

RATING OF STEAM LOCOMOTIVES IN FREIGHT
SERVICE IN TONS OF 2,000 POUNDS

Total weight of trains, exclusive of locomotive and tender, which the different classes of locomotives 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 Locomotive	Numbers (In- clusive)		Numbers (In- clusive)	Salt Lake City to Ogden	Ogden to McCannon	McCannon to Ogden	Ogden to Salt Lake City
C 57	22	190	201 to 358	2610	2060	2060	2610
	80	191	560 to 622				
MacA 57	23 3/4	206	1900 to 1949	3000	2400	2400	3000
	30	210	2000 to 2034				
MacA 63	26	214	2504 to 2532	3200	2525	2525	3200
	28	216					
MacA 63	26	220	2535 to 2554	3300	2600	2600	3300
	80						
MacA 63	28	228	2555 to 2564	3230	2650	2650	3230
	28						
CSA 69	22-22	400	3800 to 3809	5000	4600	4600	5000
		394	3810 to 3814				
	32	407	3815 to 3839				
4-6-6-4 69	3	21-21	3030 to 3949	5000	4600	4600	5000
	4	407	3950 to 3959				
	5	32	3975 to 3999				
TTT 63	29 1/2	290	5000 to 5039	4250	3350	3350	4250
			5040 to 5318				
	30	311	5400 to 5414				
			5500 to 5529				

EXPLANATION	MacA	MncArthur	SA-C	Mallet SA
	TTT	2-10-2	UP	4-6-6-4
C Consolidation	UP	4-12-2	FEP	4-8-4
	C-SA	Challenger		

EXAMPLE: Consolidation locomotive having 57-inch drivers, cylinders 22-inch diameter and 30-inch stroke and weighing 191,000 pounds on drivers.

22
C 57 — 191
80

UNION PACIFIC RAILROAD COMPANY
SOUTH-CENTRAL DISTRICT

Utah Division

Special Rules
No. 14

Effective Wednesday,
August 15, 1956

Superseding Special Rules No. 13

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

A. D. HANSON,
General Manager

C. C. LARKIN,
Superintendent

NOTE: Changes in this issue are printed
in type same as this.

Note—Referring to note on page 17 of Operating Rules:
The term "conductor" as used in Operating Rules, Special Rules, Superintendent's Bulletins or Notices will also apply to "engine herders."

Signals

8 (R). Electric lanterns may be used by switchtenders, herders and interlocking signalmen for displaying yellow lights.

Engine Whistle Signals

14 (R). In addition to locations listed in Rule 14 (1), engine whistle must be sounded and bell rung approaching private crossings where view of crossing is obscured or where it can be seen persons or vehicles are approaching or in the vicinity of the crossing.

Markers

19 (R). Oscillating red rear end light on passenger trains must be displayed from sunset to sunrise and when day signals cannot be seen due to weather or other conditions. It must also be displayed by day when train is moving under circumstances in which it may be overtaken by another train.

When rear car of a passenger train is equipped with an oscillating red rear end light on which an auxiliary marker is mounted, markers need not be displayed as required by Operating Rules 19, 19 (A) and 19 (E).

When passenger trains are clear of main track at night and rear end protection is not required, red rear end light must be extinguished and the auxiliary marker must display green light to rear.

Rear trainman is responsible for proper display of the auxiliary marker as well as rear end light.

19 (S). Referring to Operating Rule 19 (D):

Markers displaying yellow instead of green lights may be used between Salt Lake City and Las Vegas.

Blue Flag Protection at P.F.E. Icing Platforms

26 (C). Where mechanical blue flag protection is in service at P.F.E. icing platforms, when blue signal is displayed, any train, engine or cars on icing platform tracks between points where blue signals are displayed, must not be coupled to or moved. Other trains, engines or cars required to enter tracks thus protected must stop before passing the blue signal at end of icing platform and may then proceed at restricted speed but must not couple to or move other cars, engines or trains so long as blue signals are displayed.

Switch Lights On Branch Lines

27 (R). Switch lights will not be used on branch lines except Cedar City Branch.

On branch lines where switch lights are not used, trains and engines must approach facing point switches prepared to stop if switch is not in normal position.

Use of Engine Bell

30 (R). Salt Lake City ordinance reads as follows:

"It shall be unlawful for any person or persons employed on a locomotive to fail to ring bell continuously on such locomotive while in motion in the inhabited portions of the city."

Train Register

83 (R). At Salt Lake City, before entering or using Second Subdivision passenger main track, between Second South Street and yard limit sign at M.P. 780.73, yard engines must obtain information regarding all first-class trains which are due.

83 (S). Trains operating between Lund and Iron Mountain need not register at Iron Springs.

At Milford, first-class trains will register by registering ticket.

Trains in Provo-Geneva switching service need not register at Provo.

83 (T). At Provo, conductor of all trains will register and receive orders and clearance at D.&R.G.W. depot, except that conductor going on or off duty at Provo will register at Utah Railway joint telegraph office. When that office is closed, conductor going on duty must register and receive orders and clearance at D.&R.G.W. depot. When an eastward train arrives Provo and Utah Railway joint telegraph office is closed, conductor must give all necessary train registering information to the D.&R.G.W. operator by phone.

Starting Trains

84 (R). At Salt Lake City and Ogden, passenger trains must not leave passenger depot without a signal from stationmaster or passenger director.

Clearing Trains — Rule 251 Operation

86 (R). Referring to Operating Rule 86:

When instructed by dispatcher to clear a first-class train, westward second-class and extra trains must clear the time of such train not less than twenty minutes at Bridge Jct.

Spacing Trains

91 (R). On Provo Subdivision, trains in the same direction must be kept at least thirty minutes apart, except between Provo and Geneva, or when closing up at stations.

Movements in Yards

93 (R). At Salt Lake City, between Second South and Ninth South Streets, there is no superiority of trains.

All trains and engines within these limits must proceed prepared to stop short of train, obstruction or switch not properly lined, but not exceeding 12 MPH.

Between these points, main track may be used not protecting against first-class trains, but all yard engines are required to give way promptly upon the approach of either freight or passenger trains to avoid delay.

93 (S). At Salt Lake City, except when view is obscured, trains and engines may move against current of traffic between Fifth North Street and passenger depot without being preceded by flagman upon receipt of proper signal from switchtender.

93 (T). At Salt Lake City, unless otherwise directed, all trains operating via Second Subdivision Passenger Line will use west track and Provo Subdivision trains will use east track on Third West Street between Second South and Eighth South Streets.

Freight train movements may be made through passenger yard at Salt Lake City only on track 10; other trains with freight equipment may use any track through passenger yard except when handling high or wide equipment.

93 (U). Syracuse, Thatcher and Bear River Branches are operated under requirements of Operating Rule 93.

93 (V). While using D.&R.G.W. tracks, employes will be under supervision of D.&R.G.W. supervisors, and will be governed by the following rules:

D.&R.G.W. Rule 11: In non-automatic block signal limits, a train finding a fusee burning on or near its track, must stop and wait until it has burned out before proceeding.

D.&R.G.W. Rule D-11: A fusee will not apply to the main track on which a train is running, if displayed beyond the first rail of adjoining main track.

D.&R.G.W. Rule 15: The explosion of two torpedoes is a signal to proceed at restricted speed for one-half mile and is to be acknowledged by two short blasts of engine whistle. The explosion of one torpedo will indicate the same as two, but the use of two is required.

D.&R.G.W. Definition: Restricted Speed—A speed that will permit stopping short of another train or obstruction, but not exceeding 15 miles per hour.

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Continued on Opposite Side.

When communication fails, or when *dispatcher* is unable to release electric locks, crews will be governed by instructions posted in telephone booth and by Operating Rule 613.

At Salt Lake City, while trains are passing on opposite track, switching movements between Second South and Eighth South Streets on Third West Street must stop and stand clear of street crossings.

104 (T). Color light switch point indicator governing facing point movements over spring switch located in main track at east wye switch at Comstock, M.P. 10.91, Iron Mountain Branch, displays indications as follows:

104 (T). Continued.

- Green —Spring switch is properly lined for main track movement.
Yellow —Spring switch is properly lined for movement to east leg of wye.
Red —Trains and engines must stop and make inspection of switch points to determine if properly lined for movement desired.

Derails

104 (U). At Cedar City, spring point derail is located in main track just east of balloon track switch and must be locked in derailling position when not being used.
Westward trains trail through derail; eastward trains stop and line balloon track switch and derail, restoring switch and derail to normal positions after being used.

Movements Controlled by Switchtenders

104 (V). At Salt Lake City, Second South Street, unless proceed signal is received from switchtender, trains and engines must remain clear of following points:
Leaving passenger depot, remain clear of passenger lead. (Does not apply to yard engines unless a first-class train is due.)
Entering Salt Lake City, remain clear of Second South Street, stopping before fouling adjacent main track.
Entering Second South Street westward from Pedro 1 or Pedro 2 tracks, remain clear of cross-over just east of Second South Street.

Second South switchtender must handle D.&R.G.W. interchange movements on Provo Subdivision unless that track is blocked. If necessary to handle on Second Subdivision main track, switchtender must receive verbal permission from train dispatcher authorizing movement.
Freight trains for North Yard, passenger and mixed trains for Passenger Station will stop to clear Second South Street before fouling adjacent main track if route is not lined for movement of freight trains to North Yard via Pedro No. 2, or for movement of passenger and mixed trains into the Passenger Station, in which case oral instructions from switchtender must be received before proceeding.
At Salt Lake City, trains and engines must not foul adjacent tracks or slip switches between North Temple Street and Second North Street without first receiving proceed signal from switchtender. (Does not apply to yard engines unless a first-class train is due.)

104 (W). At Salt Lake City, eastward trains and engines on main track must stop to clear Fifth North Street unless proceed signal is received from switchtender.
Unless otherwise directed, all westward trains and engines moving from west yard or Toonerville yard via Freight Line will head through Main 1 pocket either via Toonerville lead or via cross-over just north of Fifth North Street. Proceed signal need not be received from switchtender at Fifth North Street for movements via this route.

Other trains and road engines, including D.&R.G.W. switch engines, must stop to clear Fifth North Street unless proceed signal is received from switchtender.
Unless otherwise directed, trains and engines, including D.&R.G.W. switch engines, moving to North Yard tracks from Freight Line must stop on straight track to clear Fourth North Street cross-over, unless proceed signal is received from Fifth North Street switchtender.

All trains and road engines moving to diesel shop or tracks in North Yard from points south of Fourth North Street on passenger main tracks must stop to clear Fourth North Street unless proceed signal is received from switchtender at Fifth North Street.
Road engines moving from diesel shop lead must sound whistle signals as follows:
Diesel Shop to passenger depot 0 —
Diesel Shop to Thirteenth North 0 0 0 0
Diesel Shop to east or west lead, Fifth North —

104 (X). At North Yard, unless otherwise directed, freight trains must enter and leave at Seventeenth North.
All trains must approach Seventeenth North prepared to stop clear of cross-overs and must not proceed until proceed signal is received from switchtender.

Trains and engines crossing eastward main track at Seventeenth North may accept proceed signal from switchtender as authority to make this move.
Eastward trains approaching Seventeenth North must sound whistle signals as follows:
To be routed via main track — 0
To be routed into North Yard — 0

104 (Y). At S.P. Jct., when signals governing movement to Cecil Jct. do not display proceed indication when route is properly lined, a member of crew must communicate with switchtender at Cecil Jct. for instructions.
When call light on instrument house at S.P. Jct. is burning and governing signal displays Stop indication, member of crew must communicate with switchtender at Cecil Jct.

Sidings and Side Tracks

105 (R). At Brigham City, westward siding extends from east switch near M.P. 20 to cross-over at depot, and eastward siding is located on north side of main track. Track from cross-over at depot to cross-over near stockyards, including Malad Branch old main track, is designated as a yard track, upon which movements may be made in either direction, but cars must not be stored on this track.
At Cache Jct., westward siding extends from east switch near M.P. 47.6 to east crossover near depot. Eastward siding extends from west switch near M.P. 49.5 to west crossover at depot.
At McCammon, westward siding is south of the main track; eastward siding is north of the main track.
At Caliente, No. 1 track is eastward siding; No. 2 track is westward siding. When movement is to be made opposite to the assigned direction, verbal permission must be received from Salt Lake City dispatcher for westward siding, and from Las Vegas dispatcher for eastward siding.

105 (S). At Salt Lake City, Provo Subdivision main track between Eighth South Street and Second South Street may be used as a siding, complying with Operating Rules 93, 99 and 105.
105 (T). At Cache Junction, Cache Valley Branch ends at depot.
At Brigham City, Malad Branch ends at sign located at west end of yard.
105 (U). At Iron Springs, eastward trains from Iron Mountain Branch will use extension track. Stop should not be made until entire train is clear of cross-over at depot.

Train Order Signals

200 (R). On branches, except Cedar City Branch, lights will not be kept burning at night in train order signals. Trains must be governed by day indication of such signals.
221 (R). At Iron Springs, when train order signal displays Stop indication for eastward trains, such trains on Cedar City Branch must stop west of junction switch and must not proceed until train order authority is received, except for switching movements.

Automatic Block Signals

240 (R). On Midvale Spur, Provo Subdivision, when Signal 01 or 02 displays Stop indication, trains and engines must be preceded by flagman between these two signals and must move at restricted speed.

Centralized Traffic Control System

266 (R). At Buena Vista, when an eastward train receives Clear or Approach indication on CTC signal or Form C clearance, train may proceed on Passenger Line to passenger depot Salt Lake City or to North Yard or on Freight Line to North Yard, being governed by CTC and interlocking signals.

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266 (R). Continued.

At North Yard, in addition to receiving Form B clearance, conductor of westward train using Freight Line must receive permission from dispatcher before starting, which will be authority to proceed to beginning of CTC territory.
At Salt Lake City, in addition to receiving Form B clearance, conductor of westward train using Passenger Line must receive permission from dispatcher before starting. Proceed signal must be received from Second South switchtender, which will be authority to proceed to beginning of CTC territory.

Before Second South switchtender may give proceed signal to a westward train, he must receive verbal permission from dispatcher and track occupancy indicator at Second South must display Unoccupied indication. When indicator displays Occupied indication but dispatcher informs switchtender that track is clear and route properly lined, proceed signal may be given.
Yard movements on Passenger Line must not pass signal 7829 at Eighth South Street until verbal permission is received from dispatcher. When authorized by dispatcher and CTC signal indication, yard movements may be made into CTC territory without receipt of Form B clearance. Yard movements beyond yard limit board must receive Form C clearance from dispatcher.

266 (S). Clearance Form B will not be required by trains entering CTC territory from Cedar City, Fillmore or Mead Lake Branches, or Tintic mine tracks, but trains will be governed by signal indication and instructions from dispatcher.
Exception: When crew of a train in turn-around service leaves CTC territory and ties up, they must receive CTC clearance before re-entering CTC territory.

266 (T). CTC Clearance Form B need not be received by trains or engines entering CTC territory at Provo or Geneva, but must be governed by signal indication and instructions from operator at Provo.

267 (R). In CTC territory between Salt Lake City and Caliente, push-buttons have been installed in telephone booths of relay houses at dual control switch locations for emergency use when dispatcher cannot clear signals or when a Stop indication is displayed and communication has failed.
Two push-buttons are installed at each location, one marked "East" and the other marked "West" and operation of button for proper direction will, when conditions permit, cause signal to clear for the movement. The following will govern:
Emergency push-buttons installed in telephone booths of relay houses at dual control switch locations may be used in an attempt to obtain proceed signal indication only when so instructed by dispatcher, or when communication fails.
When instructed by dispatcher to use emergency button and a Clear indication is received, train or engine may proceed in accordance with signal indications.

When stopped by a Stop indication and communication has failed, proper push-button may be used, and if a Clear indication is then displayed, train or engine may proceed, but must move at restricted speed to next Stop signal (A signal) in advance, keeping close lookout for track car or obstruction. A report must be made by wire to superintendent and chief dispatcher at first stop or first open telegraph office.
267 (S). CTC Stop signals located as follows are designated as "starting signals":
Lynndyl —Westward dwarf signal west of cross-overs, governing movements on Track No. 1.
Milford —Westward high signal west of highway crossing governing main track movements;
—Westward signals on signal bridge west of cross-overs governing movements on main track and west drill track;
—Eastward high signal near main track cross-over east end of yard;
—Eastward dwarf signal governing movements on east drill track.

Continued on Opposite Side.

267 (S). Continued.

- Caliente —Westward signal on cantilever west of depot governing main track movements;
—Eastward signals on signal bridge east of depot governing movements on main track and drill track.
Las Vegas —Eastward dwarf signal at east end of passenger station;
—Eastward high signals on main track and drill track just west of Bonanza underpass;
—Westward dwarf signal at west end of passenger station platform;
—Westward high signal just west of west passing track switch.

When stopped by a "starting signal", member of crew must communicate with dispatcher or operator and be governed by his instructions. Flagman need not be sent ahead unless instructed to do so by dispatcher or operator but movement must be made at restricted speed and Operating Rule 267 must be complied with.

267 (T). At Caliente, when a "starting signal" governing main track movements designated in Special Rule 267 (S) displays Stop indication, trains and engines must stop clear of fouling point of depot siding until authorized to proceed by dispatcher or signal indication.
267 (U). At Geneva, engines must not move from Geneva Steel Company Yard to siding without permission from operator at Provo.

267 (V). At Milford, eastward and westward freight trains must remain clear of yard lead until dispatcher is contacted and must be governed by his instructions and signal indication.
267 (W). At Caliente, main track switch at west end of yard, and derail at west end of Track No. 1, are power-operated and controlled by dispatcher at Las Vegas. When illuminated "S" is displayed on signal unit located on top of signal case near derail, member of crew must operate push button on east side of signal case to cause switch and derail to line for movement and signal to display Proceed indication.

When west switch is lined for movement into siding but signal displays Stop indication, in addition to being governed by Operating Rule 528, a member of crew must examine points of spring switch and derail before passing over them.
When necessary to hand operate main track switch or place selector lever in hand position, as provided in Operating Rules 527 and 528, derail switch and selector lever on derail switch must also be hand operated.

267 (X). Eastward freight trains leaving Las Vegas will, unless otherwise directed, use drill track and leave yard at extreme east switch, being governed by signal indication at that point.
267 (Y). At Lynndyl, westward trains or engines must not move from Track 2 to Track 1 at west end of yard without permission from dispatcher.

Block Signals

512 (R). At Salt Lake City, when automatic block signals governing movements through Seventeenth North display Stop indication, trains and engines must stop before acting on proceed signal from switchtender.
Power Operated Derails
526 (R). Power operated derail on drill track, east end of Las Vegas Yard, operates in conjunction with main track switch. When necessary to hand operate main track switch or place selector lever in hand position, as provided in Operating Rules 527 and 528, derail switch and selector lever on derail switch must also be hand operated.

612 (R). At D.&R.G.W. Crossings, M.P. 37.8 and M.P. 38.0 Second Subdivision, when time release has been operated as provided by Operating Rule 612, if signal governing movement over

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crossing does not change its indication within eight minutes after time release has been operated, a member of the crew must notify dispatcher.

When a train or engine has moved over the crossing and has cleared the interlocking limits, if it is necessary to make a reverse movement over crossing, member of crew must depress push button located in box on home signal, hold for five seconds, then release to receive signal indication for movement over crossing.

Sleeping On Duty

702 (R). Operating Rule 702 (A) is changed to read as follows:

Employees must not sleep while on duty.

Exchanging Signals and Inspection of Trains

713 (R). Where Operating Rule 713 (A) or Special Rule requires a trainman to be stationed on rear of train in position to give or receive signals, on freight trains he must be on rear platform of caboose; on passenger trains, including streamline trains, he must be on rear platform or in rear door, or if rear car is a business, dining or observation car, he must be on front platform of rear car or rear platform of car next ahead, and vestibule door must be open.

713 (S). Operating Rule 713 (A) must be complied with passing switchtender locations at Seventeenth North, Fifth North, First North, and Second South, Salt Lake City, on all trains, and rear trainman will be alert and be prepared to act upon any signals received from switchtenders at these locations.

Handling of Explosives or Other Dangerous Articles

802 (R). Trainmen, enginemen, yardmen, agents and other employees 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.

Placards on Cars

BE 589 (b). A car requiring car certificates and "Explosives," "Dangerous," "Dangerous—Class D Poison," "Poison Gas," or "Caution—Residual Phosphorous" placards under the provisions of this part shall not be transported unless such freight car is at all times placarded and certificated as required by this part. Placards and car certificates lost in transit shall be replaced at next inspection point and those not required shall be removed.

BE 589 (b). (1) At points where trains are inspected, cars placarded "Explosives" and adjacent cars shall be inspected; such cars shall continue in movement only when inspection shows them to be in condition for safe transportation.

Switching Cars Containing Explosives or Poison Gas

BE 589 (c). A car placarded "Explosives" or placarded "Poison Gas" shall not be cut off while in motion. No car moving under its own momentum shall be allowed to strike any car placarded "Explosives," or placarded "Poison Gas." No freight car placarded "Explosives," or placarded "Poison Gas" shall be coupled into with more force than is necessary to complete the coupling.

BE 589 (c). (1) When transporting a car placarded "Explosives" in terminals, yards, side tracks, or sidings, such cars shall be separated from the engine by at least one non-placarded car.

BE 589 (c). (2) Closed cars placarded "Explosives" shall have doors closed before they are moved.

Switching of Cars Containing Dangerous Articles

BE 589 (d). In switching operations where use of hand brakes is necessary, a placarded loaded tank car, or a draft which includes a placarded loaded tank car shall not be cut off until the preceding car or cars clear the ladder track and the draft containing the placarded loaded tank car, or a placarded loaded tank car shall in turn clear the ladder before another car is allowed to follow.

BE 589 (d). (1) In switching operations where hand brakes are used, it shall be determined by trial that a car placarded "Dangerous" or that a car occupied by a rider in a draft containing a car placarded "Dangerous" has its hand brakes in proper working condition before it is cut off.

Continued on Opposite Side.

Note: Where tracks can be serviced from both ends, it is recommended that cars containing dangerous articles be at rest before other cars are permitted to strike against the car or draft containing the car.

Placement of Freight Cars Containing Explosives in Yards, on Sidings, or Sidetracks

BE 589 (e). Cars placarded "Explosives" shall be so placed that they will be safe from all probable danger of fire. Freight cars placarded "Explosives" shall not be placed under bridges or overhead highway crossings nor in or along side of passenger sheds or stations except for loading or unloading purposes.

Notice to Crews of Cars Containing Explosives in Freight Trains or Mixed Trains

BE 589 (f). At all terminals or other places where trains are made up by crews other than road crews accompanying the outbound movement of cars, the railroad shall execute a consecutively numbered notice showing the location in the freight train or mixed train of every car placarded "Explosives." A copy of such notice shall be delivered to the train and engine crew and a copy thereof showing delivery to the train and engine crew shall be kept on file by the railroad at each point where such notice is given. At points other than terminals where train or engine crews are changed, the notice shall be transferred from crew to crew.

Position in Freight Train or Mixed Train of Cars Containing Explosives

BE 589 (g). In a freight train or a mixed train either standing or during transportation thereof, a car placarded "Explosives" shall, when length of train permits, be placed not nearer than the sixteenth car from both the engine or occupied caboose, except:

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

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

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

Separating Cars Placarded "Explosives" from Other Cars in Train

BE 589 (h). In a freight train or a mixed train either standing or during transportation thereof, a car placarded "Explosives" must not be handled next to:

1. Occupied passenger car, other than car occupied by gas handlers or military personnel accompanying shipments.
2. Occupied combination car, other than car occupied by gas handlers or military personnel accompanying shipments.
3. Any car placarded "Dangerous" or "Dangerous—Class D Poison."
4. Engine.
5. Any car placarded "Poison Gas."
6. Wooden underframe car (except on narrow gauge railroads).
7. Loaded flat car. (Note: Flat cars equipped with permanently attached ends of rigid construction shall be considered as open-top cars. See subparagraph (8) of this paragraph.)
8. Open-top car when any of the lading extends or protrudes above or beyond the ends or sides thereof.
9. Car equipped with automatic refrigeration or any other apparatus utilizing an open flame light or an internal combustion engine in its operation.
10. Car containing lighted heaters, stoves or lanterns.
11. Car loaded with live animals or fowl, occupied by an attendant.
12. Occupied caboose except as provided in paragraph (1) of this section.

Position in Train of Loaded Placarded Tank Car

BE 589 (i). In a freight train or a mixed train, except a train consisting entirely of placarded loaded tank cars and as pro-

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vided in paragraph (j) of this section, a placarded loaded tank car shall when the length of the train permits, be not nearer than the sixth car from the engine, occupied caboose or passenger car.

BE 589 (i). (1) When the length of the freight train or mixed train will not permit it to be so placed, it shall be not nearer than the second car from the engine, occupied caboose or passenger car.

BE 589 (i). (2) When transported in a freight train engaged in "pickup" or "setoff" service, a placarded loaded tank car shall be not nearer than the second car from both engine or occupied caboose.

Separating Loaded Tank Cars Placarded "Dangerous" from Other Cars in Train

BE 589 (j). In a freight train or mixed train either standing or during transportation thereof, a placarded loaded tank car must not be handled next to:

1. Occupied passenger car, other than gas handlers accompanying shipment.
2. Occupied combination car, other than gas handlers accompanying shipment.
3. Any car placarded "Explosives."
4. Engine (except when train consists only of placarded loaded tank cars).
5. Any car placarded "Poison Gas."
6. Wooden underframe car (except on narrow gauge railroads).
7. Loaded flat car. (Note: Flat cars equipped with permanently attached ends of rigid construction shall be considered as open-top cars. See subparagraph (8) of this paragraph.)
8. Open-top car when any of the lading extends or protrudes above or beyond the ends or sides thereof.
9. Car equipped with automatic refrigeration or any other apparatus utilizing an open flame light or an internal combustion engine in its operation.
10. Car containing lighted heaters, stoves or lanterns.
11. Car loaded with live animals or fowl, occupied by an attendant.
12. Occupied caboose (except when train consists only of placarded loaded cars).

Position in Freight Train or Mixed Train of Cars Placarded "Poison Gas" or Containing Poison Liquids Class A

BE 589 (k). In a freight train or mixed train either standing or during transportation thereof, a car placarded "Poison Gas" or containing poison liquids, Class A, shall not be next to other freight cars placarded "Explosives" or cars placarded "Dangerous."

Position in Freight Train or Mixed Train of Cars Placarded "Explosives" and "Poison Gas" or Containing Poison Liquids when Accompanied by Cars Carrying Gas Handling Crews

BE 589 (l). A car placarded "Poison Gas" or containing poison liquids Class A in drums, tanks or bombs, or a car placarded both "Explosives" and "Poison Gas" shall at all times be next to and ahead of the car occupied by gas handling crews, when accompanying such car.

BE 589 (l). (1) A car or cars placarded "Explosives" shall be next to and ahead of a car occupied by guards accompanying such car, except that when the car occupied by guards is equipped with a heater it shall be the fourth car behind the car or cars placarded "Explosives."

Cars Containing Explosives or Poison Gas and Tank Cars Placarded "Dangerous" in Passenger or Mixed Trains

BE 589 (m). Cars containing explosives, Class A, poison gases or liquids, Class A, and tank cars requiring "Dangerous" placards shall not be transported in a passenger train. Such cars may be transported in mixed trains but only at such times and between such points that freight train service is not in operation.

BE 589 (m). (1) Cars containing explosives, Class A, poison gases or liquids, Class A, and tank cars placarded "Dangerous" shall not be transported next to occupied cabooses or cars carrying passengers in mixed trains except as provided in paragraph (1) of this section.

Continued on Opposite Side.

BE 589 (m). (2) When a car containing explosives, Class B, or dangerous articles other than explosives requiring labels (not including Class A poison gases or liquids) is moved in a mixed train and such car is not occupied by an employee of the carrier, placards must be applied to the car as required by this part.

Position in Train of Cars Containing Class D Poison

BE 589 (n). In a freight train or a mixed train either standing or during transportation thereof, a car placarded "Dangerous—Class-D Poison" must not be handled next to cars placarded "Explosives" or next to carload shipments of undeveloped film.

Empty Tank Cars

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 "Dangerous" placards removed or replaced by "Dangerous-Empty" placards.

Riding Footboards of Engine

802 (S). A yardman or trainman need not ride on leading footboard of engine, as follows:

Between Salt Lake City and Sandy—main track movements between Fifth North and Sandy;

Between North Salt Lake and North Yard—main track movements.

Movements on Yard and Other Tracks

802 (T). Operating Rule 802 (B) applies to all movements made in the engine house area as well as all other portions of yards.

All engine movements in engine house area must stop before fouling adjacent track or lead until proceed signal is received from employee at the first switch to be used. All switch engine movements will be protected by member of ground crew; all movements made by hostlers will be protected by mechanical department employee; all road engine movements except at North Yard will be protected by member of train crew and all road engine movements at North Yard will be protected by herders.

Proceed signals must not be given for movement unless it can be seen there is no conflicting movement.

802 (U). At Salt Lake City, a red light must be displayed at both ends of a car or cut of cars left standing on Third West Street between sunset and sunrise.

802 (V). At McCammon, cross-over leading to storage track must not be left blocked with cars.

At Iron Springs, the main track must not be used in weighing cars.

802 (W). At Smithfield, in spotting cars between warehouses on California Packing Corporation spur, it must be seen that drawbridge between buildings is raised.

802 (X). At Provo, track located between joint U.P.-Utah Railway yard and turntable, between storehouse and engine-house is equipped with derail. Cars, engines or other equipment must not be stored nor left standing between derail and turntable.

At Ironton, in making delivery to long interchange track, cars must be shoved into this track instead of pulled to avoid fouling D.&R.G.W. eastward main track at the south end.

Ore Trains

802 (Y). From Iron Mountain to Desert Mound ore trains must not exceed 65 cars when handled with 2 unit diesel locomotive or 3 unit diesel locomotive with dynamic brake inoperative; and must not exceed 90 cars when handled by 3 unit diesel locomotive with dynamic brake in operation, except ore trains handled by two SD-7 road switcher units operating in multiple unit control with dynamic brake operative may handle 90 cars.

802 (Z). At Comstock, departure track must be left clear after departure of ore trains.

Location	Structure or Obstruction	Clearance of engine or car is close at—
Ogden, M.P. 0.14	24th St. viaduct	Side and Top.
Hot Springs	Overhead highway crossing	Top.
M.P. 45.20	Tunnel	Side and Top.
M.P. 45.30	Rock cut	Side.
M.P. 46.02	Rock cut	Side.
M.P. 46.12	Rock cut	Side.
Cacho Jct.	Water column	Side.
Downey	Water column	Side.
McCammon	Water column	Side.
MALAD BRANCH.		
Woodruff	Platform	Side.
BEAR RIVER BRANCH.		
M.P. 1.52	Bridge	Side.
CACHE VALLEY BRANCH.		
Logan	Water column	Side.
Logan	Shed, passenger depot platform	Side.
Preston	Stockyard platform	Side.
Preston	Oil Co. pump house	Side.
Preston	Beet loading trestles	Side.
Preston	Preston Milling Co.	Side.
SECOND SUBDIVISION.		
Garfield	Overhead highway crossing	Top.
Lake Point	Overhead highway crossing	Top.
Erda	Water column	Side.
M.P. 751.27	Overhead highway crossing	Top.
Warner	W.P. overhead crossing	Top.
Delta	Water column	Side.
M.P. 601.13	Bridge	Side.
Black Rock	Water column	Side.
THIRD SUBDIVISION.		
M.P. 527.60	Bridge	Side.
Beryl	Water tank spout	Side.
Acoma	Water column	Side.
Big Springs	Water column	Side and Top.
M.P. 471.74	Bridge	Side.
M.P. 471.46	Bridge	Side.
M.P. 471.28	Bridge	Side.
M.P. 470.91	Bridge	Side.
M.P. 469.95	Bridge	Side.
M.P. 469.33	Bridge	Side.
M.P. 469.07	Bridge	Side.
M.P. 468.06	Bridge	Side.
M.P. 458.56	Bridge	Side.
M.P. 447.89	Bridge	Side.
M.P. 444.56	Bridge	Side.
Elgin	Water column	Side.
M.P. 437.22	Bridge	Side.
M.P. 433.47	Bridge	Side.
M.P. 431.82	Bridge	Side.
M.P. 430.68	Bridge	Side.
M.P. 419.30	Bridge	Side.
Carp	Water column	Side.
M.P. 414.11	Bridge	Side.
M.P. 409.25	Signal poles	Side.
M.P. 409.16	Bridge	Side.
M.P. 408.97	Bridge	Side.
M.P. 407.09	Bridge	Side.
M.P. 406.55	Bridge	Side.
Rox	Water column	Side.
M.P. 397.32	Bridge	Side.
M.P. 397.04	Bridge	Side.
M.P. 395.42	Bridge	Side.
PROVO SUBDIVISION.		
Midvale spur	D&RGW overhead crossing	Side and Top.
M.P. 754.42	Bridge	Side.
M.P. 735.76	D&RGW overhead crossing	Side and Top.

Continued on Opposite Side.

Location	Structure or Obstruction	Clearance of engine or car is close at—
Santaquin	Overhead highway crossing	Top.
CEDAR CITY BRANCH.		
Iron Springs	Water tank spout	Side and Top.
M.P. 22.51	Kaiser ore tipple	Side and Top.
PIOCHE BRANCH.		
M.P. 0.68	Bridge	Side.
PRINCE BRANCH.		
Castellon	All ore tipples	Side and Top.
Prince	Ore bin	Side and Top.
MEAD LAKE BRANCH.		
M.P. 7.75	Cut	Side.

High and Wide Cars and Loads

900 (S). Chief Engineer's drawing 80300 is posted in yard offices and engineer's rooms.

This drawing provides information with respect to maximum heights and width of eastbound loads that will not clear Aspen Tunnel but can be handled with advance notice to General Superintendent Transportation for routing via McCammon and Granger.

The maximum published width of 12 feet is the maximum width of load that can be handled without restrictions, between adjacent tracks, based on maximum track centers of 13 feet. Twelve feet 6 inches is the maximum width of load that can be moved with special handling between the limiting heights as given in the tabulations on the drawing. Advance approval of General Superintendent Transportation must be obtained for the movement of any shipment having an effective width in excess of 12 feet in order that protection can be arranged for other shipments exceeding 12 feet in width that may be moving in the same territory.

In all cases the measurements are based on symmetrical loads being exactly centered on car (not over 43 feet center to center of trucks) and it is important to know that loads are so centered. The effective width of an eccentric load is double the maximum extension of the load from the center of the car at any given height above the top of rail.

900 (T). Nevada Public Service Commission Order in Case No. 1159 covers the operation of cars of excess height and width and of open top cars containing lading of excess height and width.

In addition to Operating Rule 803 (B), the following applies to the operation of such cars:

Cars of Excess Height

(1) Freight cars of a height exceeding 15' 6" must not be operated.

Freight cars of a height exceeding 15' 4" but not greater than 15' 6" shall be permanently marked, stenciled or placarded and such marking maintained in a legible condition, reading, "THIS CAR EXCESS HEIGHT."

All such required markings and placarding shall be placed on the side adjacent to the ladder or hand-holds near the floor line of the car at each of the four corners.

Cars of Excess Width

(2) Freight cars of width exceeding 10' 10" must not be operated.

Freight cars of a width not exceeding 10' 10" may be handled without restrictions or placarding.

Cars with Lading of Excess Height or Width

(3) No movement shall be made of open top cars containing lading in excess of 15' 6" above the top of rail or extending

Continued on Page 13.

laterally in excess of 5' 5" from center line of car except as hereinafter described:

(4) The operation of cars, the lading of which extends laterally in excess of 5' 5" from center line of car, shall be restricted to lading the size or dimensions of which cannot be reduced.

(5) All open top cars with lading extending laterally in excess of 5' 5" from center line of car or in excess of 15' 6" in height above top of rail, shall be placarded on the load itself in a conspicuous place when practicable, and the car shall be marked, stenciled, or placarded at locations specified in paragraph (1) of this rule.

(6) On any train, the consist of which includes cars loaded as described in the preceding paragraph of this rule, such cars shall be blocked together in one place in the train and if its length permits, they shall be entrained at least 5 cars distant from both the caboose and the engine, provided, however, that the provisions of this sub-section shall not apply to the transportation of rail open top cars of highway trucks or trailers, either loaded or unloaded, except that a car carrying such trailer or semi-trailer shall not be placed immediately ahead of caboose or immediately behind locomotive.

Notifying Train Employees

(7) A train order shall be delivered to every train containing any car the lading on which extends laterally in excess of 5' 5½" from center line of car or in excess of 15' 6" in height above top of rail, informing the crew of the train that the train includes such car or cars, stating total number thereof, and advising that no member of the train crew is required to ride on any such cars.

(8) A train order shall be delivered to every train the operation of which may be affected by the presence or movement of a train containing such wide loads, described in the preceding paragraph of this rule, informing the crew of the train of that fact.

Notifying Yard Employees

(9) Yard supervisors shall be given notification sufficiently in advance of the arrival of the cars, the lading on which extends laterally in excess of 5' 5½" from center line of car, to enable them to take necessary precautions to safeguard employees in yard.

Observance of Cars by Employees

(10) Employees in yards and elsewhere must keep close lookout for wide loads in trains and in switch movements, being on the alert when such movements are passing to avoid hazard of injury from such excess width loads, or damage to equipment.

(11) Any employee observing a car of excess height or a car containing lading of excess height or width which is not placarded or stenciled as required by this rule, should notify their supervisor immediately.

(12) Any employee observing a close overhead or side clearance with a car of excess height or a car with lading of excess height or width, should make immediate report so that protection can be given.

Air Brakes

1001 (R). Hostlers handling diesel units and locomotives must know air brake equipment is functioning and adequate air pressure is maintained on units before any movement is made. A setup and release of independent brakes and brake cylinder pressure must be noted on gauge.

In moving units at terminals for servicing, stop must be made before going into turntable on both incoming and outgoing movements, also before entering enginehouse or diesel servicing buildings and facilities where elevated tracks or pits are used.

At terminals where units are cut in and out of locomotive sets, hostlers will check to know air brake hoses are coupled and air cut in with brakes functioning on all units before any movement is made.

At terminals where hostlers handle units to and from stations, relieving inbound engine crews, brakes must be tested with inde-

Continued on Opposite Side.

pendent brake valve immediately after units detached from train to insure brakes operating properly and provide proper retardation of units.

In handling units around enginehouses and diesel servicing and maintenance facilities, movements must be made not to exceed five miles per hour under any circumstances.

1005 (R). Standard brake pipe pressure for freight and mixed trains is 90 pounds.

1005 (S). Other Than Steam Locomotives—Compressor governor—Road and Switch locomotives—

Main reservoir pressure:

Low pressure120
High pressure130

1025 (R). At Iron Mountain before making doublecover of loads from one track to train made up on another track at east end of Iron Mountain Yard, terminal test of air brakes required by Air Brake Rule 1025 will be made to determine if air brakes are operative on doublecover before moving out of yard track to Iron Mountain Branch main track.

Car Department forces will handle air test.

1030 (R). Where Sperry rail-detector car is working when temperature is below freezing, trains, engines and track cars must be operated at a safe speed, using sand where necessary to overcome slippery condition caused by calcium chloride solution by rail car.

1035 (R). On passenger trains, running air test as required by Air Brake Rule 1035 must be made at the following point:

Crestline—Eastward and westward.

1039 (R). Diesel locomotives 1870-70B to 1877-77B are in service on Utah Division.

These units are equipped with dynamic brake operative only on cab unit. This dynamic brake does not have dynamic interlocks to keep driver brakes released when automatic brake application is made.

This dynamic brake is only for controlling speed of light locomotive movements on descending grades and must not be used handling trains.

1044 (R). Where helper engine is cut out of rear of train, brake pipe test as required by Air Brake Rule 1044 must be made before leaving station where helper engine was cut out.

1044 (S). Unless otherwise provided, air brake test as required by Air Brake Rule 1044 must be made by all freight trains at following points:

Mount } Eastward and westward when angle cock has
Boulter } been turned or air hose separated.
Tintic }
Crestline } —Westward when angle cock has been turned
or air hose separated.

1045 (R). Between Crestline and Leith, westward freight trains handled by diesel locomotive with dynamic brake not in operation will use retaining valves as follows:

Trains averaging 65 tons or more per brake will use one-half of retaining valves, alternating on cars throughout the train between Crestline and Islen, and between Etna and Leith, and must stop at Acoma and Elgin for inspection and cooling wheels, and will use all retaining valves Islen to Minto.

Trains averaging 51 tons or more per brake will use not less than 25 retaining valves on head end Islen to Minto.

Trains averaging 50 tons or less per brake will use not less than 25 retaining valves on head end, Islen to Minto, if in judgment of conductor and engineer their use is necessary.

1045 (S). Between Crestline and Minto, westward freight trains handled by diesel locomotive, consisting of 3 or more power units with dynamic brake in operation, may be handled without using retaining valves under the following conditions:

- (a) Dynamic brake must be placed in service and tested for proper operation between M.P. 493.6 and M.P. 492.
- (b) During dynamic brake operation fireman must make frequent inspections to determine if dynamic brake is properly operating on each power unit and report results of each inspection to engineer.
- (c) Retaining valves will be used when in the judgment of engineer or conductor use thereof is necessary.
- (d) If dynamic brake is inoperative on any one power unit of locomotive, dynamic brake must not be used and retaining valves must be used as prescribed by Special Rule 1045 (R).

EXCEPTION: Section (d) does not apply on 5 or 6 unit diesel locomotives if dynamic brake is operative on 4 units.

- (e) If while using dynamic brake it becomes inoperative on one or more power units of locomotive, train must be immediately stopped and retaining valves placed in use as prescribed by Special Rule 1045 (R) before proceeding.
- (f) Conductor must advise engineer number of cars, total tonnage, average tons per operative brake and location of loads and empties in train.

Westward freight trains handled by diesel locomotive consisting of less than 3 power units must use retaining valves as prescribed by Special Rule 1045 (R) except trains handled by two SD-7 type road switcher units with dynamic brake operative.

1045 (T). Retaining valves must be used on all trains as required by Air Brake Rule 1045 (A), as follows:

- Pioche to M.P. 30;
- M.P. 27 to M.P. 22, Pioche Branch;
- Prince to Prince Junction;
- Silver City to Tintic;
- Eureka to Tintic;
- Mammoth Mine to Tintic;

EXCEPTION: Pioche Branch—When train handled by diesel locomotive with dynamic brake operative, use of retaining valves from Pioche to M.P. 30 and from M.P. 27 to M.P. 22 is not required. If dynamic brake becomes inoperative, train must stop and use retainers between these locations.

Iron Mountain to Iron Springs—Duplex retaining valves must be placed in 20-pound position on loaded conventional cars and foreign line ore cars, and in 10-pound position on system ore cars Nos. 8000-8499 and on all empties. Retaining valves must not be turned down until train stops in extension track at Iron Springs. Trains handling empties from Iron Mountain to Comstock must use retainers on all cars in 10-pound position.

EXCEPTION: Desert Mound to Iron Springs—50% of retaining valves in train must be placed in 20-pound position on head end of train.

On other grades, conductor and engineer will see that as many retaining valves are used as necessary to control train.

When retaining valves are in use, speed of 20 MPH must not be exceeded.

1046 (R). The following will govern in the handling of train and switching movements on descending grades from Mammoth Mine, Eureka, Mammoth Junction and Silver City to Tintic:

Before descending grades, retaining valves on cars must be tested as prescribed by Air Brake Rule 1045 (A), and brake cylinder piston travel must be adjusted if necessary.

It must be known before descending grades that brakes on all cars are properly operating and that retaining valves on all cars are in 20 pound position.

Continued on Opposite Side.

1046 (R). Continued.

Speed on descending grades must not exceed 6 MPH at any point.

Maximum number of cars per train to be handled on descending grades must not exceed the following:

From	To	No. Cars
Mammoth Mine	Mammoth	3
Mammoth	Mammoth Jet.	10
Eureka, Mammoth Jet, and Silver City	Tintic	16

RATING OF DIESEL LOCOMOTIVES IN FREIGHT SERVICE IN TONS OF 2,000 POUNDS
Total weight of trains, exclusive of locomotives, which the different classes of locomotives will haul in each direction between stations named, under favorable weather conditions.

Type	Numbers (Inclusive)	H.P.	No. Units	Numbers (Inclusive)	H.P.	No. Units	Type	Numbers (Inclusive)	H.P.	No. Units	Numbers (Inclusive)	H.P.	No. Units
EMD	1000-1095	Yd. Sw 1000	1	1000-1095	Yd. Sw 1000	1	EMD	1000-1095	Yd. Sw 1000	1	1000-1095	Yd. Sw 1000	1
ALCO	1280-1295	Rd. Sw 1500	1	1280-1295	Yd. Sw 1500	1	ALCO	1280-1295	Yd. Sw 1500	1	1280-1295	Yd. Sw 1500	1
EMD GP-7	100-129	Rd. Sw 1500	1	100-129	Rd. Sw 1500	1	EMD GP-7	100-129	Rd. Sw 1500	1	100-129	Rd. Sw 1500	1
EMD SD-7	775-784	Rd. Sw 1500 (6 motors)	1	775-784	Rd. Sw 1500 (6 motors)	1	EMD SD-7	775-784	Rd. Sw 1500 (6 motors)	1	775-784	Rd. Sw 1500 (6 motors)	1
EMD GP-9	130-299	Rd. Sw 1750	1	130-299	Rd. Sw 1750	1	EMD GP-9	130-299	Rd. Sw 1750	1	130-299	Rd. Sw 1750	1
EMD	1400-1499	Frt. 1500	1	1400-1499	Frt. 1500	1	EMD	1400-1499	Frt. 1500	1	1400-1499	Frt. 1500	1
EMD	1870-1877	Rd. Sw 2400	2	1870-1877	Rd. Sw 2400	2	EMD	1870-1877	Rd. Sw 2400	2	1870-1877	Rd. Sw 2400	2

Note: Diesel switch locomotives and single unit diesel locomotives with one air compressor except SD-7 type locomotives Nos. 775-784, are restricted in road service to a maximum of 45 cars on descending grades of 1% and over.

Note: Rating of 1870-1877 class between Provo and Geneva is 7000 tons.

Note: Rating shown is for single unit. If more than one unit, rating of combined units will govern.