

UNION PACIFIC SYSTEM
UNION PACIFIC RAILROAD COMPANY

Kansas Division

**Special Rules
No. 1**

**Effective Sunday,
June 18, 1933**

Superseding Consolidated Superintendent's
Bulletin Orders No. 3 and Special Rules in
Time-Table No. 151.

Employees whose duties are in any way affected
thereby, must have a copy of these rules with
them while on duty.

W. H. GUILD, General Superintendent

N. A. WILLIAMS,
General Manager

G. L. WHIPPLE,
General Sup't. Transportation



7 (B). At points where there are close clearances, trainmen will work on the opposite side of train from them; and, if necessary, the fireman will receive the signals and communicate them to the engineman.

8 (A). Electric lanterns may be used for displaying white light only. Their use for displaying colored lights for signaling purposes is not permitted.

9 (R). Lights will not be kept burning at night in train order signals and trains will be governed by the day indication, on the following branches:

Solomon Branch;	Manhattan Branch;
McPherson Branch;	Junction City Branch;
Plainville Branch;	Leavenworth Western Branch;
	Leavenworth Branch.

Switch lights will not be kept burning at night and trains must approach all facing point switches prepared to stop and must know that the switches are in proper position before passing over them at the following locations:

On McPherson Branch;
 On Plainville Branch, between Penokee and Halford, both stations inclusive;
 On Manhattan Branch, between Marysville and Manhattan;
 On Leavenworth Western Branch, except at Leavenworth, Onaga and Miltonvale;
 On Leavenworth Branch.

10 (h). At night, a yellow light on a dwarf signal, on a "call-on" signal, or on a "short-arm" signal of an interlocking plant, indicates "proceed at slow speed."

10 (j). Rule 10 (f) is hereby amended as follows:

Color	Indication
Purple.	Stop. (Night indication for derail switches on sidings.)

10 (r). By day and by night, a red, yellow, or green light is displayed on color light block signals. See Rule 526 (A).

The indication of these lights is as follows:

Color	Indication
Red.	Stop.
Yellow.	Approach next signal prepared to stop.
Green.	Proceed.

11 (R). Between Menoken and Hastings, where color light block signals are in service, yellow fuseses must not be used, and when a fusee of any color is found burning on or near the track, it must not be passed until burned out.

14 (w). Relative to Rules 14 (l) and 14 (u), instead of starting the first of the long sounds at the whistling post, as required by Rule 14 (u), the first of the long sounds will be started at such a point, depending on the speed of the train or engine, that the signal will be completed by ending the last sound immediately before reaching the crossing. The last sound may be prolonged, if necessary, and the duration of the complete signal must be not less than 10 seconds.

The sounds of the whistle should be no louder than necessary to give adequate warning to traffic in vicinity of the crossing, thus avoiding unnecessary annoyance to residents.

The engine-bell must be ringing continuously until the engine has passed over the crossing.

17 (C). When rules require headlight to be displayed, electric headlights on road engines must be dimmed under conditions outlined below, except in foggy or stormy weather or when other conditions make it inadvisable:

In yards where yard engines are employed and at stations where switching is being done;

At meeting points, until the train to be met is clear of the main track;

When standing;

On two or more tracks when approaching trains running in opposite direction.

These instructions do not supersede or modify those contained in Rules 17 and D-17.

19 (F). When passenger trains are being switched, the markers must be removed to prevent obscuring the view of the engine men.

26 (A). Blue flag or blue light must in all cases be displayed on the same side of train at each end.

26 (B). When necessary to protect against the moving or coupling into, of certain bad order cars on repair tracks with other cars, some of which it may be necessary to move, a red flag by day and a red light by night must be displayed on such cars to indicate that they must not be moved or coupled into under any circumstances.

These instructions do not change or modify Rule 26 in any way.

27 (A). In block signal limits, trains will not be required to stop for a switch-light not burning at night, when it can be seen that the switch is in proper position.

83 (R). At Terminal Jct., a clearance card received by the only section of westward second-class trains, will confer the same authority as when received at their initial station.

Clearance card (Form 2643) must be received as follows:

At Union Station	—by all westward trains;
At Terminal Jct.	—by all westward trains;
At Topeka	—by all U. P. trains at U. P. passenger station;
At Topeka	—by all eastward R. I. passenger trains, at R. I. passenger station;
At Topeka	—by all eastward R. I. freight trains, at R. I. yard office;
At Manhattan	—by all trains;
At Salina	—by all trains;
At Ellsworth	—by all trains;
At Plainville	—by all trains;
At Colby	—by all trains, except when there is no operator on duty;
At Onaga	—by all trains;
At Hastings passenger station	—by Nos. 501, 502, 543, and 544;
At Hastings yard office	—by all freight trains, before leaving;
At Marysville	—by all Manhattan Branch trains;
At Leavenworth	—by all westward trains.

Trains are not required to receive clearance card (Form 2643) as per Rule 83 (A) as follows:

At Topeka	—all eastward R. I. trains at U. P. passenger station;
At Stout	—all trains;
At K. C. & O. Jct.	—eastward C. B. & Q. trains after receiving clearance card at Helvey;
At Lawrenceburg	—all trains;
At Cochrane	—all westward trains.

83 (S). Trains must register by registering ticket (Form 2642) as follows:

At Terminal Junction	—all trains;
At Topeka	—all U. P. trains except those for which Topeka is the initial or terminal station, and all R. I. trains;
(U. P. Passenger Station)	—all Eastern Subdivision trains;
At Manhattan	—all Topeka Subdivision trains;
At Menoken	—all St. Joseph Subdivision trains.
At Upland	

Nos. 501, 502, 543, and 544, must register at Hastings passenger station.

83 (T). Solomon is registering station for Nos. 158, 159, 165, 166, 531 and 532 only.

83 (U). Eastward C. B. & Q. trains must not occupy main track at Alma Junction until authority has been received from the train dispatcher.

84 (B). Rule 84 (A) of the "Rules and Instructions of the Transportation Department" is changed as follows:

"On freight trains approaching sidings, if everything is all right, the conductor will, if practicable, signal the engineman to proceed. This will be answered by 14 (b)."

93 (R). Yard limits are established, and defined by yard limit signs, at the following stations:

Armstrong	Sylvan Grove	Upland	Leavenworth
Lawrence	Plainville	Marysville	Easton
Topeka	Hill City	Hanover	Winchester
Manhattan	Colby	Endicott	Holton
Junction City	Oakley	Fairbury	Onaga
Abilene	Menoken (On Topeka Subdivision)	Carleton	(Garrison, including Garrison Crossing)
Solomon	Onaga	Fairfield	Clay Center
Salina	(St. Joseph, including Terminal Yard and Elwood)	Hastings	Miltonvale
Ellsworth	Hiawatha	Grand Island	Lawrenceburg
Hays	Sabetha	Garrison Crossing	Concordia
Ellis	Seneca	Blue Rapids	Belleville
Minneapolis		(Blue Springs, including Blue Spgs. Jct.)	
Beloit		Beatrice	
McPherson			

98 (A). When pulling into a siding, rear end of train must be clear of main track, when practicable, before train is stopped.

Trainmen and enginemen will be held responsible for striking cars on sidings or for damage done in making emergency stop to avoid striking cars. If view is obstructed, brakeman must be sent ahead.

As an additional protection, when cars are set out on sidings where dispatcher cannot be notified so that train order may be immediately put out covering, one torpedo must be placed at each end of siding a sufficient distance to permit train heading in to stop. (See Transportation Department Rule 825.)

98 (B). Where a train is required to stop at a railroad crossing at grade not protected by interlocking plant or automatic crossing signals, and the view from either side is obstructed more than 200 feet, a member of the crew must precede the train and give proceed signal from the crossing, if safe to proceed, and the train must not proceed over the crossing until the proceed signal has been received.

98 (R). The Missouri State Law governing movement of trains over railroad crossings at grade is as follows:

"Every company operating a railroad shall cause all trains on such railroad to come to a full stop not less than ten nor more than sixty rods before reaching any railroad junction or crossing at grade, unless such stoppage is rendered unnecessary by an interlocking plant or other device approved by the written order of the railroad and warehouse commissioners, or by the court upon appeal. Any company violating any of the provisions of this section shall forfeit not less than twenty dollars nor more than one hundred dollars, to be recovered in a civil action before any justice of the peace of the county in which such violation occurs, upon the complaint of any person; said fine to be paid into the school fund of said county."

The Kansas State Law governing movement of trains over railroad crossings at grade is as follows:

"Trains carrying passengers exclusively, or passengers, mail, or express, shall be designated as first-class trains. Mixed freight and passenger trains, and all other trains, switch engines, and engines without cars, shall be designated as second-class trains.

All trains (and engines without cars) shall come to a full stop at least two hundred (200) and not more than eight hundred (800) feet from any grade crossing of other roads (except when such crossing is protected by interlocking device, gate, or derailling apparatus), and if the way is clear, shall sound two blasts of the whistle before starting forward.

First-class trains shall always have precedence over all other trains of any company at grade crossings, except where such precedence may be changed by written contract between crossing companies.

In case of trains of the same class approaching simultaneously, the one of the older road shall have the right to cross first, and the last train to cross shall not start until the first train has cleared the crossing.

Where a railroad crosses at grade the track of another within the yard limits of said other road and the track of such other road is not visible for at least five hundred (500) feet from the point of crossing, the crossing train shall send a flagman ahead from the point of stopping before crossing.

No train upon any road crossing the yard of another road shall stop on such crossing, after it has started forward to cross, nor until it has cleared such crossing by at least sixty (60) feet; provided, this shall not apply where crossings are so near to depots, water tanks or other places where stops are required to be made as to render it impracticable."

The Nebraska State Law governing movement of trains over railroad crossings at grade is as follows:

"All railroad trains (and engines without trains), shall come to a full stop at least 200 feet, and not more than 800 feet, from the crossing of the other railroads, and the engineer shall sound two long blasts of the whistle before starting forward, except where said railroads maintain a semaphore and gate, with torpedo attachments, and when the signals indicate the crossing to be clear, no stop need be made.

When trains (or engines without trains) approach a crossing simultaneously, the one on the older road shall have the right to cross first, and the last train to cross shall not start until the first train has cleared the crossing and signal indicates that track is clear.

Every engineer violating the provisions of the two preceding sections, shall for each offense, forfeit one hundred dollars to be recovered in the name of the State of Nebraska for the benefit of the school fund; and the person, persons, or corporations on which road such offense is committed shall forfeit for each offense so committed, the sum of two hundred dollars to be recovered in like manner."

98 (S). RAILROAD CROSSINGS.

Location	Railroad Crossed	Trains Which Have Precedence	How Governed
Bonner Springs. (M. P. 18.0)	A. T. & S. F.	U. P.	Interlocking Plant.
Topeka. (M. P. 67.5)	A. T. & S. F.	U. P.	Interlocking Plant.
Topeka. (M. P. 68.2)	C. R. I. & P.	U. P.	
Manhattan. (M. P. 119.4)	C. R. I. & P.	U. P.	
On Enterprise Spur.	A. T. & S. F.	A. T. & S. F.	Gate.
Abilene. (M. P. 164.5)	A. T. & S. F.	U. P.	Cabin Interlocking Plant.
Salina. (M. P. 187.2)	A. T. & S. F.	U. P.	The gate is connected with signals 500 feet on each side of the crossing. If the signal is at stop position and no train is in sight on the A. T. & S. F. within the limits of the stop boards which are located about 250 feet on each side of the crossing, flagman must be sent ahead to set gate against A. T. & S. F. trains and then be governed by Rule 509 (A) or 509 (B).
Ellsworth. (M. P. 224.4)	S. L. & S. F.	U. P.	Cabin Interlocking Plant.
Minneapolis. (M. P. 23.7)	A. T. & S. F.	U. P.	
Beloit. (M. P. 57.2)	Mo. Pac.	Mo. Pac.	
Salina. (M. P. 0.5) McPherson Branch	A. T. & S. F.	U. P.	
Salina. (M. P. 0.6) McPherson Branch	C. R. I. & P.	U. P.	
Salina. (M. P. 0.6) McPherson Branch	Mo. Pac.	U. P.	
Lindsborg. (M. P. 20.7)	Mo. Pac.	Mo. Pac.	All trains on Union Pacific track must stop at switch target until gate has been set across Missouri Pacific track. When entire train has passed the target on opposite side of crossing, the gate must be set across Union Pacific track.
McPherson. (M. P. 35.1)	A. T. & S. F.	A. T. & S. F.	
Lincoln Center. (M. P. 33.8)	A. T. & S. F.	U. P.	Gate.
Frankfort. (M. P. 58.6)	Mo. Pac.	Mo. Pac.	Automatic Crossing Signal.
Terminal Yard. (M. P. 0.2)	C. B. & Q.		Gate and Crossing Tender.
Terminal Yard. (M. P. 0.2)	U. T.		
Troy. (M. P. 15.2)	C. B. & Q.	St. J. & G. I.	Interlocked Semaphore Signal.
Hiawatha. (M. P. 42.1)	Mo. Pac.	St. J. & G. I.	Interlocking Plant.
Hanover. (M. P. 128.0)	C. B. & Q.	St. J. & G. I. trains have precedence over C. B. & Q. trains going toward Wyoming. C. B. & Q. trains going toward Concordia have precedence over St. J. & G. I. trains moving in either direction.	

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Location	Railroad Crossed	Trains Which Have Precedence	How Governed
Endicott. (M. P. 147.0)	C. B. & Q.	C. B. & Q.	Automatic Crossing Signal.
Fairbury. (M. P. 152.6)	C.R.I.&P.	St. J. & G. I.	
Fairbury. (M. P. 154.3)	C.R.I.&P.	St. J. & G. I.	Automatic Crossing Signal.
Belvidere. (M. P. 176.8)	C. B. & Q.	St. J. & G. I.	Automatic Crossing Signal.
Davenport. (M. P. 191.1)	C. & N. W.	St. J. & G. I.	Automatic Crossing Signal.
Edgar. (M. P. 200.4)	C. B. & Q.	St. J. & G. I.	Automatic Crossing Signal.
Hastings. (M. P. 226.4)	C. & N. W.	St. J. & G. I.	Automatic Crossing Signal.
Hastings. (M. P. 227.2)	C. B. & Q.	C. B. & Q.	Interlocking Plant.
Belt Line Crossing. (M. P. 249.5)	Belt Line.	St. J. & G. I.	Semaphore and Gate.
Hund. (M. P. 5.3)	A.T.&S.F.	U. P.	
Clay Center. (M. P. 147.4)	C.R.I.&P.	U. P.	Automatic Crossing Signal.
Garrison Crossing. (M. P. 172.9)	Manhattan and L. W. Branches.	Manhattan Branch.	
Irving. (M. P. 152.7)	Mo. Pac.	Mo. Pac.	All trains must send a flagman ahead and not proceed until crossing is known to be clear.
Stone Siding. (M. P. 113.1)	C. B. & Q.		Automatic Crossing Signal.
Beatrice. (M. P. 97.6)	C. B. & Q.	U. P.	
Beatrice. (M. P. 97.2)	C.R.I.&P.	U. P.	
Clay Center. (M. P. 33.3)	Junction City & L. W. Branches.	Junction City Branch.	
Clyde. (M. P. 54.7)	Mo. Pac.	Mo. Pac.	
Concordia. (M. P. 69.9)	C. B. & Q.	Southward C. B. & Q. trains have precedence over U. P. trains moving in either direction. U. P. trains moving in either direction have precedence over northward C. B. & Q. trains.	
Concordia.	A. T. & S. F. on Mo. Pac. transfer.	A. T. & S. F.	Gate.
Hollis. (M. P. 2.7)	C. B. & Q.	U. P. trains have precedence over eastward C. B. & Q. trains. Westward (south) C. B. & Q. trains have precedence over U. P. trains.	

98 (T). At Terminal Jct., eastward trains leaving Union Pacific No. 2 track are not required to stop at stop board, when the switches are properly set for them.

98 (U). When a train is stopped by a signal at a railroad crossing protected by automatic signals, if it can be seen that there is no conflicting train movement, a trainman must proceed to the crossing and operate the clock work time release located at the crossing.

If operation of the time release does not clear the signal, the trainman may signal his train to proceed over the crossing if there is no train approaching on the conflicting route. If a train or engine is standing between the home signals on the conflicting route, the proceed signal must not be given until after a thorough understanding has been had with the crew of the train or engine on the conflicting route.

99 (R). When a train order is received reading, "All eastward (or westward) extra trains wait at.....until.....," the train addressed is relieved from protecting its rear end against following extra trains until the time named in the order.

On Kansas Division, use of this train order is authorized only as follows:

On St. Joseph Subdivision, between St. Joseph and Home;
 On Grand Island Subdivision, between Hastings and Grand Island;
 On Manhattan Branch, between Manhattan and Marysville;
 On Leavenworth Branch; On McPherson Branch;
 On Junction City Branch; On Plainville Branch;
 On Belleville Branch; On Highland Branch;
 On Solomon Branch; On Leavenworth Western Branch.

101 (F). Trains must not pass over broken rails on curve until joint bars have been placed on both sides of the rail and securely fastened. In case of square break on tangent track, trains may proceed at slow speed after stopping at least 200 feet from the break.

101 (G). When a train encounters any dangerous defect in roadway or track, or is stopped by a block signal under circumstances which would indicate a defect in track or signal apparatus (see Rules 101, 101 (A), 509, 510, and 808), the fact must be reported to the train dispatcher from the first point of communication, telephone booth, or telegraph office, except that permissive block signals in horizontal position will be reported at first stop, or open telegraph office, or summit of grade, if no previous opportunity for reporting.

D-102 (A). If a train is parted or is doubling from any cause and the front portion passes any switch of a cross-over, siding or other route via which it would be possible for another train or engine to enter, it must not move against the current of traffic in returning to the rear portion, unless a flagman is protecting the return movement at any and all such switches, or unless the return movement has been authorized and protected by train dispatcher.

103 (A). Cars must not be handled ahead of engine between stations, except as follows:

When necessary to take cars to or from a spur;
 On work trains;
 Between St. Joseph and Elwood;
 Between Stout and Highland.

When this is done, it must be for no greater distance than necessary and the movement must be at slow speed, with air brakes cut in and operative on cars ahead of the engine.

In switching with an engine equipped with footboards, when there are no cars ahead of the engine, a yardman or trainman (and not more than one) must ride on leading footboard of engine in direction the engine is moving, on either yard or main tracks, except as follows:

When the switches to be passed over can be plainly seen to be properly lined;
 Where the movement is over a crossing protected by a crossing watchman on duty. See Rule 802 (A);
 At Kansas City, continuous main track movements between State Line and Ice House;
 At Junction City, main track movements, except over highway crossing west of freight station;
 At Salina, all movements in train yard between Santa Fe and Ohio Streets;
 At Ellis, all main track movements except over street crossings east and west of passenger station.

Employees are prohibited from riding on engines or cars as follows:

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103 (A). Continued.

On engine footboard between engine and cars when cars are being pushed or pulled, except when necessary to make cut between engine and first car;
 On leading footboard while coupling engine to cars;
 On engine pilots;
 On deadwood, drawbars, brake beams, journal boxes, or brake wheels;
 On end of cars containing loads which may shift.

103 (B). Engines must not be run under any coal mine tipple, nor over hoppers at coal chutes. Air must be working on all cars when putting up coal and before starting up incline leading to beet trestles at sugar factories.

103 (C). A trainman, when one available, must ride rear of tank of a road engine backing up without cars while switching at stations or moving in yards.

104 (F). Spring switches are indicated by a letter "S" on switch target, and trains moving against the current of traffic must stop and examine switch points before passing over them.

After a train or engine has started through a spring switch, the switch must be set **by hand for tracks over which movement is being made** before a reverse movement is made, or before backing to take up slack.

104 (G). Roadway machines, such as ditchers, pile drivers, rail loaders, bridge derricks and the like, must not be dropped, either alone or with other cars, but must be shoved to a stop.

Cars of any kind must not be "poled" or "staked" by yard or road crews.

104 (H). Relative to Transportation Department Rule 104 (A) and Maintenance of Way Department Rule 104 (E), on all cross-overs between a main track and any other track, both switches must be equipped with switch locks and they must be locked while trains are passing over them and must be left locked after they have been used.

104 (R). Switches will be set normally,

At Terminal Jct., for Kansas City Terminal High Line track;
 At C. R. I. & P. Jct., for Union Pacific tracks;
 At Monoken, the switch leading from Topeka Subdivision to the passing track in west end of yard will be set for Topeka Subdivision main track;
 At Stout, west passing track switch, for Highland;
 At Lawrenceburg, switch at east leg of wye, for Concordia.

152 (C). Snow plows must not be operated through drifts when trains are seen approaching or are passing on an adjacent track. Flangers must be raised when passing over bridges, highway crossings, railroad crossings, frogs and switches, and through interlocking limits.

152 (R). THE SPEED SHOWN BELOW MUST NOT BE EXCEEDED:

(The speed shown under heading of "Psgr." includes mail and express trains, and under heading of "Frt." includes mixed trains and light engines with or without caboose. Freight engines used in passenger service on branches, must not exceed the speed specified for those engines in freight service.)

Location	Maximum Speed Miles Per Hour		Remarks
	Psg.	Frt.	
At any point.	40	25	Passing coaling stations.
At any point.		35	Trains handling any gravel loaded in Hart Convertible (wooden) cars, when total gravel does not exceed 50% of tonnage.
At any point.		30	On any train when more than 50% of the tonnage is gravel.
At any point.	30	30	Trains handling system or foreign scale test cars.
At any point.	20	20	Engines backing up with or without cars.
At any point.	5	5	On tracks laid with rail weighing less than 60 pounds per yard.

152 (R). Continued.

Location	Maximum Speed Miles Per Hour		Remarks
	Psg.	Frt.	
Within yard limits.	40	25	Speed must be as much slower as conditions may require.
Within yard limits.	25	25	Mixed trains with or without freight equipment.
Railroad crossings where governed by automatic crossing signals.	30	30	From the point where the governing home signal can be seen to indicate proceed, until the engine is over the crossing.
Over spring switches.	15	15	When using turnouts.
Over spring switches.	20	20	When not using turnouts, but where switch points will be caused to oscillate under such movement.
Over spring switches.	20	20	When not using turnout, but when movement is over facing point switch.
On wye tracks and sidings.	15	15	Speed must be as much slower as rules or conditions may require.
When using cross-overs or turnouts.	6	6	With Mikado, Mallet type, 5000, and 9000 class engines.
Eastern Subdivision.			
At any point.	70	45	Mixed trains with no freight equipment. Mixed trains with freight equipment. With freight engines. Light engines. Over A. T. & S. F. Crossing. Westward trains over Quincy Street Crossing. Eastward trains over Quincy Street Crossing. Over Kansas Avenue Crossing. In Material Yard. Nos. 21, 103 and 104 within city limits. Within city limits. Over and between Ash and Vine Streets. Over Sixth Street Crossing.
At any point.	70	50	
At any point.	45	50	
At any point.	45	45	
Bonner Springs.	30	30	
Topeka.	5	5	
Topeka.	12	12	
Topeka.	12	12	
Topeka.	5	5	
Rossville.	35	20	
St. Mary.	20	20	
Wamego.	35	15	
Junction City.	15	15	
On curves as follows:			
Between mile posts—			
	36.53 and 36.87	50	35
	123.12 and 123.46	30	25
	124.74 and 125.24	50	35
	133.68 and 137.17	40	25
Western Subdivision.			
At any point.	70	45	Mixed trains with no freight equipment. Mixed trains with freight equipment. With freight engines. Light engines. Over A. T. & S. F. Crossing. Within city limits.
At any point.	70	50	
At any point.	45	50	
At any point.	45	45	
Enterprise Spur.	10	10	
Salina.	30	30	
Between Salina and Ellis.		40	
Victoria.	35	35	

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Location	Maximum Speed Miles Per Hour		Remarks
	Psg.	Fr.	
Western Subdivision. On curves as follows: Between mile posts—			
143.60 and 145.22	40	30	
167.86 and 168.23	50	35	
208.36 and 208.61	50	35	
210.02 and 216.00	35	25	
221.89 and 222.39	35	25	
230.57 and 232.77	40	25	
234.95 and 235.64	40	25	
236.74 and 237.76	50	35	
238.91 and 239.46	50	35	
247.23 and 247.36	50	35	
249.48 and 250.01	50	35	
295.77 and 295.95	35	25	
297.51 and 297.70	50	35	
Solomon Branch. At any point.	25	25	
At any point.	35		With motor trains.
McPherson Branch. At any point.	25	25	
At any point.	35		With motor trains.
At Salina.	10	10	Between Prescott St. and Union Station.
Plainville Branch. Between—			
Salina and M. P. 27.	25	25	
M. P. 27 and Plainville.	30	30	With 400 class engines.
M. P. 27 and Plainville.	25	25	With engines heavier than 400 class.
Plainville and M. P. 137.	25	20	
M. P. 137 and M. P. 153.	25	25	
M. P. 153 and Colby.	25	20	
Colby and Oakley.	25	25	
Salina and Plainville.	40		With motor trains.
M. P. 103 and 108.	45		With motor trains.
M. P. 108 and 137.	40		With motor trains.
M. P. 137 and 153.	45		With motor trains.
M. P. 153 and Colby.	40		With motor trains.
Colby and Oakley.	45		With motor trains.
Topeka Subdivision. At any point.	60	45	
At any point.	45		With freight engines.
At any point.	35	35	Light engines.
Upland.	25	25	Through junction switch.
St. Joseph Subdivision. At any point.	50	40	
At any point.	40		With freight engines.
At any point.	35	35	Light engines.
Upland.	25	25	Through junction switch.
On curves as follows: Between mile posts—			
4.9 and 5.2 53.9 and 56.2	35	25	
8.6 and 14.8 57.9 and 58.4	35	25	
17.8 and 25.2 66.8 and 67.2	35	25	
40.8 and 41.8 73.6 and 75.2	35	25	
44.2 and 44.5 82.1 and 82.3	35	25	
48.3 and 48.6 101.1 and 101.3	35	25	

Location	Maximum Speed Miles Per Hour		Remarks
	Psg.	Fr.	
Grand Island Subdivision. At any point.	60	45	
At any point.	45		With freight engines.
At any point.	35	35	Light engines.
East of Steele City.	25	25	Between slow boards.
Between Hastings and Grand Island.	35	30	
Between Hastings and Grand Island.	40		With motor trains.
Highland Branch. At any point.	20	20	
At any point.	15	15	Engines backing up on straight track.
At any point.	10	10	Engines backing up on curves.
Manhattan Branch. At any point.	50	40	
At any point.	40		With freight engines.
At any point.	35	35	Light engines.
Between Manhattan and Marysville.	35	35	
Between Manhattan and Marysville.	40		With motor trains.
On curves as follows: Between mile posts—			
100.1 and 100.5	35	25	
102.0 and 106.3 110.3 and 111.2	40	30	
107.2 and 107.6 111.4 and 111.6	35	25	
112.5 and 112.6 118.8 and 120.0	40	30	
121.1 and 122.1 128.7 and 129.2	35	25	
132.8 and 133.0 137.0 and 137.4	35	25	
162.2 and 162.4 179.4 and 179.9	35	25	
Leavenworth Western Branch. At any point.	35	25	
Near mile post 4.0.	10	10	Between slow boards.
On curves as follows: Between mile posts—			
1.1 and 5.4 77.4 and 79.3	25	20	
8.2 and 21.0 81.0 and 101.9	25	20	
24.0 and 24.3 103.7 and 107.7	25	20	
25.3 and 25.5 109.0 and 110.0	25	20	
26.5 and 26.9 111.9 and 113.3	25	20	
30.6 and 31.8 116.0 and 117.7	25	20	
33.2 and 36.0 120.6 and 120.9	25	20	
40.3 and 40.9 121.9 and 123.5	25	20	
50.0 and 50.2 126.2 and 131.6	25	20	
52.5 and 53.2 135.9 and 137.1	25	20	
55.1 and 55.9 138.0 and 140.3	25	20	
62.2 and 62.6 142.4 and 142.6	25	20	
65.0 and 70.9 146.6 and 147.9	25	20	
72.1 and 72.3 156.4 and 156.7	25	20	
73.7 and 73.8 160.6 and 163.4	25	20	
74.7 and 74.9 165.5 and 165.7	25	20	
76.1 and 76.3	25	20	
Junction City Branch. At any point.	35	35	
At any point.	40		With motor trains.
Near mile post 19.5.	10	10	Between slow boards.
Clay Center.	5	5	Between slow boards located 50 feet each side of Court St.

Location	Maximum Speed Miles Per Hour		Remarks
	Pggr.	Frnt.	
Junction City Branch. On curves as follows: Between mile posts—			
7.37 and 8.04 10.52 and 10.57	35	25	
12.44 and 12.92 15.62 and 15.71	35	25	
19.68 and 19.85 25.49 and 25.82	35	25	
59.82 and 60.09 61.80 and 62.32	30	25	
Belleville Branch. At any point.	35	35	With motor trains.
At any point.	40		
Leavenworth Branch. At any point.	30	30	With motor trains.
At any point.	35		
Over Bridge 16.90.	10	10	
No. 101 will reduce speed to 10 miles an hour passing station platform at Kanopolis and Russell to discharge U. S. Mail.			

509 (E). Relative to Rule 509 (B), except in yard limits, flagman must be sent ahead at night, even though the next signal in advance is in plain view and the track can be seen to be clear.

509 (F). When a train is stopped by a block signal, on double track when ready to proceed as per Rule 509 (C) and on single track when the flagman is not to be sent ahead as per Rule 509 (B), two long sounds of the engine whistle (14b) must be given before the train proceeds.

509 (G). On single track, when a light engine, or a motor train with only one trainman, is stopped by a block signal under conditions making it necessary to send a flagman ahead to comply with Rule 509 (A) or 509 (E), after placing one torpedo one-fourth mile from rear of train, it may proceed at slow speed, not exceeding six miles an hour, expecting to find a train in the block, broken rail, obstruction, or switch not properly set, without sending a flagman ahead.

509 (H). When a train is stopped by a block signal at a meeting or passing point on single track under conditions making it necessary to send a flagman ahead to comply with Rules 509 (A) or 509 (E), if the engineman of the train which is stopped is verbally informed by a trainman of the train on the siding that his train has more cars than the siding will hold, the train which is to use the main track may proceed at slow speed not exceeding six miles an hour to next signal, expecting to find a train in the block, broken rail, obstruction, or switch not properly set, without sending a flagman ahead.

509 (R). When Home Block Signal 667 at Soldier Creek is at "stop" position, trains must be governed by single track Rules 509, 509 (A), and 509 (B).

509 (T). At Menoken, on block signal 06 located at west end of passing track, there are two signals on the same post.

The upper signal governs eastward movements from Topeka Subdivision through the passing track. By day and by night, it displays a red, yellow, or green light, and the indication of these lights is as follows:

Color	Indication
Red.	Passing track is occupied, or, must not be used.
Yellow.	Passing track may be used to the dwarf signal near east end of passing track.
Green.	Passing track may be used, and the east switch is lined for Eastern Subdivision main track.

The lower signal is a two-color light signal, and if the route is clear, it will display a yellow light when the switches at west end of passing track are lined for crossover movement from Topeka Subdivision to Eastern Subdivision main track.

Eastward trains on Eastern Subdivision must not use passing track without permission from the train dispatcher.

A color light dwarf signal is located between the main track and passing track at east end, and if this signal indicates "stop" after the switches have been lined for eastward movement from passing track to Eastern Subdivision main track, that move-

ment must be governed by Rules 509, 509 (A), and 509 (B).

A color light head-in signal, which governs westward trains entering the passing track is located on Eastern Subdivision home block signal No. 717 at the east switch.

The operator will handle switches at east end for trains to enter or leave the passing track at that point.

D-511 (R). Before a train may come out from a siding onto a main track through a spring switch, two torpedoes must be placed at least one-half mile from this switch in the direction from which trains may approach. Trains governed by this rule need not comply with Rule D-511.

D-511 (T). Where color light dwarf signals have been installed in connection with spring switches, the following will govern movements from siding to main track, by day or by night:

When a red light is displayed, a train or engine on siding must stop for it, and may then move from siding to main track, after complying with Rules 511 (B) and D-511 (R), and without complying with Rule D-511.

When a yellow light is displayed, a train or engine may move from siding to main track without complying with Rules D-511 and D-511 (R).

If the light is not burning, trains and engines must stop and be governed by Rules 509 (C) and D-511 (R).

D-511 (U). Color light dwarf signals, see Rule D-511 (T), are located as follows:

Location	Governing
Lawrence, east end of center siding.	Trains moving from center siding to eastward main track.
Lawrence, west end of center siding.	Trains moving from center siding to westward main track.
Perry, east end of center siding.	Trains moving from center siding to eastward main track.
Perry, west end of center siding.	Trains moving from center siding to westward main track.
Grantville, east end of center siding.	Trains moving from center siding to eastward main track.
Grantville, west end of center siding.	Trains moving from center siding to westward main track.

525. If a Home Block Signal fails to indicate "stop" or a Distant Block Signal fails to indicate "caution" when a block is entered, a member of the crew must be left at the signal; the train dispatcher must be notified from the first available point of communication and report must be sent to the superintendent by wire. The employe left at the signal must stop and notify all trains moving in the direction governed by that signal and must remain there until relieved by an employe of the Signal Department or by instructions from the proper officer.

525 (A). If a Home Block Signal fails to indicate "stop", or a Distant Block Signal fails to indicate "caution", when a light engine, or a motor train with only one trainman, enters a block, the train dispatcher must be notified from the first available point of communication, and report must be sent to the superintendent by wire.

526 (A). By day or by night, if the light is not burning on a color light block signal, trains and engines must stop and be governed by Rules 509 (A), 509 (B), and 509 (E), on single track, and by Rule 509 (C) on double track.

674 (R). To indicate the route to be used through interlocking plants, the following engine and motor whistle signals will be used: (The signals prescribed are illustrated by "o" for short sounds; "—" for longer sounds.)

At Bonner Springs—over A. T. & S. F. Crossing:	
For switch for eastward trains to enter siding,	— o
At Topeka—over A. T. & S. F. Crossing:	
For main track switch to east yard and rip track,	— o —
For Rock Island—Curtis Street connection,	o o — o
For Golden Belt Elevator tracks,	— o o —
For Santa Fe interchange tracks,	— o — o
For cross-over, 700 feet east of crossing,	— o —
At St. Joseph—over Missouri River Bridge:	
For St. J. & G. I.,	— o —
For C. R. I. & P.,	— o —
For Union Terminal,	o — o

674 (R). Continued.

At Hiawatha—M. P. 42.1:

For main track, —

For diverging track, — o

At Hastings—M. P. 227.2:

For main track, —

For diverging track, — o

703 (A) Each employe governed by Hours of Service Law must notify superior officer of the time the law requires him to be off duty early enough that he may be relieved, if necessary, before exceeding the hours of service permitted by law.

703 (B). Train, yard, and engine men (except regular assigned passenger engine men) must register on book provided for that purpose, on arrival at home terminal at completion of each trip or day's work, their accumulated mileage, or hours, including arbitrarians and overtime, for the current month, including all mileage or hours to date and any over-run from the previous month.

713 (A). A member of the crew must be stationed on the rear end in position to give or receive necessary signals when meeting trains on double track or when meeting trains on sidings. At stations where there is a depot, to be on the rear end when passing depot and at blind sidings to be on rear end when passing station board, except that when the train has an observation or special car, he must be on front platform of the rear car or on platform of the car next ahead. On passenger trains, the vestibule door must be open so that hot boxes or other defects may be detected.

714 (B). The use of alcohol or oil lamps or other heating devices not a part of car equipment, by passengers or employes in passenger train cars, is strictly prohibited under all circumstances.

720 (A). Stockmen must be given an opportunity to board cabooses without necessity of doing so while trains are in motion.

720 (B). When practicable, outfit cars should be moved on local or mixed trains, and women or children occupants thereof should ride in the place provided for passengers on those trains. When it is necessary to move occupied outfit cars on through freight trains, if there are women or children with those cars whom it is not practicable to move in any other way, they may remain in the outfit cars during such movement when requested by foreman and authorized by the superintendent.

720 (R). Passengers may be carried on freight trains between stations at which the trains stop, as follows:

Persons in charge of live stock or other freight when provided with proper transportation.

Employes with annual pass or with trip pass so endorsed.

Passengers with revenue tickets when presented for passage on:

Trains

Between Stations

Freight, except those consisting mostly of stock —In Kansas (See last paragraph hereof).

Passengers must not be loaded on freight trains until work is completed and train ready to leave.

Agents and conductors must notify passengers that local freight or mixed trains will stop with caboose opposite platform for them to get on or off.

Within the State of Kansas, on freight trains, passengers under 15 years of age must be accompanied by parent, guardian, or other competent person.

722 (A). Dead engines, disabled engines, or engines with one or more rods taken down must not be hauled in fast freight trains when it is possible to avoid it.

With side rods or main rods down a speed of fifteen miles an hour must not be exceeded.

With side rods and main rods in place the maximum speed may be increased to twenty-five miles an hour unless otherwise restricted.

724 (A). When it is necessary to cross a track when going between their homes and places of employment, or in going from one point to another at stations, employes must use regular street crossings or established foot crossings.

They must keep a sharp lookout for engines or cars when using such crossings and the crossing of tracks at any other point is prohibited.

802 (A). When one or more cars are being switched or pushed over a road crossing not protected by a watchman or employe assigned as such, or, when a road engine, with or without cars, is backing over such a crossing at a station, a member of the crew must precede the movement and act as crossing watchman, and he must not get on front end of the leading car or on rear of tank until it has passed over the crossing.

When a train is parted to clear a public crossing, or is standing near such crossing,

a trainman must act as crossing watchman when a train or engine is approaching on a siding or main track.

When a crossing watchman is on duty, trainmen must not give signal for highway traffic to come ahead.

802 (R). On Manhattan Branch track at Manhattan, trains and engines must not exceed a speed of 3 miles an hour over Poyntz Avenue, and a trainman must act as crossing watchman before any movement is made over this crossing.

On Leavenworth Western Branch, all trains must stop, and a man must be sent ahead to act as crossing watchman, before passing over highway crossing at M. P. 27.99, unless it is known that the crossing signal is working.

802 (W). Westward trains will be governed by the following when taking water at Lawrence:

With more than 65 cars, the train must be stopped east of Seventh Street, and the engine, or engines, go to the water crane with no cars.

With less than 65 cars, stop need not be made at Seventh Street, but the train must be separated so as to clear both Seventh and Third Streets.

If a fire department truck approaches while water is being taken by the second engine of a double header, the leading engine must be cut off to clear Second Street.

803 (A). Before occupied outfit cars or drover cars are coupled into, the occupants must be notified. When such occupied cars are being switched, either in yards or on road, the air must be coupled through.

803 (B). Before placing cars at coal chutes, the engine foreman or conductor must consult with the coal chute foreman or employe in charge, and it must be known positively that there are no men about the cars where they might be injured, before permitting any move to be made.

805 (A). Cars must not be left on, nor foul of, what are known as "Lead Tracks" in the various yards when it can be avoided. When it is necessary to do so, the yardmaster, agent, or operator, must be immediately advised and he will notify trains entering or leaving the yard. This does not relieve trainmen, yardmen, or enginemen, from proper observance of yard rules, and they will be held strictly accountable for yard accidents on lead tracks, as well as on any other track in yard, whether such notice is received or not.

807 (A). When a train is delayed, trains following must be allowed to pass as promptly as possible, and the conductor and engineer of the delayed train will be held jointly responsible for delay resulting from failure to comply with these instructions.

820 (R). Allowance for empty and underloaded cars as indicated below must be reported as required by Instruction 24 on Form 1216, "Conductor's Car and Tonnage Report".

	For each empty or loaded car weighing less than 40,000 lbs. (including light weight of car).	For each empty or loaded car weighing between 40,000 and 50,000 pounds (including light weight of car).
Between Brookville and Ellsworth.	3000 lbs.	
Between Lawrence and Leavenworth.	3000 "	
Between all stations except those shown above.	6000 "	3000 lbs.

824 (B). Trains setting out cars account hot box will remove packing from box which was running hot. Brasses and oil soaked waste removed from cars on road must be retained and exchanged for new, leaving old waste in bucket, and brasses on caboose platform.

824 (C). When necessary to remove keys from brake heads, or when working on brake rigging, cut-out cock in branch pipe must be closed and reservoirs bled. Where cut-out cock is located in cylinder pipe, the latter only need be closed. All keys must be replaced before brakes are cut in, to avoid personal injury.

824 (D). Conductors must report by wire to superintendent and trainmaster, from first open telegraph office where train stops, cases of brakes sticking, giving car numbers and initials.

824 (R). In addition to making inspection of train as often as practicable as per Rule 824, every freight train must stop and must be inspected at the following points:

- Ellsworth —Eastward and westward;
- Dorrance —Eastward and westward;
- Hiawatha —Eastward and westward;
- Seneca —Eastward and westward;
- Carleton —Eastward and westward.

826 (A). When employes, passengers, or others are injured, call the nearest railroad surgeon. If the persons injured are not employes, they should be sent to their homes or placed in charge of local relief authorities, after immediate necessary attention has been given by the railroad surgeon.

When necessary to call surgeons, other than those regularly employed by the railroad, it should be with the distinct understanding that their services will not be required after arrival of the railroad surgeon.

835 (A). Passengers in coaches or chair cars are permitted to place packages, traveling bags, etc., in the racks provided for that purpose when they can be safely carried there, but when not, they must be placed on floor, but not in aisle of car where they might cause someone to fall. The reason for this requirement must be explained to the owner.

837 (A). Gate at front end of first coach next to baggage or mail cars must be closed at all times in order to prevent possibility of personal injury to passengers, account buffers between these two cars not being protected by curtains.

When occupied passenger equipment is being switched, or while standing uncoupled, open ends of cars must be protected by closed gates. Also, rear gate must be closed on moving trains.

847 (A). When passenger train cannot be properly heated, wire report thereof must be made to superintendent.

During snow storm or extremely cold weather, engine must not be detached from passenger train if it can be avoided; if it becomes necessary to do so, or if train is separated for any reason, trainmen and enginemen must exercise care, drain steam line and disconnect steam hose between cars, if necessary, to prevent freezing.

Engine or detached portions of train must be recoupled and steam line again connected as quickly as possible to avoid discomfort to passengers.

847 (B). As a precaution against personal injuries to passengers, trainmen will use the words "Please Watch Your Step", when passengers are boarding or alighting from train.

847 (C). When engines equipped with track sprinklers are used on trains carrying passengers, sprinklers are to be operated day or night when speed of train is in excess of 20 miles an hour, over and approximately 100 feet on each side of open road crossings at grade, entering and leaving station grounds, at known dusty locations, passing trains on adjacent tracks, and as indicated by sprinkler signs.

Sprinklers must not be operated when passing depots if there are any persons on the station platform, and are not to be operated on station platforms when train is making a station stop.

Enginemen must handle in such a way as to result in comfortable condition to passengers on observation platform.

849 (A). Trainmen must use every effort to keep unauthorized persons off their trains, and when unable to do so peaceably, chief dispatcher must be notified by wire so that officers may be called to assist.

865 (A). Trainmen, enginemen, yardmen, agents, and other employes who in any way handle or care for explosives and other dangerous articles must familiarize themselves with the regulations and instructions governing the handling of them.

Conductors must notify enginemen of the presence and location in the train of cars containing explosives and of loaded placarded tank cars before leaving the initial station or station where such cars are picked up.

Between points where separate trains are operated for freight service only, cars containing explosives must not be handled in a train that carries passengers. (BE 676).

Between points where only mixed train service is operated, or where passengers are carried in the caboose of a freight train, a car containing a freight shipment of explosives, or a tank car placarded "Inflammable" may (unless otherwise instructed) be hauled, but such cars must not be placed next to a car carrying passengers. (BE 676).

Cars placarded "Explosives" must be placed in through freight trains near the middle of the train and must be not nearer than the 16th car from the engine, electric locomotive, or motor car, nor the 11th car from the caboose, or other cars carrying passengers, if the length of the train will permit. (BE 677-a).

Cars placarded "Explosives" may be placed in local freight, local pick-up, and local set-out trains not nearer than the second car from the engine, electric locomotive, motor car, caboose or other cars carrying passengers, when placing them near the middle of the train would require additional switching at way stations. (BE 677-b).

Cars placarded "Explosives" must have hand and air brakes in service and must not be placed next to cars placarded "Inflammable" or "Corrosive Liquid", nor next to empty or loaded tank cars, wooden frame flat or gondola cars, nor next to carloads of pipe, lumber, poles, iron, steel, or similar articles liable to shift and break through

end of placarded car; nor next to cars containing lighted heaters, stoves or lanterns, or occupied by attendants. (BE 676-677c-677d).

Placarded tank cars must not be placed in trains next to cars placarded "Explosives" nor next to cars containing lighted heaters, stoves or lanterns, nor next to gondola or flat cars with lading such as logs, lumber, rails or pipe that is likely to shift, and when practicable must be placed not nearer than the sixth car from the engine, electric locomotives, motor car, caboose, or other cars carrying passengers. (BE 677-e).

Empty tank cars must not be moved from stations unless dome cover and all outlet caps have been replaced and wrenched tight, shipping tags and cards removed from car, and "Inflammable" placards removed or replaced by "Dangerous Empty" placards.

When placards become detached in transit, conductor must see that they are replaced upon arrival at the next terminal, if in through trains, or at first station stop if in local freight trains. (BE 675).

BE numbers shown above refer to correspondingly numbered regulations of the Bureau of Explosives, Interstate Commerce Commission.

865 (B). Cars designated below must be handled in rear of train, and next to caboose in the order named:

Drover cars, occupied or unoccupied;

Scale test cars;

Cars with emergency drawbars;

Outfit cars;

Emigrant movables (except steel underframe cars may be placed near head end when so requested by attendant in charge);

All wooden underframe cars;

Any car tagged with Form 4725 reading, "Handle only at rear end of train".

Trains containing drover cars must not be pushed by an engine at the rear. If it becomes necessary, in an emergency, to clear main track by use of an engine at rear of the train, the drover cars must first be vacated.

When a helper engine is used, it must be cut in ahead of drover cars. (See Special Rule 865-C.)

Switching must not be done with drover cars, except in handling to or from trains.

Live stock must be handled in head end of train when practicable, and stock cars loaded with scrap, boards, engine wood, long rods, bolts, or any commodity which might work out of openings in sides or ends of car, must not be moved until these openings are properly slatted.

Freight cars with bad order drawbars may be handled in trains under the following conditions:

(a) When not containing live stock or perishables, may be chained up in train and handled to first available side track where must be set out to be repaired;

(b) When containing live stock or perishables, may be chained up in train and handled to first repair point;

(c) When containing any commodity or empty, may be handled behind the caboose to destination or to first terminal, provided the good drawbar can be coupled to the caboose and in addition is secured by chain, and has air and hand brakes operative. On ascending grades, a trainman must ride the car.

A red flag by day or a red light by night must be displayed on the rear of any car handled behind caboose.

865 (C). When not used on head end of train, helper engine must be cut in ahead of caboose, and when there are wooden underframe cars or drover cars on the rear end, the helper engine must be cut in ahead of them.

865 (T). Instructions contained in Rule 865 (B) are modified to permit handling of wooden underframe cars under load in proper block in trains designated as "KO" and "AKO".

877 (A). Employes must not go out on exterior of cab of, nor hang out from gangway or steps of, a moving engine for any purpose. When this is necessary, the engine must be stopped.

881 (A). When engines under steam are standing, whether coupled to other equipment or not, the engineman must personally see that the throttle is closed and latched, cylinder cocks opened and reverse lever latched in center notch; and that straight air is applied on engines so equipped.

882 (A). The engineman or fireman must not move the engine or any part of its machinery, unless he knows that it can be done without injury to anyone.

882 (B). Due to the extremely high temperatures developed in cylinders, superheated engines cannot be drifted with tightly closed throttle without serious damage to lubrication, cylinder packing, rod packing, building up carbon deposits, and ser-

Continued on page 10.

882 (B). Continued.

iously injuring the service of the engine. It is therefore necessary to keep a certain amount of steam in the cylinders of superheated engines while they are moving.

The following rules must be observed on all superheated engines:

On all drifting grades the main throttle of all engines must be partly opened or cracked a sufficient amount to prevent a vacuum in the cylinders. Mallet engines when descending heavy grades may be drifted with closed throttle after moving a sufficient distance with the drifting throttle to permit cylinders to cool below the flash point of the oil.

In approaching a stop, a small amount of steam should also be worked through the cylinders. The throttle should never be entirely closed but the pressure gradually reduced with the throttle until freight engines are down to approximately 4 miles an hour when throttle should be closed. On engines in passenger train service, the throttle may be closed approximately one train length before the stop when this is necessary in order to make a satisfactory stop. However, it is permissible when conditions are favorable, such as working slowly to a stop up heavy grades, to work steam to an entire stop.

While drifting, the reverse lever should be in the highest cut-off consistent with proper cushioning of the moving parts.

On engines approaching or stopping at passenger stations and working a light throttle, the reverse lever should be moved towards the corner sufficiently so that the engine will drift smoothly and without pounding in the rods and boxes; the drifting pressure can be controlled in this way with the reverse lever as well as with throttle. These rules do not apply to emergency stops.

Mallet engines must not be cut into simple except to assist in starting train.

883 (A). Blow-off cocks must not be opened on either side of engine at any point where liable to cause personal injury or damage to property.

883 (B). Enginemen operating 3-cylinder locomotives must use special care to see that cylinder cocks are opened and cylinders thoroughly drained when starting out at terminals or at other times when engine is cold; must also exercise special caution in preventing high water in boilers which carries over into cylinders. Much damage has been done to 3-cylinder engines by neglecting these precautions. Enginemen must know positively that dope cups and oil cavities on inside main rod are properly filled and lubricating.

884 (A). Enginemen going on duty must know that the stoker lubricators and oil cups are filled and feeding, and that stokers are operating properly. First slide over conveyor may be opened before engine leaves ash pit and stoker should be operated sufficiently to know that it will run properly.

When standing on sidings or drifting on long grades, stoker engines and jets must be shut off and engine hand-fired except when coal is out of reach of fireman or when necessary to comply with safety instructions.

All except the first slide over conveyor trough must be closed while taking coal and descending designated grades. All slides must be closed when approaching terminals where engine is to be removed from train, and elevator screw must be emptied of coal before necessity for firing ends, except where tank is full of coal and it is almost impossible to close first slide. Steam to stoker lubricator must be shut off in time for lubricator to cool at points where it is to be filled. Stoker valve at steam turret, coal control lever, and crusher cover must be closed when leaving engine.

Report must be made if stoker or steam jets use an excessive amount of steam, or when there are defects in connection with the conveyor trough and slides.

886 (A). Conductors must report promptly by wire to the proper officer, all cases of rough handling of trains in their charge between terminals, also all rough handling of trains by road or yard engines at terminals that may come to their attention, and all cases of excessive whistling or other noise made by trains going by or around passenger trains, or at passenger stations.

When a passenger train is roughly handled, the conductor must call the engineman's attention to the fact at the first stop and explain to him just what occurred.

Conductor will be held responsible for failure to make report of any improper handling of the train.

886 (B). Enginemen on passenger and freight trains, when making maximum speed, must make application of air brakes approaching curves and on heavy curves keep brakes applied sufficient length of time around curve to steady train.

887 (R). On passenger trains, air test as required by Air Brake Rules 1051 and 1051 (A) must be made at the following points:

- M. P. 210.5 Western Subdivision—Westward;
- M. P. 216.75 Western Subdivision—Eastward;

M. P. 74.5 Plainville Branch—Eastward and westward.

On freight trains, when angle cock has been turned or hose separated, air test as required by Air Brake Rule 1044 (A) must be made at the following points:

- Brookville —Westward;
- Arcola —Eastward and westward;
- Terra Cotta —Eastward and westward;
- Hill Spur —Eastward and westward;
- Carneiro —Eastward and westward;
- Mount Zion —Eastward and Westward;
- Kanopolis —Eastward;
- Waldo —Westward;
- Paradise —Eastward.

When helper engine is picked up or cut off at Hanover or Bremen, air test must be made as required by Air Brake Rule 1041.

888 (A). While passing through cities, towns, and yards, there must be no failure to keep sharp lookout ahead on both sides of the engine. Firemen must do this in preference to other duties, except that they must keep the fire in such condition that there will be no loss of efficiency of the engine.

888 (B). Train and enginemen must not wash up or change clothes while on duty going into terminals. They must be ready to handle any emergency which might arise, and washing up and changing clothes must not be started until after the train has been tied up or they are relieved from duty.

889 (A). Rule 889 of the "Rules and Instructions of the Transportation Department" is changed as follows:

"See that engine is supplied with twelve torpedoes, not less than three red fuses and equipment for proper hand and train signals. While running at night, have in cab, where it cannot be seen by passing trains, a red light, and, in case of danger, signal approaching trains."

893 (A). On double track, whenever a train is stopped for any reason other than an ordinary stop made by the engineman, or when livestock, vehicles, or any other object has been struck by a train, it must be known that the opposite main track is not obstructed before permitting a train to pass on that track.

894 (A). Except in making emergency stop, when sand is used in anticipation of reducing speed or stopping, sand must be under entire train before setting the brakes. Sand must not be used over spring switches.

894 (B). Enginemen, before starting each trip, must inspect ashpans and when pans are found to be defective, must not leave a point where repairs can be made, without written authority from district foreman regardless of delay to any train.

Before leaving any point where ashpan doors have been opened, enginemen must know that they have been tightly closed and securely fastened.

When fire is observed falling from ashpans, report must be made by wire to superintendent and master mechanic from first open telegraph office where stop is made, and attention must be called to it on work report at end of run.

Enginemen on engines equipped with ashpan sprinklers must, except in freezing weather, use the sprinkler before starting trip, and each time after the grates are shaken or at any time when there are live coals in the ashpan. During freezing weather the use of ashpan sprinkler must be regulated by necessity in such manner as to avoid freezing up sprinkler or ashpan doors.

895 (A). Engines must not take coal while passenger trains are standing or passing on opposite track. Lumps of coal are liable to fall through windows of passenger cars, causing personal injury.

Enginemen must not move engines from coaling stations until they are sure that employes are off the tank.

896 (R). Engines, of any class, must not go on the following tracks:

- Muncie —Over bridge on sand spur;
- Sunflower —Track No. 6;
- Manhattan —Before using crossover just west of the Letts Melick Grocery Company it must be known that crossover is not blocked by persons unloading cars;
- Eureka Lake —Stock track;
- Kanopolis —East of buildings on Royal salt mine spurs;
- Ellsworth —Weber mill spur;
- Ellsworth —Old creamery spur;
- Yocemento —Spur tracks beyond the east face of the old Plant, and, on account of pieces of concrete falling, from the buildings, employes should not go near them.

Continued on page 11.

896 (R). Continued.

200 and 300 class and heavier engines must not go on the following tracks:
 Salina —Industry track between Second and Third Streets on Elm Street.

1900 class and heavier engines must not go on the following tracks:
 Sunflower —Any track, except lead track, at Lone Star Cement Company plant;
 Lawrence —River tracks;
 Wanego —Mill track spur;
 Manhattan —Ice plant spur;
 Manhattan —Perry Packing & Wholesale Company spur;
 Manhattan —Hollenbeck spur;
 Junction City —Hogan mill spur.

2200 class and heavier engines must not go on the following tracks:
 Topeka —Turnout on tracks Nos. 4, 5, 6 and 7, at material yard;
 St. Mary —College spur track;
 Manhattan —Crossover from No. 2 passing track to main track just east of Colorado Street;
 Salina —Rip track;
 Salina —No. 8 track;
 Salina —Old ice house track.

Union Pacific 2800 class and heavier, and Rock Island 2500 and 2600 class and heavier engines, must not go on the following tracks:
 Topeka —No. 1 track in east yard.

Union Pacific and Rock Island 5000 class and heavier engines must not go on the following tracks:

Fruitland —Between derails on business track;
 Topeka —South track at roundhouse;
 Topeka —Cinder pit track;
 Bavaria —House and elevator track;
 Brookville —Elevator track;
 Arcola —Business track;
 Carneiro —Stock track;
 Mt. Zion —Business track;
 Black Wolf —Stock and elevator track;
 Wilson —North elevator track;
 Bunker Hill —Stock track;
 Homer —Elevator track;
 Balta —Elevator track;
 Victoria —Stock track;
 Toulon —Elevator track;
 Hog Back —Elevator track;
 Ellis —Nos. 1, 2 and 3 tracks in old yard.

5000 class engines may use the following tracks, but, a speed of 5 miles an hour must not be exceeded:
 Ellis —Tracks 1 and 2, west of Washington Street crossing.

Engines permitted to use the following tracks, must not exceed a speed of 5 miles an hour:

Muncie —East of bridge on sand spur;
 St. Mary —College spur track;
 Manhattan —Consumers sand company spur;
 Solomon —Wye track;
 Wilson —North elevator track;
 Bunker Hill —Stock track;
 Victoria —Stock track;
 Ellis —Nos. 1, 2 and 3 tracks in old yard.

When necessary, 200 and 300 class engines may use the following tracks, but a speed of 5 miles an hour must not be exceeded:

Trenton —Elevator track;
 Shipton —Elevator track;
 Culver —House track;
 Tescott —House track;
 Beverly —House track;
 Shady Bend —Stock track;
 Lincoln Center —Elevator track;
 Sylvan Grove —House track;
 Lucas —Mill spur;

Paradise —House track;
 Natoma —House track;
 Plainville —Stock track.

5000 class engines must not go on the following tracks:
 Hanover —Stock track;
 Fairbury —City track;
 Davenport —C. & N. W. transfer.

9000 class engines must not go on the following tracks:
 Grove —Business track;
 Emmett —Business track;
 Onaga —Leavenworth Western Branch tracks, and turntable tracks;
 Duluth —West end of business track;
 Nolan —Business track;
 Sullivan —East end of business track;
 Frankfort —Missouri Pacific transfer;
 Winifred —Business track;
 Carden —Business track;
 Herkimer —House track;
 Bremen —East end of business track;
 Hanover —Business track, stockyards track, and all storage tracks;
 Spence —Business track;
 Hollenberg —Business track;
 Steele City —West end of business track;
 Endicott —Business track, house track, and storage tracks;
 Fairbury —Beer track, mill track, city track, alfalfa spur, city light spur, auto dock, and, between west stock track switch and stock chute on stock track;

Powell —Business track;
 Alexandria —Business track;
 Belvidere —Business track;
 Carleton —House track, coal chute track, coal storage track, and, between west stock track switch and stock chute on stock track;

Davenport —C. & N. W. transfer, and west end of business track;
 Sedan —Business track;
 Edgar —Business track, and city track;
 Fairfield —Freight house track, business track, and storage tracks, except that 9000 class engines may pick up stock from east end;

Anan —Business track;
 Glenvil —Business track;
 Level —Business track;
 Hastings —Uptown tracks, and storage tracks;
 Hull —Business track;
 Marietta —Business track;
 Oketo —All side tracks;
 Barneston —Business track, and passing track;
 Badger —All side tracks;
 Stone Siding —Hopper track;
 Blue Spgs. Jct. —Wye track, storage track, and business track;
 Blue Springs —Wye track, storage track, and business track;
 Holmesville —Business track, and storage track.

898 (A). Enginemen will give two long and two short sounds of engine or motor whistle when approaching a train which is stopped on opposite track on double track, and when approaching a train which is on a siding on single or double track. On double track special care must be taken to sound warning signals, and particularly when trains or engines are approaching highway crossings from opposite directions at the same time.

Work trains unloading ballast on double track, must stop when a train is passing on the opposite track.

899. Employes must inform themselves as to the location of all structures or obstructions where clearances are close, and must exercise care to avoid injury therefrom to themselves or others.

There are close clearances above and at the side of main tracks as shown below, and in addition thereto, at platforms and other structures above and at the side of industry, stock, and other tracks.

Continued on page 12.

Location	Structure or Obstruction	Clearance of Engine or Car is Close at—
At all stations	Mail cranes	Side.
Eastern Subdivision.		
M. P. 0.88	Bridge	Sides and top on both tracks.
Kansas City, Kansas	Tenth Street Viaduct	Top on both tracks.
M. P. 6.87	Bridge	Sides on both tracks.
M. P. 9.3	Block Signal 93	Side on No. 1 track.
M. P. 11.38	Bridge	Sides on both tracks.
M. P. 11.81	Bridge	Sides on both tracks.
Edwardsville	Standpipe east of depot	Side on No. 2 track.
M. P. 25.46	Bridge	Sides on both tracks.
M. P. 27.86	Bridge	Sides on both tracks.
Linwood	Standpipe east of depot	Side on No. 2 track.
Linwood	Standpipe west of depot	Side on No. 1 track.
M. P. 34.35	Bridge	Sides on both tracks.
M. P. 35.95	Bridge	Sides on both tracks.
Lawrence	Standpipe east of depot	Side on No. 2 track.
Perry	Standpipe east of depot	Side on No. 2 track.
Perry	Standpipe west of depot	Side on No. 1 track.
M. P. 52.60	Bridge	Sides on both tracks.
M. P. 60.88	Bridge	Sides on both tracks.
M. P. 64.29	Bridge	Sides on both tracks.
M. P. 66.76	Bridge	Side on No. 2 track.
Topeka	Standpipe west of round-house	Side on No. 2 track.
M. P. 84.29	Bridge	Sides.
M. P. 96.72	Bridge	Sides.
M. P. 97.13	Bridge	Sides.
M. P. 97.28	Bridge	Sides.
M. P. 99.66	Bridge	Sides and top.
Wamego	Standpipe west of depot	Side.
M. P. 117.61	Bridge	Sides.
M. P. 118.97	Bridge	Sides.
Manhattan	Standpipe east of depot	Side on No. 2 track.
Manhattan	Standpipe west of depot	Side on No. 1 track.
M. P. 137.18	Bridge	Sides and top.
Western Subdivision.		
M. P. 151.55	Bridge	Sides.
Abilene	Standpipe west of depot	Side.
Abilene	Telephone pole between main track and north track, 400 feet west of Cedar Street	Side.
M. P. 173.62	Bridge	Sides and top.
M. P. 181.12	Bridge	Sides.
Salina	Standpipe	Side.
M. P. 187.12	Bridge	Side.
M. P. 195.06	Bridge	Side and top.
M. P. 201.94	Bridge	Side.
M. P. 202.44	Bridge	Side.
M. P. 216.32	Rock cut	Side.
Ellsworth	Standpipe	Side.
Dorrance	Standpipe	Side.
M. P. 274.01	Bridge	Side.
M. P. 285.04	Bridge	Side.
M. P. 290.62	Bridge	Side and top.
Solomon Branch.		
M. P. 23.65	Bridge	Sides and top.
Plainville Branch.		
M. P. 1.16	Bridge	Side.
M. P. 10.69	Bridge	Side and top.
M. P. 33.36	Overhead bridge	Side and top.
M. P. 33.45	Overhead bridge	Side and top.
M. P. 33.66	Overhead bridge	Side and top.

Location	Structure or Obstruction	Clearance of Engine or Car is Close at—
Luray	Standpipe	Side.
Palco	Water tank spout	Side and top.
Bogue	Standpipe	Side.
M. P. 135.22	Bridge	Side.
M. P. 139.67	Bridge	Side.
M. P. 145.06	Bridge	Side.
M. P. 145.91	Bridge	Side.
Morland	Water tank spout	Side and top.
M. P. 150.46	Bridge	Side and top.
M. P. 151.49	Bridge	Side and top.
M. P. 154.40	Bridge	Side and top.
Hoxie	Standpipe	Side.
Menlo	Water tank spout	Side and top.
Colby	Standpipe	Side.
McPherson Branch.		
M. P. 21.42	Bridge	Top.
Topeka Subdivision.		
M. P. 7.09	Bridge	Side and top.
M. P. 8.70	Bridge	Side and top.
M. P. 20.51	Bridge	Side.
M. P. 34.45	Bridge	Side and top.
Onaga	Standpipe	Side.
Lillis	Standpipe	Side.
Frankfort	Standpipe	Side.
St. Joseph Subdivision.		
St. Joseph	Missouri River bridge	Side and top.
M. P. 5.35	Peters Creek bridge	Side.
M. P. 5.63	Peters Creek bridge	Side.
M. P. 7.14	Peters Creek bridge	Side.
Severance	Water tank spout	Side and top.
M. P. 25.74	Wolf River bridge	Side and top.
Hiawatha	Standpipe east of depot	Side.
Hiawatha	Standpipe west of depot	Side.
Sabetha	Standpipe east of depot	Side.
Sabetha	Standpipe west of depot	Side.
Sabetha	Coal chute	Side.
M. P. 76.22	Nemaha River bridge	Side.
Seneca	Standpipe	Side.
Beattie	Standpipe	Side.
Marysville	Standpipe	Side.
Grand Island Subdivision.		
Marysville	Standpipe	Side.
M. P. 114.40	Blue River bridge	Side and top.
M. P. 117.75	Bridge	Side.
Hanover	Water tank spout	Side.
Endicott	Standpipe	Side.
Alexandria	Water tank spout	Side.
Carleton	Coal chute	Side.
Carleton	Standpipe	Side.
Edgar	Standpipe	Side.
Fairfield	Standpipe east of depot	Side.
Fairfield	Standpipe west of depot	Side.
Hastings	Standpipe	Side.
Doniphan	Standpipe	Side.
Manhattan Branch.		
M. P. 100.50	Bridge	Side.
M. P. 109.23	Bridge	Side.
Blue Springs Jct.	Water tank spout	Top.
M. P. 123.26	Bridge	Side.
M. P. 124.29	Bridge	Side.
M. P. 135.10	Bridge	Side.
M. P. 139.37	Bridge	Side.

Location	Structure or Obstruction	Clearance of Engine or Car is Close at—
Manhattan Branch.		
M. P. 146.03.....	Bridge.....	Side.
M. P. 162.85.....	Bridge.....	Side.
M. P. 167.97.....	Bridge.....	Side.
M. P. 179.68.....	Bridge.....	Side.
M. P. 180.67.....	Bridge.....	Side.
M. P. 187.79.....	Overhead highway bridge.....	Side and top.
Junction City Branch.		
Wakefield.....	Water tank spout.....	Side and top.
M. P. 22.41.....	Bridge.....	Side.
Morganville.....	Water tank spout.....	Side and top.
M. P. 48.20.....	Bridge.....	Side and top.
M. P. 51.07.....	Bridge.....	Side.
Clyde.....	Water tank spout.....	Top.
M. P. 63.34.....	Bridge.....	Side.
M. P. 65.42.....	Bridge.....	Side and top.
Concordia.....	Water tank spout.....	Side and top.
L. W. Branch.		
M. P. 1.69.....	Overhead bridge.....	Top.
M. P. 14.56.....	Bridge.....	Side and top.
Winchester.....	Water tank spout.....	Top.
M. P. 34.74.....	Bridge.....	Side and top.
Valley Falls.....	A. T. & S. F. bridge.....	Side and top.
M. P. 36.23.....	Bridge.....	Side.
M. P. 44.16.....	Bridge.....	Side and top.
Holton.....	Overhead bridge.....	Top.
Holton.....	Water tank spout.....	Side and top.
M. P. 69.35.....	Bridge.....	Side.
Havensville.....	Water tank spout.....	Top.
M. P. 78.93.....	Bridge.....	Side.
M. P. 80.62.....	Bridge.....	Side.
Onaga.....	Standpipe.....	Side.
Blaine.....	Water tank spout.....	Side and top.
M. P. 117.64.....	Bridge.....	Top.
Garrison Crossing.....	Standpipe.....	Side.
Leonardville.....	Water tank spout.....	Top.
Clay Center.....	Water tank spout.....	Top.
M. P. 150.49.....	Bridge.....	Side.
Miltonvale.....	Water tank spout.....	Side and top.

1051. On a passenger train, after engine or engine crew has been changed or an angle cock closed, except for cutting off cars from rear, a running test of brakes must be made as soon as speed of train permits. Such test should be made by applying the train brakes with sufficient force to ascertain whether they are operating properly. Steam or power should not be shut off unless conditions require it. In case the brakes do not operate properly in this test, the signal for brakes must be given.

1051 (A). The test prescribed in Rule 1051 will also be made (except on ascending grades in excess of one per cent) one mile from meeting points, railroad crossings, end of double track, drawbridges, before descending heavy grades, and before reaching any hazardous point. Engineman must know that brakes are properly holding the train, and if not, the train must be stopped, cause ascertained and remedied.

Rear brakeman must station himself on the retainer valve end of the rear car, and if air escapes from the retainer valve, give proceed signal; if air does not escape, the train must be stopped, the cause ascertained and remedied.

1060 (B). Conductors handling cars with air brake cut out, must wire superintendent at first opportunity in addition to complying with Air Brake Rule 1060 (A).

1063 (B). That part of Air Brake Rule 1063 (A) reading:

“If the train has not more than 8 cars, release brakes so that they will be about off when the stop is completed, this being called ‘pre-release’. With longer trains hold the brakes applied until stopped.”
is changed to read as follows:

“If the train has not more than 12 cars and stop is being made, except on a downward grade of 1% or more, the brakes should be released so that they will be about off when the stop is completed, this being called ‘pre-release’. With longer trains hold the brakes applied until stopped.”

RATING OF ENGINES IN FREIGHT SERVICE, IN TONS OF 2,000 POUNDS.

Total weight of trains, exclusive of engine and tender, which the different classes of engines will haul in each direction between stations named, under favorable weather conditions. A deduction of ten per cent may be made for fast trains.

Type of Engine	Numbers (Inclusive)	Kansas City to Salina	Salina to Ellsworth	Ellsworth to Ellis	St. Joseph to Double	Double to Hamlin	Hamlin to Marysville		Marysville to Hanover	Hanover to Hastings	Menoken to Marysville		Marysville to Beatrice
C 54	$\frac{19}{30}$ 153	50 to 51			980	1150	980		1070	2050			
C 57	$\frac{22}{30}$ 187 191	201 to 358	3500	1300	1800				1430	2690	2070		2070
C 57	$\frac{21}{30}$ 162 171	400 to 499	2500	1000	1500	1180	1400	1180	1300	2455	1895		1895
MK 57	$\frac{23\frac{1}{2}}{30}$ 206	1900 to 1949							1600	3000	2500		2500
MK 63	$\frac{26}{28}$ 214 228	2200 to 2320	4500	1700	2200				1650	3200	2600		2600
MK 63	$\frac{26}{30}$ 222	2480 to 2499	4800	1900	2400								
P 77	$\frac{22}{28}$ 148	2800 to 2849	3000	1050	1550								
TTT 63	$\frac{29\frac{1}{2}}{30}$ 285 295	5000 to 5089	5500	2400	3000				2290	4400	3400		3500
UP 67	$\frac{27}{31-32}$ 368 372	9000 to 9087	6500						3200	5200	4500		4500
Type of Engine	Numbers (Inclusive)	Salina to Kansas City	Ellsworth to Salina	Ellis to Ellsworth	Double to St. Joseph	Stout to Double	Hiawatha to Stout	Marysville to Hiawatha	Hanover to Marysville	Hastings to Hanover	Marysville to Aikins	Aikins to Menoken	Beatrice to Marysville
C 54	$\frac{19}{30}$ 153	50 to 51			1600	900	1850	975	1060	2750			
C 57	$\frac{22}{30}$ 187 191	201 to 358	4500	1300	3000				1410	3560	2330	3900	2070
C 57	$\frac{21}{30}$ 162 171	400 to 499	3200	1000	2200	1900	1090	2140	1175	1290	3250	2140	3550 1895
MK 57	$\frac{23\frac{1}{2}}{30}$ 206	1900 to 1949							1600	3960	2575	4300	2500
MK 63	$\frac{26}{28}$ 214 228	2200 to 2320	5500	1800	3800				1650	4200	2760	4300	2650
MK 63	$\frac{26}{30}$ 222	2480 to 2499	5800	2000	4000								
P 77	$\frac{22}{28}$ 148	2800 to 2849	3700	1050	2600								
TTT 63	$\frac{29\frac{1}{2}}{30}$ 285 295	5000 to 5089	6000	2500	5000				2300	5500	3800	4900	3500
UP 67	$\frac{27}{31-32}$ 368 372	9000 to 9087	6500						3200	6500	4800		4500

EXPLANATION

"C" Consolidation Engines
 "E" Eight Wheelers
 "P" Pacific Type
 "S" Switch
 "T" Ten Wheelers
 "MC" Mallet
 "MK" Mikado Type
 "TTT" 2-10-2 Type
 "FTT" 4-10-2 Type
 "UP" 4-12-2 Type

EXAMPLE: Consolidation Engine having 57 inch drivers, cylinders 21 inch diameter and 30 inch stroke, and weighing 162,000 pounds on drivers:

C 57 $\frac{21}{30}$ 162