67	15	South
K. U. Spur	84.4	A 82	15	South
Carpenter Bros.	89.2	A 87	10	North
Malone & Hyde	90.5	A 88	8	North
Nicholasville Indus.Pk	93.5	A 91	Lead	North
Standard Metals	122.4	A120	12	South
Moreland	126.6	A124	25	North
McKinney	131.5	A129	15	North
Eubank	146.0	A143	15	North
Science Hill	153.5	A151	15	South
Science Hill	153.5	A151	10	North
Cumberland W. & C.	156.5	A154	12	North
Warners Farm Supply	157.5	A156	9	South
Southern States	158.5	A157	12	North
Tecumseh Products Co	163.0	A161	15	South
Grove Coal Co.	165.2	A163	20	Both
Cooper Steam Plant	166.5	A164	Lead	South
Greenwood	179.0	A176	12	South
Flat Rock	186.2	A187	7	South
Pine Knot	196.6	A194	45	Both
Winfield, Tenn.	203.6	A201	40	Both
Blue Diamond	204.8	A202	40	Both
Bear Creek	205.6	A203	8	South
Budd Coal Co.	205.7	A203	40	South
Rugby Road	223.9	A221	28	South
Sunbright Lead	232.4	A229	Lead	South
Nemo	246.1	A243	10	South
*Watts Bar	285.0	A282	50	Both
Bakewell	312.7	A310	8	North
Rathburn	317.0	A317	3	North
Dayton Spur, Tenn.	132.9H	133H	14	South
Otter Creek	137.1H	138H	14	North
Gamble Construct.Co.	142.2H	143H	11	North
Southern St.Lime Corp.	142.3H	143H	52	North
Wetsel	152.0H	152H	14	South
Cardiff	160.1H	161H	7	South
Number One	TE2.0	-	16	South
Barnes	TE3.5	-	30	South

NOTE: Stations marked thus (*) have no local or team tracks.

20. HOW TO JUDGE SPEED OF CAR APPROACHING COUPLING

Sight car with fixed objects — start count.

Count seconds it takes car to pass fixed object.

An excellent way to get accurate timing without a watch is to count "one hundred and one, one hundred and two" and so on as the car passes the fixed object. **OVERSPEED COUPLINGS CAUSE DAMAGE!**

TABLE SHOWING SPEED OF CARS IN M.P.H.

If car passed object in:	It was travelling:			
	40 Ft. Car	50 Ft. Car	60 Ft. Car	85 Ft. Car
4 seconds	7.0	8.7	10.3	14.6
5 seconds	5.6	7.0	8.2	11.6
6 seconds	4.7	5.9	6.9	9.7
7 seconds	4.0	5.0	5.9	8.3
8 seconds	3.5	4.4	5.2	7.3
9 seconds	3.1	3.9	4.6	6.5
10 seconds	2.8	3.5	4.1	5.8
11 seconds	2.5	3.2	3.8	5.3
12 seconds	2.3	2.9	3.5	4.9
13 seconds			3.2	4.3
14 seconds			3.0	4.2
15 seconds			2.8	3.9
16 seconds				3.6
17 seconds				3.4
18 seconds				3.2
19 seconds				3.1
20 seconds				2.9

21. COMMUNICATION & SIGNAL INFORMATION

INSTRUCTIONS FOR MANUAL OPERATION OF DUAL-CONTROL SWITCH MACHINES IN CTC OR REMOTE CONTROL TERRITORY (Rule 533)

To operate switch manually:

1. Secure authority from control station to remove power from switch.
2. Unlock both levers.
3. Operate short lever from "Power" or "Motor" to extreme opposite position showing "Hand."
4. Operate long lever marked "Hand-Throw" until it engages mechanism and moves switch points to desired position. This may or may not occur on first attempt to move switch points.
5. Complete stroke with long lever marked "Hand-Throw" and secure with lock, examine switch points before moving train or engine over the switch.
6. When authorized movements have been completed, restore switch to power operation.
7. Restore long lever marked "Hand-Throw" to original position.
8. Restore short lever marked "Hand" to position showing "Power" or "Motor" and lock.
9. Report to Control Station switch restored to Power Operation.

INSTRUCTIONS RELATIVE TO THE OPERATION OF HAND-OPERATED SWITCHES EQUIPPED WITH G. R. S. ELECTRIC LOCKS

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

A. FOR MOVEMENT FROM MAIN TRACK TO SIDING OR SPUR TRACK:

1. Stop engine or cars just ahead of switch points.
2. Open door of lock housing which has a standard switch lock on it.
3. Lift lock lever until it rests against stop in 45 degree position. Then observe when indicator clears or moves to the 45 degree position, complete the movement of lock lever to the extreme left hand position. This unlocks the switch and it can then be operated the same as any other hand thrown switch.

B. FOR MOVEMENT FROM SIDING OR SPUR TRACK TO THE MAIN TRACK:

1. Secure permission from the control station to operate the electric lock and enter the main track. The switch must be unlocked and thrown before the derail or inside crossover switch is operated.
2. Lift lock lever until it rests against stop in 45 degree position. After predetermined time interval has expired, indicator should clear and switch can be unlocked by completing the movement of the lock lever to the extreme left hand position.

After a movement into or out of the switch has been completed and the hand lever or switch returned to normal position, the crank handle in the lock housing must be restored to the right hand or normal position and the door on the lock housing closed and locked.

An emergency release is provided in the lock housing for use in case of trouble or if the electric lock fails to operate properly. To operate the emergency release, after obtaining permission from control station, break seal and move emergency lever to release position, then operate in the usual manner. When emergency release is operated to enter main track from a spur, Rule 517 must be observed. If emergency release is operated, notify control station immediately as signals will remain in stop position until mechanism has been reset by signal maintainer.

DETECTORS (Rules 101(b), 959, 1014, 1035, 1080)

For hot box and dragging equipment detectors listed below, a revolving red light has been placed on detector buldings governing movements on adjacent main track. In the case of double main track locations, another revolving red light is mounted on a pole on opposite side from detector building and governs movement on adjacent main track.

LOCATION OF HOT BOX DETECTORS

Detector Name	Mile Post Location	Track Side Revolving Light Located	Direction Activated
Walton, Ky.	20.0	West	Both
Mason, Ky.	41.5	East	Both
Rogers Gap, Ky.	60.0	West	Both
Bishop, Ky.	87.8	East	Both
Burgin, Ky.	109.0	East	Both
Moreland, Ky.	128.7	East	Both
Science Hill, Ky., No.1	151.8	East	Both
Science Hill, Ky., No.2	151.8	West	Both

21. COMMUNICATION & SIGNAL INFORMATION (Cont'd)

LOCATION OF HOT BOX DETECTORS (Cont'd)

Detector Name	Mile Post Location	Track Side Revolving Light Located	Direction Activated
Greenwood, Ky.	175.5	West	Both#
Silerville, Tn., No.1	201.1	East	Both
Silerville, Tn., No.2	201.1	West	Both
Pemberton, Tn., No.1	212.5	East	Both
Pemberton, Tn., No.2	212.5	West	Both
Glen Mary, Tn., No.1	226.5	East	Both
Glen Mary, Tn., No.2	226.5	West	Both
Lancing, Tn., No.1	241.8	East	Both
Lancing, Tn., No.2	241.8	West	Both
Emory Gap, Tn.	261.9	East	Both#
Spring City, Tn.	279.2	West	Both
Dayton, Tn.	302.7	East	Both
Daisy, Tn.	319.6	East	Both

- Also has Hot Wheel Detector.

HOT WHEEL DETECTOR.

Hot wheel detectors are located at Rogers Gap, Greenwood and Emory Gap. When these detectors are activated they will result in an alarm just like the hot box detectors.

Upon notification by the Atlanta Hot Box Center of a hot wheel, the crew will do the following:

1. Stop the train and verify if one or more wheels on the car is hot.
2. When notified to check a **hot wheel** on a car at a specific location in the train and crews do not find an **overheated wheel** they are to check **wheels** five cars ahead and five cars behind.
3. The crew must report the status of the handbrake and retainer valve on the car to the Atlanta Hot Box Center and attempt to release the brakes before moving the car.
4. If the car has one or more hot wheels, the crew will set the car out for mechanical inspection, advising the Chief Dispatcher as to location car set out.

LOCATION OF DRAGGING EQUIPMENT DETECTORS

Revolving Lights

Location	Mile Post	Track Side Revolving Light Located	Direction Activated
Erlanger (No. 1)	8.0	East	Both
Erlanger (No. 2)	8.0	West	Both
Rohan	51.9	East	Both
Elihu	163.1	West	Both

Flashing Lights

Location	Milepost	Light Locations By Milepost	Side of Track	Direction Activated
Wilmore, No. 1	98.5	100.3 & 102.2	On Signal	Southbound
Wilmore, No. 2	98.5	100.3 & 102.2	On Signal	Southbound
Waynesburg, No. 1	142.0	140.7 & 139.0	On Signal	Northbound
Waynesburg, No. 2	142.0	140.7 & 139.0	On Signal	Northbound
Tateville	171.0	169.9 & 168.1	On Signal	Northbound
Hixson	328.7	330.0 & 331.2	On Signal	Southbound

After the detector comes into view and prior to the lead locomotive passing the detector, the head end of every train will call to the caboose crew's attention via radio that the train is approaching a hot box detector, dragging equipment detector or clearance detector. The flagman or conductor will respond after the caboose passes the detector by saying, "All clear," or "All dark on the box."

When the hot box detector records excessive journal temperature, or the dragging equipment detector has been hit, the light will immediately display revolving or flashing red, and train must be stopped promptly and inspected by crew members for hot journal or dragging equipment in accordance with Operating Rule 1035.

In case of no radio on caboose, the conductor must take necessary action to stop the train as required by Rule 959.

This light, when actuated, will remain on for approximately seven seconds after caboose passes detector.

When a crew member goes to inspect a suspected hot box, in addition to tools and supplies, he will take available fire extinguishing material for use when needed.

When stopped by red light, even though hot box center advises the tape is clear, the train must be inspected.

When notified to check a hotbox on a car at a specific location in the train, and crews do not find an overheated journal, they are to check journals five cars ahead and five cars behind. If no overheated journals are found, then journals on the same eleven cars on the opposite side must be checked.

When a train is stopped by the Detector Center for a hotbox, dragging equipment or clearance detector indication, the following information must be given to the Detector Center as quickly as radio communication can be established:

(1) Car Initial and Number
(2) Hot or not hot (or type of dragging equipment or clearance problem found)
(3) Type of car
(4) Loaded or empty
(5) Type of journal
(6) Standard, or unusual journal configuration (if cars are not hot)
(7) Disposition of car

It must be clearly understood that this information is to be furnished in each instance when the train is stopped by the Detector Center, regardless of whether or not there is a hotbox, dragging equipment or clearance problem.

In the event that the crew is unable to establish radio communication with the Detector Center after the above information has been obtained, **the crew must immediately** contact the Chief Dispatcher and pass this information to him.

Exception - Steam-powered Trains

Because hot box detectors cannot distinguish between steam and hot journals, the Atlanta Detector Center will closely monitor movement of all steam-powered trains. Such trains will not stop for inspection on activation of the revolving red beacon at a detector unless notified by the Detector Center to inspect the steam engine for dragging equipment or the cars for hot journals, hot wheels, dragging equipment or the cars for hot journals, hot wheels, dragging equipment or clearance problems. Protection of steam engine journals, wheels and clearances is the responsibility of the crew.

LOCATION OF DISPATCHER CONTROLLED RADIO BASE STATIONS

Location	Frequency	Hours
Cumberland Falls, Ky.	Road & Dispatcher	Continuous
Daisy, Tn.	Road & Dispatcher	Continuous
Dayton, Tn.	Road & Dispatcher	Continuous
Erlanger, Ky.	Road & Dispatcher	Continuous
Kings Mountain, Ky.	Road & Dispatcher	Continuous
Muddy Ford, Ky.	Road & Dispatcher	Continuous
Oakdale, Tn.	Road & Dispatcher	Continuous
Oneida Fire Twr., Tn.	Road & Dispatcher	Continuous
Pilot Mountain, Tn.	Road & Dispatcher	Continuous
Rockwood, Tn.	Road & Dispatcher	Continuous
Somerset, Ky.	Road	Continuous
Spring City, Tn.	Road & Dispatcher	Continuous
Williamstown, Ky.	Road & Dispatcher	Continuous
Wilmore, Ky.	Road & Dispatcher	Continuous

LOCATION OF WAYSIDE RADIO BASE STATIONS

Location	Frequency	Hours
Cincinnati, Oh.	Road & Terminal	Continuous
Erlanger, Ky.	Road	(See Sec. 18)
Lexington, Ky.	Road	(See Sec. 18)
Danville, Ky.	Road	Continuous
Oneida, Tn.	Road & Tenn RR	(See Sec. 18)
Oakdale, Tn.	Road	Continuous
Emory Gap, Tn.	Road	(See Sec. 18)
Chatt., Tn.	Road & Terminal	Continuous

22. HAZARDOUS MATERIALS AND POLLUTANTS

CAUTION: LEAKING CHLORINE VAPORS FROM TANK CARS CAN CAUSE INJURY TO THE RESPIRATORY SYSTEM WHEN BREATHED. EVEN IN LOW CONCENTRATIONS, ANYTIME CHLORINE CAN BE SMELLED YOU SHOULD GET OUT OF THE AREA AS QUICKLY AS POSSIBLE, AND REPORT THE LEAK TO THE APPROPRIATE OFFICER.

22. HAZARDOUS MATERIALS AND POLLUTANTS (Cont'd)

At the commencement of each trip, Conductors must examine or require competent crew member to:

(1) Inspect the six (6) head cars behind the engine and the six (6) rear cars ahead of an occupied caboose to identify placarded cars not properly spaced.

(2) Examine all waybills of the train to identify any cars containing Hazardous Materials.

Do not move any placarded car, loaded or empty, on line of road without a waybill or knowledge of current or previous contents.

At all locations where tank cars placarded Flammable Gas are in a shove move, a crew member suitably equipped for the purpose of protecting the shove must:

a. Place himself at or ahead of the leading car for the entire distance of the shove.

b. After the shove move has stopped, a crew member must walk the cut to determine that all such placarded cars are on the track.

When shoving cuts containing "Flammable Gas" into the Forwarding Yard at Hump Yards, the movement must not exceed five (5) MPH, and a crew member must be on the leading end of the lead "Flammable Gas" car in the cut. No cuts may be shoved into adjacent tracks until the crew member protecting the leading end has reported the cut secured and in the clear of adjacent tracks.

To comply with rules and regulations governing the handling of "Flammable Gas," all Yard Foremen and affected yard personnel involved in handling tank cars containing "Flammable Gas" must be notified prior to handling such cars that such cars must be handled in accordance with instructions contained in the Hazardous Material Switching Chart. Notification to Yard Foremen may be made orally in person or by radio. Yard Foremen will notify affected yard personnel.

Any time loaded cars containing hazardous materials are picked up on line of road and no agent or other clerical forces are on duty, the dispatcher must be notified that pick-up includes hazardous materials.

Hazardous material placards must be securely in place before moving loaded and/or empty tank cars, or loaded hopper or box cars containing hazardous materials from customer's siding. Cars with placards missing **must not** be pulled.

Cars placarded "Explosives," "Flammable Gas," or "Flammable" must not be left on any track unless track is free from combustible material such as dead grass and weeds.

Cars placarded Explosive A must not be placed under a bridge or overhead highway crossing nor in or alongside passenger shed or station, except for loading or unloading purposes.

Shipments containing hazardous materials for transportation may not be accepted in a rail car unless the placards for the hazardous materials are affixed as required by regulations and specified on shipping papers.

THE FOLLOWING MUST BE REPORTED IMMEDIATELY TO THE CHIEF DISPATCHER:

ALL SPILLS, DISCHARGES, OR RELEASES OF HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, AND HAZARDOUS WASTE INTO THE ELEMENTS (AIR, LAND, OR WATER), ALSO ALL SPILLS, DISCHARGES, OR RELEASES OF ALL OILS OR OTHER POLLUTANTS.

INSTRUCTIONS TO EMPLOYEES IN EVENT OF HAZARDOUS MATERIAL ACCIDENTS

1. Check for injuries, provide assistance as needed, notify dispatcher.
2. Check waybills and documents for hazardous materials cars in train -- waybills stamped **DANGEROUS, EXPLOSIVE, POISON GAS** or **RADIOACTIVE MATERIAL** in upper left corner.
3. Do not go near derailed or damaged hazardous material cars to investigate accident.
4. Give dispatcher information on:
   a.) Injuries.
   b.) How many cars are involved, with their location and condition where possible to obtain this information safely.
   c.) Each hazardous material car: Initial and number, contents, placards, shipper, and condition of car where possible to obtain this information safely.
   d.) Danger to surrounding area: Homes, schools, streams, if applicable.
5. Review information and recommendations contained in the **TRANSPORTATION EMERGENCY ACTION GUIDE FOR HAZARDOUS MATERIALS INCIDENTS** posted in locomotives and cabooses, and take action as necessary.
6. Inform local authorities of the contents of each car that presents a hazard, tell them about the EMERGENCY ACTION GUIDE and advise them to keep people away from the accident. This **DOES NOT** mean evacuation unless the GUIDE calls for same.
7. Report all information above to the first railroad officer who reaches the scene.

HAZARDOUS MATERIAL SWITCHING CHART

1	2	SWITCHING OPERATIONS			
		3	4	5	6
TYPE OF CAR	PLACARD APPLIED ON CAR	SHALL NOT BE CUT OFF IN MOTION OR ALLOWED TO BE STRUCK BY A FREE MOVING CAR	SHALL BE SEPARATED FROM ENGINE BY AT LEAST ONE NON-PLACARDED CAR	WHEN HAND BRAKES ARE USED, PRECEDING CARS MUST CLEAR LADDER BEFORE CUTOFF	MUST NOT BE PLACED UNDER BRIDGES OR HIGHWAYS
ANY CAR*	"EXPLOSIVES A"	X	X		X
ANY CAR*	"POISON GAS"	X			
TANK CAR	ANY LOADED PLACARD			X	
COFC TOFC	ANY PLACARD	X			
TANK CAR	FLAMMABLE GAS	X			

* - Includes flat cars carrying trailers or containers.

EXPLANATION OF TRACK DIAGRAMS

~ ~ ~ ~ ~ Automatic Block Signal Territory - Single Track

≈ ≈ ≈ ≈ ≈ Automatic Block Signal Territory - Double Track

---------- Centralized Traffic & Remote Control Territory - Single Track

= = = = = = = Centralized Traffic & Remote Control Territory - Double Track

>>>>>>> Train Order (Dark Territory) - Single Track

⩾⩾⩾⩾⩾⩾⩾ Train Order (Dark Territory) - Double Track

23. INDEX TO SPECIAL INSTRUCTIONS

23. INDEX TO SPECIAL INSTRUCTIONS (Cont'd)

Position in train of placarded cars containing hazardous materials

NOTE A: Cars with alternate numbered placards will be handled the same as cars with word description placards.

NOTE B: Cars with same placards may be placed next to each other.

Cars placarded  or

No restrictions

RESTRICTIONS

	Cars placarded: EXPLOSIVES A	Cars placarded: POISON GAS	Cars placarded: RADIOACTIVE	Loaded tank cars placarded:	Empty tank cars placarded:	Loaded cars other than tank cars placarded:
	(See: NOTE B)			CORROSIVE	Corrosive	DANGEROUS, BLASTING AGENTS
				POISON	Poison	CORROSIVE
				CHLORINE	Chlorine	FLAMMABLE GAS
				ORGANIC PEROXIDE	Organic Peroxide	OXIDIZER
				OXIDIZER	Oxidizer	ORGANIC PEROXIDE
				OXYGEN	Oxygen	CHLORINE
				FLAMMABLE	Flammable	FLAMMABLE GAS
				FLAMMABLE SOLID	Flammable Solid	NON-FLAMMABLE GAS
				NON-FLAMMABLE GAS	Non Flammable Gas	POISON
				FLAMMABLE GAS	Flammable Gas	OXYGEN
				FLAMMABLE SOLID W	Flammable Solid "W"	FLAMMABLE SOLID W
				BLASTING AGENTS	Poison Gas	FLAMMABLE
						EXPLOSIVES B
Must not be nearer than the sixteenth car from the engine or occupied caboose		•		(See:	NOTES	A & B)
Must not be nearer than the sixth car from the engine or occupied caboose	•			•		
When train length does not permit, must be placed near the middle of train but not nearer than the second car from the engine or occupied caboose	•	•		•		
MUST NOT BE NEXT TO: Engine	•	•	•	•	•	
Loaded flat car (1)	•	•		•(2)		
Open top car (3)	•	•		•		
Car with automatic refrigeration or heating apparatus in operation, or a car with open flame apparatus in service, or with an internal combustion engine in operation	•	•		•		
Car containing lighted heaters, stoves or lantern	•	•		•		
Occupied car	•(4)	•(4)		•		
Occupied caboose	•(4)	•(4)	•	•	•	
Explosives A		•	•	•		•
Poison Gas	•		•	•		•
Radioactive	•	•		•		•
Undeveloped film			•			
Any loaded placarded car (other than combustible)	•	•	•			

(1) A flat car equipped with permanently attached ends of rigid construction is considered to be an open top car.

(2) A loaded flat car, other than a specially equipped car in trailer-on-flat-car or container-on-flat-car service or a flat car loaded with vehicles secured by means of a device designed for that purpose and permanently installed on the flat car, and of a type generally accepted for handling in interchange between railroads. This exception for cars in trailer-on-flat-car service does not apply to loaded flatbed trucks, loaded flatbed trailers, or loaded trucks or trailers without securely closed doors.

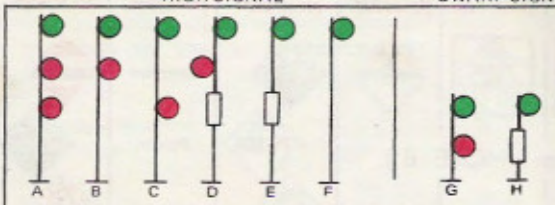
(3) An open top car when any of the lading protrudes beyond the car ends or when any of the lading extending above the car ends is liable to shift so as to protrude beyond the car ends.

(4) A rail car placarded EXPLOSIVES A or POISON GAS in a moving or standing train must be next to and ahead of any car occupied by the guards or technical escorts accompanying this car. However, if a car occupied by guards or technical escorts is equipped with a lighted heater or stove, it must be the fourth car behind any car requiring EXPLOSIVES A placards.

SOUTHERN RAILWAY SYSTEM

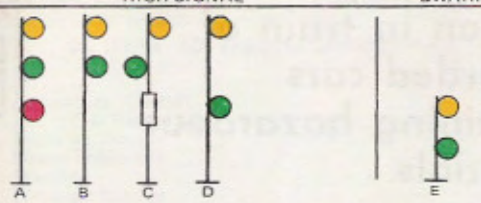
AUTOMATIC BLOCK, INTERLOCKING SIGNALS, CTC AND REMOTE CONTROL SIGNALS

HIGH SIGNAL DWARF SIGNAL

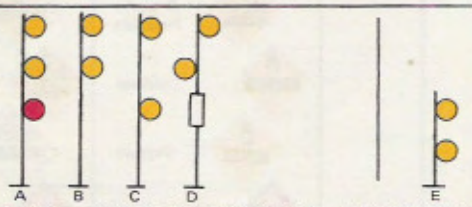


RULE 301 NAME: Clear. INDICATION: Proceed.

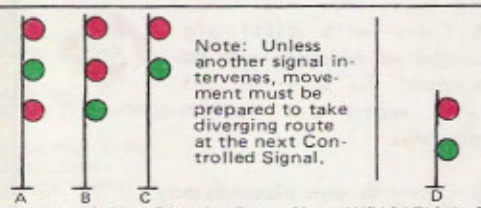
HIGH SIGNAL DWARF SIGNAL



RULE 302 NAME: Approach Diverging. INDICATION: Proceed, approaching next signal prepared to take diverging route.

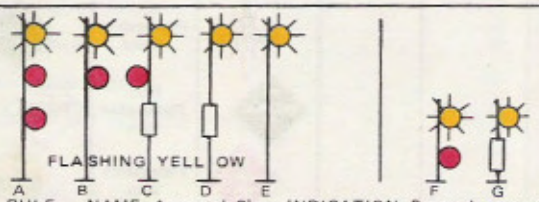


RULE 303 NAME: Advance Approach. INDICATION: Proceed, preparing to stop at second signal.

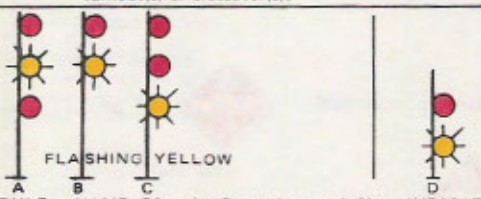


Note: Unless another signal intervenes, movement must be prepared to take diverging route at the next Controlled Signal.

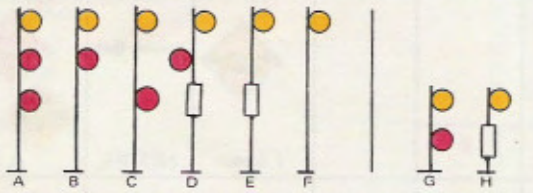
RULE 304 NAME: Diverging Route Clear. INDICATION: Proceed through diverging route, observing authorized speed through turnout(s) or crossover(s).



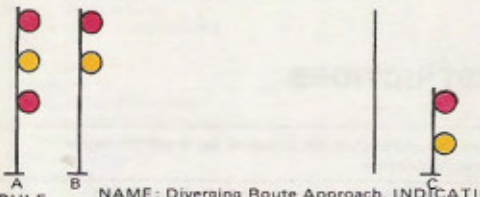
RULE 306 NAME: Approach Slow. INDICATION: Proceed, approaching next signal at Slow Speed. Train exceeding Medium Speed must at once reduce to that speed.



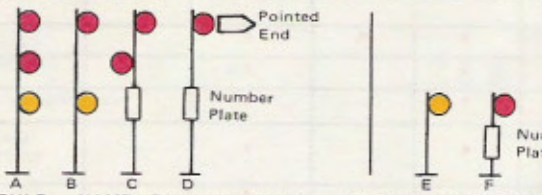
RULE 306.1 NAME: Diverging Route Approach Slow. INDICATION: Proceed through diverging route, observing authorized speed through turnout(s) or crossover(s), then not exceeding Medium Speed, approach next signal at Slow Speed.



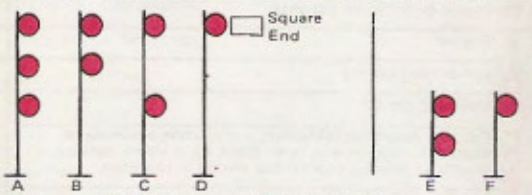
RULE 307 NAME: Approach. INDICATION: Proceed, preparing to stop at next signal. Train exceeding Medium Speed must at once reduce to that speed.



RULE 308 NAME: Diverging Route Approach. INDICATION: Proceed through diverging route, observing authorized speed through turnout(s) or crossover(s), preparing to stop at next signal. Train exceeding Medium Speed must at once reduce to that speed.



RULE 309 NAME: Restricted Proceed. Restricted Speed. INDICATION: Proceed at



RULE 310 NAME: Stop. INDICATION: Stop.

SPEED:

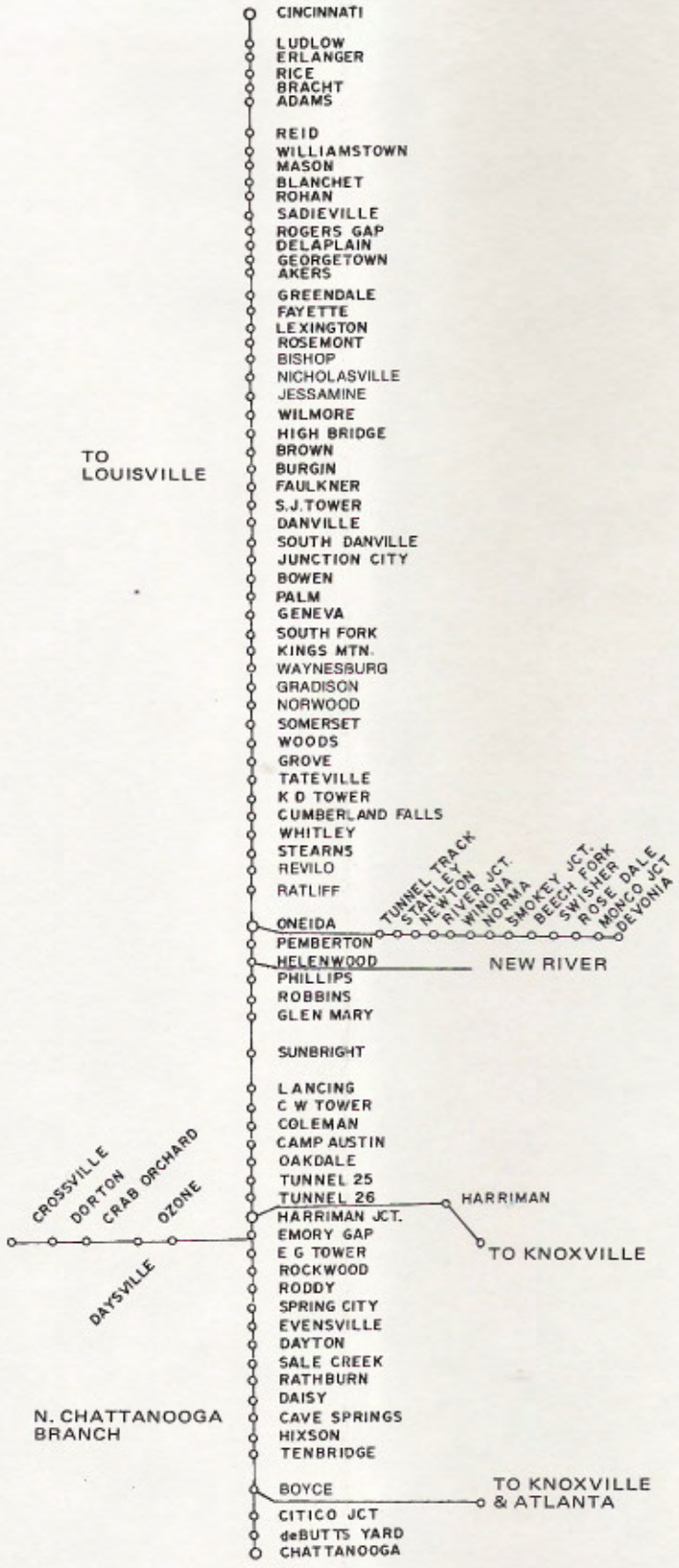
MEDIUM SPEED – A SPEED NOT EXCEEDING 30 MILES PER HOUR.

REDUCED SPEED – PROCEED PREPARED TO COMPLY WITH FLAGGING SIGNALS AND STOP SHORT OF TRAIN OR OBSTRUCTION.

RESTRICTED SPEED – PROCEED PREPARED TO STOP SHORT OF ANOTHER TRAIN, OBSTRUCTION, OR SWITCH NOT PROPERLY LINED AND LOOK OUT FOR BROKEN RAIL, BUT AT A SPEED NOT EXCEEDING 15 MILES PER HOUR.

SLOW SPEED – A SPEED NOT EXCEEDING 15 MILES PER HOUR.

YARD SPEED – A SPEED THAT WILL PERMIT STOPPING WITHIN ONE-HALF THE RANGE OF VISION.



KENTUCKY DIVISION

SAFETY

IS OF

FIRST

IMPORTANCE

AVOID FALLS

CHECK FOOTING

BEFORE DISMOUNTING

PREVENT LADING DAMAGE

MAKE COUPLINGS NOT

MORE THAN 4 M.P.H.

Printed By

management information services

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

INSTRUCTIONS — (1) Use MAXIMUM SPEED for kind of train (passenger or freight) unless line-up shows lower train speed. (If timetable maximum speed is not listed below, use next higher MPH column). (2) Use MILES from train's last recorded timetable or line-up location to point where inspection car clears. (3) Read MPH column down to MILES line for running time of train in minutes. Example — a train at 45 MPH going 11 miles uses 14 minutes. (4) Add running time to the train's time at last recorded location to determine when the train is due at clearing point. CLEAR THIS TIME NOT LESS THAN FIVE MINUTES. See Rule 1509(a).

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